Review of Experience of Family Medicine in Europe and Central Asia: Moldova Case Study

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Currency Equivalents

Currency Unit: Lei
Effective Exchange Rates:
December 1996: 1US$ = 4.7 Lei
December 1998: 1US$ = 8.3 Lei
December 2000: 1US$ = 12.4 Lei
December 2002: 1US$ = 13.9 Lei
November 2003: 1US$ = 13.5 Lei
December 2004: 1US$ = 13.0 Lei

Weights and Measures: Metric System

Acronyms and Abbreviations

CAS Country Assistance Strategy
CEE Central and Eastern Europe
CIS Commonwealth of Independent States
ECA Europe and Central Asia
FD Family Doctor
FM Family Medicine
FSU Former Soviet Union
GDP Gross domestic product
GP General Practitioner
HIC Health Insurance Company
HIF Health Insurance Fund
HIV Human Immunodeficiency Virus
MDG Millennium Development Goals
M&E Monitoring and Evaluation
MOH Ministry of Health
OECD Organization for Economic Cooperation and Development
PC Primary Care
PHC Primary Health Care
STI Sexually Transmitted Illness
TA Technical Assistance
TB Tuberculosis
THE Total Health Expenditure
TOT Training of Trainers
TOR Terms of Reference
UNICEF United Nations Children's Fund

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ACKNOWLEDGMENTS

This report reviews the experience of family medicine in Moldova. It is part of a study comprising 5 volumes which reviews the experience of family medicine in four countries in the Europe and Central Asia Region (ECA) – Armenia, Bosnia and Herzegovina, Kyrgyz Republic and Moldova. The report reviews the experience, draws lessons and establishes an evidence-based for detailed analysis. The study presents best practices for policy dialogue and future investments by the Bank and other financial institutions. The detailed case studies compare these countries and draw common themes and issues. Comparisons are made with best developed or existing models in the OECD and other ECA countries that have already undertaken family medicine reform.

The report was prepared with financing from a Dutch Trust Fund. It was prepared by a team led by Rifat Atun (Imperial College) and included Viorica Berdaga (UNICEF), Lilia Turcan (UNICEF), Svetlana Stefanetz (UNICEF), Evelina Cibotaru, and Alisher Ibragimov (Centre for Health Management, Imperial College). UNICEF Moldova office provided co-financing and technical support to the Moldova Case Study, as part of a larger collaborative research project. The Task Profile Instrument was designed by Wienke Boerma. The study was prepared under the leadership of Betty Hanan. Kees Kostermaans and Juan Pablo Uribe were the peer reviewers. Valuable comments were provided by Betty Hanan, Joana Godinho, Victor Volovei and Mikhai Ciocanu. Anna Goodman helped to prepare the document for publication.
Executive Summary

Introduction

1. The objectives of the study were to review the experience of family medicine in Europe and Central Asia (ECA), present best practices, and make recommendations for policy dialogue and future investments.

2. The study employed primary and secondary research, using both qualitative and quantitative methods of inquiry and used proprietary framework of analysis and instruments to explore key changes in policies, regulations, organizational structures, financing, resource allocation, provider payment systems, service provision, and human resources. The impact of family medicine reforms was analyzed.

3. Moldova inherited a health system based on the Soviet Semashko Model characterized by: centralized planning; hierarchical administrative organization; a very large provider network dominated by hospitals and tertiary provider units; parallel health systems for line ministries and large organizations; poorly developed PHC level fragmented by tripartite delivery model which provided services separately for adults, men and children, as well as a large number of vertical programs delivered by narrow-specialists; absence of family physicians at PHC level which lacked gate keeping function; a surfeit of hospitals and human resources concentrated in the capital Chisinau; an inequitable resource allocation system based on historic activities and inputs — and favored large hospitals in urban centers at the expense of rural areas; line-item budgeting of provider units and salary based payment systems which encouraged inefficiency and discouraged improved performance; strict care delivery protocols not based on current evidence which encouraged excessive referral to secondary care level; highly curative and disease focused services (partly attributable to the nature of medical training) with limited health promotion or prevention, and; a system which allocated users to doctors and prevented them from exercising choice or meaningfully participating in the health production process.

4. Decoupling from the Soviet Union Rapid led to rapid economic decline. Between 1993 and 1999 the GDP declined by 60 percent. By 2000, the GDP per capita was US$353.50 with almost 90 percent of the population living on less than US $1.00 per day. In the transition period level of funding to the health sector declined substantially — creating a substantial funding gap between the level of financing needed by the health system and the resources available.

5. Low funding levels from the public sector and low salaries of health professionals resulted in many health professionals leaving the health sector — particularly in rural areas — substantial inequities, emergence of rent seeking behavior, and informal payments which acted as a barrier to many citizens to accessing health services.

6. Early in the transition period population health indicators worsened, and then recovered to levels witnessed in 1990.
7. Government of Moldova sought to reform the health system to address key problems, namely: Organizational complexity; excess infrastructure and human resources; allocative inefficiency and inequities in financing; inefficient service provision; limited incentives and low pay levels for health personnel.

**Key Achievements: Organizational and regulatory changes**

8. The Law on Health Protection was adopted in 1995 and in 1997 the Moldovan Government approved a Health Sector Strategy for the period 1997-2003. The Strategy aimed to address structural inefficiencies, reduce human resources and improve financing of the health sector and identified as key objectives: (i) 'addressing health issues' as a priority; (ii) equity and solidarity; (iii) establishing effective structures and processes to implementing and monitor National Health Policy; (iv) establishing intersectoral programs with broad consultation, consensus and community participation.

9. Despite a resource-constrained environment Moldova has achieved significant milestones with PHC reforms.

10. Key laws and regulations have been developed to create an enabling environment for FM and PHC reforms. Family Medicine is recognized as a specialty in Law.

11. The tripartite system of pediatric, women’s and adult clinics have been consolidated into unified PHC centers providing services for all citizens.

12. The scope and content of PHC services have been articulated in law and defined in detail in the State Guaranteed Benefits Package.

13. A large number of PHC centers have been refurbished with support from the WB HIP.

14. Users have been given the freedom to choose their family physicians.

15. There has been a remarkable rationalization of the hospital sector: the most substantial amongst the FSU countries.

16. Financing, resource allocation and provider payment systems.

17. Mandatory Health Insurance with co-payments have been introduced: creating a transparent environment as regards payments to health service providers. A key achievement of the reforms is the establishment of a Single Payer System which allows integration of state and local budget revenues with MHIF contributions to fund the Basic Benefits Package under the Mandatory Health Insurance Fund for the insured and those in exempt categories. A Health Insurance Company, with Territorial Branches, has been established and is now acting as the purchaser of health services.

18. New provider payment methods, based on simple per capita mechanism, have been successfully introduced to remunerate PHC centers: according to agreed contracts between the health Insurance Company and the rayon health authority.
19. Moldova has been particularly successful in increasing the proportion of health system funding allocated to PHC and has specified in Law that 35 percent of the public health expenditure should be allocated to PHC level.

**Service Provision**

20. A State Guaranteed Basic Package has been introduced for the entire population regardless of their insurance status and enrolment. Citizens not covered under the MHI scheme have access to Basic Benefits Package under the MHIF.

21. There is excellent coverage of immunization and reasonably well spread provision of basic PHC services in all regions but significant inequities persist.

22. The task profile survey shows statistically significant difference in the application of medical techniques, use of equipment when delivering PHC services, provision of health promotion services, as well as management of first contact and chronic conditions by family physicians in advanced reform areas as compared with those in intermediate and early reform areas.

23. There is evidence from the qualitative research that the new model is welcomed by the users and health professionals who identify many benefits which amongst other include user-centeredness of the model and having a named doctor, user choice and more comprehensive nature of FM model.

**Resource Generation**

24. A critical mass of FM specialists and nurses has been trained in short-course retraining programs.

**Key Challenges and Recommendations**

25. There has been good progress with the FM and PHC reforms in Moldova but this progress needs to be sustained and accelerated to address many challenges which remain.

26. The retraining programs have been successful in rapidly scaling up FM in Moldova but are too short to convert narrow specialists to generalist family physicians. Existing training programs need to be extended and further strengthened to produce family physicians of higher competence and to counteract criticisms leveled by narrow specialist and opponents of reforms at FM institution.

27. Countrywide standards on scope and quality of services have succeeded in establishing minimum quality standards and basic level PHC services as compared with OECD countries, the scope and content of services provided in PHC setting in Moldova are still basic and there is much room for expanding the scope of services provided in PHC. Current contract introduced by the HIC and the BBP-MHIF will help enhance equity by providing a uniform package of services to the whole country. Much work needs to be done in the next few years to further institutionalize this system. To further develop PHC, over time, there needs to be a move to more flexible contracting based on performance. However, such a shift will require: significant analytical and execution capacity at the HIC robust information systems at PHC level; enhanced choice of users, and; expanded management capacity.
28. Major inequities in access to services and funding exist. The next phase of reforms should place an emphasis on enhancing equity by changing resource allocation mechanisms to take into account poverty and health needs.

29. The presence of narrow specialists at PHC centers is a source of inefficiency and a barrier to developing PHC as it adversely impacts on first contact, continuity and comprehensiveness functions of PHC. All narrow specialists at PHC level should be trained as family physicians and roles modified so that they practice family medicine.

30. Limited incentives and poor salary levels of FM specialists are two major problems that need addressing in immediate term. There needs to be a much stronger indication that FM is valued on par with hospital specialties.

31. There are no incentives to achieve a substantial secondary-to-primary shift: limiting the ability of PHC level to develop extended primary care and move beyond a gate keeping role. Further, limited vertical integration hinders development of continuum of care.

32. Implementing PHC reforms is a complex strategic change process and there is insufficient managerial capacity to accelerate the pace of development. It is necessary to rapidly develop a critical mass of middle and senior level managers and health professionals to act as change agents.

33. As with the other countries in this study, there is a lack of systematically collected data at PHC level which can be analyzed to demonstrate key reform objectives have been achieved. The PHC component of the M&E system at the Institute of Public Health and Management needs to be enhanced and analytic capacity expanded to regularly analyze data to generate timely information to inform decisions.

34. The benefits of a family medicine centered PHC system is not adequately communicated to citizens and health professionals. Although, the WB HIP has significantly invested in communication and advocacy activities more investment is needed to improve communication between and within levels of the health system and with the public to rectify misperceptions of family medicine.

35. The power amongst the health service providers rests with the hospital sector. Recent administrative reform, which has recentralized power in the hands of the rayon hospital director, at the expense of PHC providers which were autonomous, is a retrograde step and needs to be reversed.

Critical Success Factors

36. The study has identified a number of critical success factors. These include: Being strategic by allowing regional and inter-country cross learning and lesson sharing; Investing in not just technical inputs but management of change; Simultaneously working at policy, strategy and operational levels; (iv) Appropriate governance structures; Maintaining responsiveness to the changing context; Branding and image building to improve the status of FM specialist, as compared with narrow-specialists; Improved incentives for continual improvement; Improved communication between and within levels of the health system and to the public; Developing a holistic approach to reform, and; Having an agreed exit strategy.
1. INTRODUCTION

1.1. OBJECTIVES OF THE STUDY AND METHODOLOGY

1. The objectives of the study were to review the experience of family medicine in Europe and Central Asia (ECA), present best practices, and make recommendations for policy dialogue and future investments. The countries included in the study included Armenia, Bosnia and Herzegovina, Kyrgyz Republic and Moldova. In addition, a desk study was conducted on Estonia.

1.2. THE EVALUATION FRAMEWORK

2. Kutzin suggests a three-step approach to evaluating health reforms, describing: (i) key contextual factors driving reform; (ii) the reform itself and its objectives, and (iii) the process by which the reform was implemented. To these three further steps can be added: (1) describing the changes introduced by the reforms; (2) analyzing the impact of these changes on health system objectives and goals, and (iii) establishing whether the reforms have achieved the policy objectives.

3. The evaluation used a framework to analyze key changes in health system elements and objectives in relation to primary health care (PHC). This is shown in Figure 1. (See annex 1)

Figure 1. Framework for analyzing health systems

1 The term “family medicine” is used here, but other terms such as “primary health care (PHC)” or “general practice”
4. This framework builds on that developed by Hsiao and identifies four levers, available to the policy makers and managers in health systems. Management and modification of these levers enables policy makers to achieve different intermediate objectives and goals. The ‘organizational arrangements’ lever refers to the policy environment, stewardship function, and structural arrangements in relation to funding agencies, purchasers, providers and market regulators. Financing and resource allocation levers refer to resource collection, pooling, allocation, and the mechanisms and methods used for paying health service providers. The ‘provision’ lever refers to the ‘content’ – the services provided by the health sector rather than the structures within which this ‘content’ is delivered. The intermediate goals identified in the framework – equity, technical and allocative efficiency, effectiveness and choice – are frequently cited by others as end goals in themselves. However, in this framework efficiency, equity, effectiveness and choice are taken as means – contributing to attainment of the health sector’s ultimate goals of health, financial risk protection and user satisfaction.

5. This framework was used to analyze key changes in health system elements and intermediate goals. An important finding of literature search and country visits was the lack of systematically collected data at PHC level. Therefore, primary research was undertaken to generate original data to complement secondary research findings.

1.3. PRIMARY RESEARCH

6. Primary research comprised of three elements: (i) Qualitative research; (ii) Primary Health Care Facility Survey; (iii) Physician Task Profile Survey

1.3.1. Qualitative research

7. Qualitative research involved 100 key informant interviews, including 28 policy makers and managers (of which 4 were nurses) as well as 68 doctors and 4 nurses currently in practice. Thirty of these doctors were from urban and 38 from rural areas. Three of the remaining four nurses were from rural and one from urban practices.

8. The interviews explored the perceptions of key informants regarding the goals and objectives of the reforms, changes in structures and processes, critical success factors, barriers and enablers that influenced the introduction and diffusion of Family Medicine reforms, major achievements and lessons learned.

9. A semi-structured questionnaire was specifically developed for the study for face-to-face in-depth interviews of key informants. The questionnaire was piloted then iteratively refined in the four countries studied.

10. Purposive sampling was used over two stages. An initial set of key informants were purposively identified for the first stage of the study and interviewed. The data emerging from the initial set of interviews were analyzed to identify key emerging themes, which were explored further using a refined and shortened questionnaire to allow in-depth exploration of some of the key themes emerging from the initial set of interviews. The second stage also employed ‘purposive sampling’ with ‘snowballing’ to capture a multi-level multi-stakeholder sample of key informants, representing the key stakeholders involved in PHC reforms – in both policy development and implementation – from urban and rural areas.
11. The analysis informed the detailed case study by capturing information on key structural and process changes, issues related to design and implementation of PHC reforms, the drivers and barriers to reform, the factors influencing the establishment of an enabling environment for change and the lessons learnt.

1.4. PRIMARY HEALTH CARE FACILITY AND PHYSICIAN TASK PROFILE SURVEYS

12. These two elements of primary research were done concurrently to explore changes in service delivery and practice of family physicians as a result of the PHC reforms and training of physicians as family medicine specialists. It was not possible to do a pre- and post-intervention study as there were no data or baseline studies which analyzed service delivery patterns and physician practices before the reforms and after the introduction of changes.

13. We undertook two cross-sectional studies simultaneously: (i) Primary Health Care Facility survey, and; (ii) Physician Task Profile survey.

14. Each of the instruments were adapted to the context of Moldova and translated to Romanian and Russian. Local research teams were trained in the use and application of the instruments. Data analysis was undertaken at Imperial College.

15. We used purposive sampling to provide a diverse sample. Nine districts were selected based on geography and the relative stage of development of PHC care reforms including three districts each from Northern, Central and Southern parts of the country. In each district, urban and rural PHC centers were surveyed. Each district has a large PHC centre which serves the whole town and rural PHC centers serve the population who live in villages. Sixty eight centers were surveyed and 163 doctors working in these centers were interviewed by a team trained in the use of the instruments. We also interviewed 561 patients who attended these centers on the day the surveys were undertaken. The surveys were undertaken jointly by UNICEF who also used the survey to interview a further 821 patients to explore their views on programs supported by UNICEF. (Table 1 and 2)

Table 1. Number of facilities, physicians and patients surveyed (by location)

<table>
<thead>
<tr>
<th></th>
<th>Northern</th>
<th>No</th>
<th>Central</th>
<th>No</th>
<th>Southern</th>
<th>No</th>
<th>Aggregate</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>Facilities</td>
<td>3</td>
<td>Facilities</td>
<td>3</td>
<td>Facilities</td>
<td>3</td>
<td>Facilities</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Doctors</td>
<td>26</td>
<td>Doctors</td>
<td>16</td>
<td>Doctors</td>
<td>33</td>
<td>Doctors</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>Patients</td>
<td>176</td>
<td>Patients</td>
<td>126</td>
<td>Patients</td>
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<td>Patients</td>
<td>434</td>
</tr>
<tr>
<td>Rural</td>
<td>Facilities</td>
<td>21</td>
<td>Facilities</td>
<td>19</td>
<td>Facilities</td>
<td>19</td>
<td>Facilities</td>
<td>59</td>
</tr>
<tr>
<td></td>
<td>Doctors</td>
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<td>Doctors</td>
<td>26</td>
<td>Doctors</td>
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<td>Doctors</td>
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</tr>
<tr>
<td></td>
<td>Patients</td>
<td>333</td>
<td>Patients</td>
<td>296</td>
<td>Patients</td>
<td>319</td>
<td>Patients</td>
<td>948</td>
</tr>
<tr>
<td>Total</td>
<td>Facilities</td>
<td>24</td>
<td>Facilities</td>
<td>22</td>
<td>Facilities</td>
<td>22</td>
<td>Facilities</td>
<td>68</td>
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<tr>
<td></td>
<td>Doctors</td>
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<td>Doctors</td>
<td>65</td>
<td>Doctors</td>
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<tr>
<td></td>
<td>Patients</td>
<td>509</td>
<td>Patients</td>
<td>422</td>
<td>Patients</td>
<td>451</td>
<td>Patients</td>
<td>1382</td>
</tr>
</tbody>
</table>

16. Thirty centers and 62 doctors were surveyed from four districts at advanced stage of PHC reforms (Floresti, Glodeni, Anenii Noi and Hincesti). Thirty centers and 86 doctors were surveyed from four
districts at intermediate stage of reforms (Edinet, Stefan-Voda, Comrat and Cahul), and a further eight centers and 15 doctors were surveyed from one district at early stage of reforms (Telenesti). (Table 2)

Table 2. Location of districts and reform status

<table>
<thead>
<tr>
<th>Districts</th>
<th>Geography</th>
<th>Reform Status</th>
<th>Doctors interviewed</th>
<th>Centers surveyed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edinet</td>
<td>North</td>
<td>Intermediate</td>
<td>21</td>
<td>8</td>
</tr>
<tr>
<td>Floresti</td>
<td>North</td>
<td>Advanced</td>
<td>16</td>
<td>8</td>
</tr>
<tr>
<td>Glodeni</td>
<td>North</td>
<td>Advanced</td>
<td>19</td>
<td>8</td>
</tr>
<tr>
<td>Anenii Noi</td>
<td>Centre</td>
<td>Advanced</td>
<td>11</td>
<td>6</td>
</tr>
<tr>
<td>Hincesti</td>
<td>Centre</td>
<td>Advanced</td>
<td>16</td>
<td>8</td>
</tr>
<tr>
<td>Telenesti</td>
<td>Centre</td>
<td>Early</td>
<td>15</td>
<td>8</td>
</tr>
<tr>
<td>Stefan-Voda</td>
<td>South</td>
<td>Intermediate</td>
<td>18</td>
<td>8</td>
</tr>
<tr>
<td>Comrat</td>
<td>South</td>
<td>Intermediate</td>
<td>25</td>
<td>7</td>
</tr>
<tr>
<td>Cahul</td>
<td>South</td>
<td>Intermediate</td>
<td>22</td>
<td>7</td>
</tr>
</tbody>
</table>

1.4.1. PHC Provider Facility Survey

17. This component of the primary research used a facility survey instrument developed specifically for the study. The instrument drew on guidance and methodologies developed by the World Bank on facility surveys and a number of internationally available facility surveys. The instrument was developed by the research team and refined following discussions with collaborators in Bosnia and Herzegovina, Kyrgyzstan and Moldova to ensure appropriateness to the local context and piloted in each of the four countries included in the study.

18. The instrument comprises sets of questions to capture information on: (i) general characteristics of PHC facilities and the population size served; (ii) scope of services; (iii) Organization of services; (iv) availability and composition of PHC staff, availability of essential emergency drugs, availability of equipment and services; (v) comprehensiveness of services; and (vi) quality of services.

19. A summary of the elements of the instrument is attached in Annex 2.

20. The instrument was coded and a computer program was written in Access® for data entry and analysis. We performed statistical analysis (descriptive statistics and T-Test) to test for observed differences.

1.4.2. Survey of Task Profiles of Family Physicians

21. The second component of the primary research was a cross-sectional survey of family physicians to explore their ‘Task Profiles’ using a validated instrument developed by the NIVEL Group in the Netherlands. The instrument, previously tested and validated in 32 European countries, is available in several languages, including Russian and other Slavic languages. It enables collection of detailed data on the preventative, promotive and curative services provided by family physicians, their skills, knowledge base, attitudes and their workload – the latter is captured by use of a seven-day workload diary. The
instrument was obtained from the author Dr. WGW Boerma and with his kind permission used in the study. A summary of the instrument is shown in Annex 3.

22. The survey of the Task Profiles of Family Physicians aimed to identify the scope and availability of services and the skills of doctors working at PHC level and to identify similarities and differences between FM specialist and non-specialist GPs.

23. The instrument was tested in the four study countries and modified to ensure contextual sensitivity. The instrument was coded and a data collection and entry program developed in Microsoft Access. Data were transferred to SPSS® for statistical analysis.

1.5. **SECONDARY RESEARCH**

24. Secondary research comprised of two elements: (i) a review of international and in-country published literature to ascertain key legislative changes related to the reforms and to identify changes in financing, resource allocation, provider payment systems, organizational changes and regulation, and service provision; and (ii) analysis of cross-sectional and longitudinal data on health indicators.

1.5.1. **Literature review**

25. The literature review consisted of desk research of published articles in peer-reviewed journals, supplemented by documentary analysis of published reports, key legal instruments and policy documents, World Bank Publications (including aide memoires), country HITs published by the European Observatory on Health Systems Research, and other relevant studies.
2. THE CHALLENGES FACED IN THE EARLY PART OF THE TRANSITION BY THE HEALTH SYSTEM IN MOLDOVA

2.1. BACKGROUND

26. Moldova declared its independence from the Soviet Union in August 1991. It is landlocked country bordered by Romania and Ukraine and covers a landmass of 338,000 sq. km. It has a population of 4.3-4.5 million. In the last decade, Moldova has experienced a negative population growth.\(^{ix}\) (Figure 2)

**Figure 2. Population Growth (annual percent) 1990-2002**

![Population Growth Chart]

Source: World Bank, 2004

27. Moldova has a rich mosaic of mix of ethnic groups comprising ethnic Romanians (around 67 percent), Ukrainians and Russians (25 percent), Gagauz Turks (3.5 percent), and others such as Jewish and Bulgar which comprise the rest.

2.2. ECONOMIC CHANGES AND INCREASING POVERTY

28. Between 1993 and 1999 the GDP declined by 60 percent. By 2000, the GDP per capita was US $353.50 with almost 90 percent of the population living on less than US $1.00 per day.\(^{ix}\)

29. The World Bank estimated that by 2000, per capita GNP was only 40 percent of that in 1990,\(^{xi}\) lower than around 50 percent for the rest of the FSU countries and about 75 percent for Central and Eastern Europe.\(^{xii}\) Economic growth resumed in 2000 after a decade of decline in the GDP. (Figure 3)
30. Following a decade of severe economic decline, Moldovan GDP rebounded by more than 25 percent over the period 2000 to 2003. Strong growth continued in 2004. Growth in Moldova has been strongly pro-poor. Poverty rates have fallen from 71 percent of all households in 1999 to 37 percent in 2003.

31. The primary source of the recent growth performance has been a strong surge in final consumption. The increase in consumption has been fuelled by the large inflow of workers’ remittances and wage and pension increases. Investment has remained low and net exports are significantly negative.

32. Notwithstanding the recent growth, Moldova is the poorest country in Europe with a Gross National Income of US percent590 \[\text{GNI} \times \text{US}\] The GDP per capita, at purchasing power parity, in 2004 was estimated to be US$ 1,800.\[\text{GDP per capita (US$)}\] Moldova was among the last of the FSU economies to return to positive GDP growth and the GDP level is still around 40 percent of the pre independence levels.\[\text{GDP growth (annual %)}\] Early in the transitions years, Moldova sought external financing to overcome the economic shocks and begin a program of structural adjustment. Today, Moldova remains highly indebted. In 2000, the present value of debt-to-GDP ratio reached 90 percent.\[\text{Debt ratio (percent)}\]

33. Rapid and substantive decline in GDP created significant poverty amongst the population and in particular the population from rural villages.\[\text{Poverty (percent)}\] The World Bank estimates that in 2000, almost 88 percent of households had incomes below subsistence levels, while 53 percent had less than half the subsistence level.\[\text{Poverty (percent)}\] A household budget survey undertaken in 2000 showed that around 40.5 percent of all households had monthly incomes under the poverty line.\[\text{Poverty (percent)}\] In 2002, the poverty level was estimated to be 50 percent of the population although other studies estimate this figure to be higher. For instance, the 2001 World Bank Dynamic Poverty Study (May 2001 Unpublished) showed that the incidence of poverty had increased from 50 percent in 1997 to almost 70 percent in 1999, thereafter declining to 65 percent at end of 2000.\[\text{Poverty (percent)}\]
34. The worsening economic conditions also led to widening of inequalities. Between 1998 and 2001 the Gini coefficient was 0.4\textsuperscript{xxiii}

2.3. DECLINING HEALTH EXPENDITURES

35. Reduced economic activity and consequent decline in the GDP adversely impacted on Government budget allocated to the health sector which experienced a substantial decline in the period 1993 to 2003.

36. Between 1994 and 1997, the Moldovan Government contributed financing of the health sector amounting to around 6 percent of the GDP, while the total health expenditure was around 8.3 percent of the GDP.\textsuperscript{xxiii} In 1996, the amount of funds allocated by the Government to health fell to 3.8 percent of GDP. In 1999, following the economic crisis which saw a 6.5 percent decline of the GDP, the State expenditure on health budget was reduced by 35 percent from 4.3 percent of the GDP to 2.9 percent of the GDP, while the total expenditure fell from 7.2 percent of the GDP to 5.3 percent. In 2000, the Government expenditure on health sector amounted to 2.9 percent of the GDP (and 17 percent of the State budget), further declining to 2.8 percent in 2001. In the same period the total expenditure on health fell to 5.1 percent of the GDP. (Figure 4)

**Figure 4. Total, public and private health expenditure as a percentage of GDP**

![Graph showing health expenditure as a percentage of GDP from 1997 to 2001.]


37. According to the November 2003 World Bank Health Policy Note for Moldova, in the ten-year period since 1993, budgetary spending on health care has declined 62 percent in real terms since 1993.\textsuperscript{xxiv} By 2000, it represented 100 lei, or US$10 per capita. As a percentage of GDP, Moldovan public sector health expenditure is just below the world average (3.2 percent of GDP) and above the average for low income countries (2.4 percent of GDP). It is on par with the Eastern European and Central Asian Region’s average of 4.4 percent.\textsuperscript{xxv} The situation is actually worse than in other countries, however, because only 65 percent of public funds are actually available to purchase health care services. Thirty-
The financial constraints faced by the sector are further exacerbated by the fact that not all the funds allocated to the health system are always received by the MoH and budget sequestration is not unusual. Further, a substantial proportion of the public funds (35 percent of the total) are actually used to pay for debt arrears and only 65 percent of the total budget is available to purchase health care services; although, with the introduction of Mandatory Health Insurance these debt arrears are being cancelled.

The decline in health expenditure has meant that the Government had difficulty to meet its obligations to fully finance a minimum package of services for its citizens, maintain the extensive infrastructure and pay the salaries of human resources employed in the health sector. The low funding levels from the public sector and low salaries of health professionals led to emergence of informal payments which acted as a barrier to many citizens to accessing health services. A household survey carried out by UNICEF in 1997 showed that 33 percent of those surveyed could not access health services because of lack of funds.

2.4. WORSENING HEALTH INDICATORS

The transition adversely affected the health of the population. The health system faces the burden of a dual epidemiological profile, characterized by diseases of poor countries like infectious diseases, and diseases of rich countries like cancer and cardiovascular diseases. Poverty, alcohol and tobacco are the key determinants in the health of most Moldovans. Morbidity and mortality from these factors account for a sizeable burden on society and on the economy.

In 1995, Moldova was on the verge of a public health crisis. Life expectancy was declining and sexually transmitted infections (STIs) were reaching near epidemic proportions. However, Moldova has made steady progress since the mid-1990s in reversing the decline in life expectancy and in restoring health status to levels unseen since before the economic crisis. The most substantial reversals are in terms of life expectancy, which increased from 65.9 years in 1995 to 67.4 years in 2000. (Figure 5)
42. According to preliminary figures from the Department of Public Health and Management, infant mortality rate, which was 18.3 per 1,000 live births in 2002, has declined to 16 per 1,000 live births. In 2000, maternal mortality ratio per 100,000 live births was estimated to be 36.

43. Key public health challenges lie with communicable diseases, in particular tuberculosis (TB) and HIV/AIDS, where the situation is worsening.
44. Estimates of HIV incidence and prevalence are a cause for concern and show an increase in prevalence of by more than 25 times to reach 0.2 percent among adults of the 15-49 age group, ranking fourth in the CIS.\textsuperscript{xix} According to UNAIDS/WHO estimates, in 2001, the number of people in Moldova living with HIV/AIDS (PLWHA) was of 5,500. Of these, 2,000 have been officially diagnosed and 50 are under treatment. Young people under 30 years constitute about 70 percent of all infected. Without an effective control program the HIV/AIDS prevalence was projected to reach 1.9 percent by the beginning of 2011.\textsuperscript{xix} HIV infection is currently concentrated in the intravenous drug user (IDU) population and injecting drug use currently remains the main mode of HIV transmission accounting for 82 percent of all reported cases in 2001. There is a change in epidemiological patterns. The proportion of IDUs among newly detected HIV cases declined from over 80 percent in 2000 to less than 55 percent in 2003, suggesting that sexual transmission became an important transmission route and, as in Ukraine and Russia, the epidemic, which has been concentrated in risk groups, is spreading to general population.

45. Pregnant women constitute an important group affected by HIV/AIDS. According to the latest available statistics the share of women infected with HIV/AIDS gradually increased from 24.3 percent in 2000 to 37.9 percent in 2003. Since 1989, 78 HIV+ pregnant women have been registered by the Ministry of Health. Until 2003, around one to three cases of HIV+ pregnant women were identified per annum. However, following the introduction of universal testing of pregnant women for HIV, the number of newly detected HIV cases increased from 12 cases in 2003 and to over 40 cases in the first nine months of 2004. This increase reflects the spread of HIV beyond the risk groups in Moldova to the general population.

46. The population of injecting drug users (IDU) is estimated at 50,000 and this number is estimated to be growing at 30 percent per annum.\textsuperscript{xx} Most of the IDUs are not registered drug users. Hence, estimating true incidence and prevalence levels is fraught with difficulty. However, according to statistics from the Centre for Public Health and Management, in 2003, the prevalence of drug users was 155 per 100,000 population. In 2004 this figure had increased to 173.8 per 100,000: an annual increase of 12 percent.

47. A worrying trend is the rapid and substantial rise in the incidence and prevalence of sexually transmitted illness. The number of cases of syphilis increased almost thirty fold from 7.1 per 100,000 in 1989 to 200.1 per 100,000 in 1999. The number of new cases of common STIs (syphilis, gonorrhea, chlamydia and trichomoniasis) was estimated in 2001 to be around 239,000 per year. The expansion of commercial sex work (CSW) and trafficking of women are contributing to this explosion in sexually transmitted illnesses, which increase the likelihood of sexual transmission of HIV. The officially notified cases of STIs are much lower than the estimates of incidence, which are thought to be four to five times the officially notified rates which show a decline in syphilis but a continuing and substantial increase in gonorrhea levels. (Figure 7)
Figure 7. Incidence of gonorrhea and syphilis based on official notifications

Source: Department of Public Health and Management (2004 estimates)

48. In the period 1990 to 2002, the incidence of tuberculosis more than doubled (according to officially notified new cases), although estimates put the current incidence to be almost 50 percent higher than the officially notified cases. (Figure 8)

Figure 8. Tuberculosis incidence

Source: Department of Public Health and Management and (Estimated from World Bank Statistics 2004 and World Bank TB/HIV Project PAD)

49. The most dramatic increase of tuberculosis was registered in children. In 2004, as compared with 2003, the number of officially registered tuberculosis cases in this group doubled.
50. Given the increase in the incidence and prevalence of tuberculosis, STIs, IDUs and expanding commercial sex work rapid increase in HIV/AIDS and evolution from concentrated to a generalized epidemic is likely.

51. Although Moldova has worsening communicable disease problems it has gone through demographic and epidemiological transition and chronic illnesses are prevalent. Between 2000 and 2004, the incidence of cardiovascular illness increased by almost 80 percent to reach 170 per 100,000 population. (Figure 9) Similar trends are observed for neoplasms which, in the same period, increased by 20 percent (Figure 10)

**Figure 9. Incidence of cardiovascular illness**

![Graph showing incidence of cardiovascular illness from 2000 to 2004](image_url)

Source: Department of Public Health and Management

**Figure 10. Incidence of malignant neoplasms**

![Graph showing incidence of malignant neoplasms from 2000 to 2004](image_url)

Source: Department of Public Health and Management
52. Another source of concern is the increasing number of children with disability, which has increased 60 percent between 1993 and 2001. (Figure 11)

![Figure 11. Number of children with disability (per 1,000 children aged 14 years and under)](image)

Source: Department of Public Health and Management

53. Notwithstanding these improvements, Moldovan health indicators continue to lag considerably behind other European and Commonwealth of Independent States (CIS) countries and greater efforts will be needed for Moldova to meet the MDG targets

### 2.5. EXCESS INFRASTRUCTURE AND HUMAN RESOURCES

54. As with other post-Soviet countries, at independence, Moldova inherited a centralized health system based on the Semashko model. The model was characterized by an extensive infrastructure with a curative focus and a large number of health professionals.

55. As in other post-Soviet countries, parallel health services for railways, prisons, and the ministries of defense, interior and education existed. These services consume around 10 percent of the central government funding for health.

56. In 1994, there were 305 hospitals with 42,000 beds, amounting to 116 hospital beds per 10,000 population. In the same year there were 37.9 physicians and 104 nurses and midwives per 10,000 population: a high figure when compared with the countries of the former Soviet Union (FSU) and Central and Eastern European Region. However, these averages masked huge inequities in the distribution of infrastructure and human resources with an excess in urban areas and cities and relative absence in rural areas. It was estimated that, in 2002, around 15 percent of rural areas were not covered by doctors.

57. For instance, as regards number of doctors per capita population, there was a ten fold difference between urban and rural areas. (Figure 12)
Figure 12. Number of doctors per 1,000 population in urban and rural areas

Source: Department of Public Health and Management Annual Statistics 2002

58. A similar picture existed for the number of nurses but this difference was less marked, with a four fold difference in the numbers per 1,000 population. (Figure13)

Figure 13. Number of nurses per 1,000 population (urban and rural)

Source: Department of Public Health and Management Annual Statistics 2002

59. Despite the large overall number of medical professionals in the country, there have not been any major reductions in medical school admissions.
Although there is a large hospital and PHC infrastructure, most of the buildings are in poor condition. A survey of four large family doctor centers, (serving a population of around 430,000 people), six health centers (serving a population of 68,000) found poor infrastructure quality and work environment and inadequate equipment levels (except for a few that had been refurbished as part of the WB HIF Project).xxxiv

2.6. INEQUITIES IN HEALTH EXPENDITURE AND OUTCOMES

Although information is limited, the 2001 UNICEF household survey highlighted critical aspects related to the financial fairness of the Moldova health system. (Ref) The main findings of the survey included: (i) poor households have more limited access to health care services, reflected in the total number of visits to outpatient clinics and hospitals by income level, (ii) poorer households pay a much higher percentage of their income for health care and the difference are exacerbated over time, (iii) average out of pocket expenditure for hospitalization is more than three times the average household income. The study highlighted the potentially catastrophic nature of expenditure for hospital care and the need to develop a financial risk pooling mechanisms that mitigates risk among the poorest population, and that these three factors combine to create a barrier to access for the poorer households: with consequent decline in health outcomes for the poor and a widening health gap.

Regional and socio-economic inequities existed for resource allocation, service utilization, morbidity and mortality. Resource allocation to local governments is not need based and follows historic patterns. Further, the proportion of local government funds allocated to health care varies. Health expenditures, as a proportion total local government spending declined from 28 percent, in the period 1993-1997, to an average of 22 percent in 2000 – but ranged between 17 to 28 percent by region. xxxv Not surprisingly, in 2000, per capita health expenditure between regions varied two fold. (Figure 14)

Figure 14. Per capita health expenditure (in 2000, in Moldovan Lei)

![Per capita health expenditure graph](image)

Source: Department of Public Health and Management

Similarly, infant mortality rates between some regions also varied by almost two fold. (Figure 15)
64. Despite an excess of human resources, these were not equitably distributed with a tenfold difference in the per capita number of doctors and fourfold difference in the per capita number of nurses in urban and rural areas (Figures 12 and 13).

2.7. Inefficient Service Provision

65. Moldova inherited a health system based on the Soviet Semashko Model characterized by: (i) centralized planning; (ii) hierarchical administrative organization; (iii) a large provider network dominated by hospitals and tertiary provider units; (iv) parallel health systems for line ministries and large organizations; (v) poorly developed PHC level fragmented by tripartite delivery model which provided services separately for adults, men and children, as well as a large number of vertical programs delivered by narrow-specialists; (vi) absence of family physicians at PHC level which lacked gatekeeping function; (vii) a surfeit of human resources concentrated in urban areas; (viii) an inequitable resource allocation system based on historic activities and inputs rather than need or poverty — which favored large hospitals in urban centers at the expense of rural areas; (ix) line-item budgeting of provider units and salary based payment systems which encouraged inefficiency and discouraged improved performance; (x) strict care delivery protocols not based on current evidence which encouraged excessive referral to secondary care level; (xi) highly curative and disease-focused services (partly attributable to the nature of medical training) with limited health promotion or prevention, and; (xii) a system which allocated users to doctors and prevented them from exercising choice or meaningfully participating in the health production process.

66. For consumers, health services were provided free of charge, and there was little individual responsibility for health.
Performance, in terms of productivity of facilities, satisfaction of patients or quality of care, was not considered a factor when financing provider institutions. Managers could maximize their budgets by reporting as many full beds as possible and minimize their costs by admitting patients who required little care. Under this system, there was no accountability for performance.

These factors created inappropriate incentives to retain unnecessary beds, to admit patients with little or no need for hospital care for period of lengthy hospitalization, and invest little effort to improve quality, appropriateness or efficiency of services. There existed no incentives also to encourage public health, health promotion, or PHC.

The vertical programs, as in other post-Soviet countries operated without good linkages with other related programs. For instance the linkages between narcology, tuberculosis, STI services were poor and the services are not effective in targeting risk populations.

Primary care level had limited involvement in managing common chronic and communicable disease problems and acted as a referral level rather than discharging effective gate keeping function. It was not effective in managing common conditions at PHC level to resolve problems.

2.8. **Low Levels of Pay for Health Personnel**

Salaries, paid to physicians and middle-level medical staff, are determined according to the “Law on Remuneration of the Republic of Moldova” and levels reflect years of service, qualifications and position held rather than performance. The Law does not provide any incentives to encourage improved performance or provision of high quality services.

In 2000, teachers and doctors earned around US $20-30 per month. In 2000, the average salary for physicians was US$30 per month and that for other health personnel averaged US$24 per month. In the transition period, the wage differentials between the public and private sector widened, with consequent movement of many public sector staff to the private sector.

The erosion of real salaries, arrears with payment of salaries, and failure to link salary levels with group and individual performance is a major weakness in the system. While there have been efforts to reduce salary arrears and to increase wages, structural problems in the salary scales have not been addressed and remain a barrier to achieving any meaningful changes to salary levels.

Low salaries and lack of incentives have led to low motivation levels and encouraged rent seeking behavior. Informal payments increased substantially. This led to erosion of public confidence in the health sector and health professionals and also adversely affected the quality and scope of services delivered. Many health professionals left the health sector or emigrated abroad. Although, this natural wastage has helped address the presence of excess human resources most of those who left the service are ancillary staff and nurses who are difficult to attract and retain in the service as they have few other means of generating additional income.
While the attrition in the number of health professionals in the health system alleviated some of the excesses in the health system it created significant problems in rural areas. The decline in the number of health professionals working in rural areas was much higher than that observed in urban areas. For instance, between 1995 and 2001 the number of doctors in urban areas declined only 5.6 percent while the number in rural areas declined by around 25 percent. The decline for nurses in rural areas was more dramatic, with a decline of 37 percent as compared with 19 percent in urban areas. (Figure 17)
2.9. **Access Barriers to the Health Services and Negative Perception of the Health System**

76. A number of studies identified that high cost of health care was a major barrier to accessing health care. In particular for the poor population unofficial payments acted as a deterrent.

77. A survey of health conducted in 2001 showed that the majority of the population was not satisfied with the infrastructure of health facilities. On average, only 13 percent of the population was 'completely' or 'very satisfied' with the current healthcare system and 84 percent believed it should be changed. Despite an excess capacity of health care facilities, there was inadequate access coverage in all of the judets surveyed with significant regional variation. On average, 55 percent of those visiting their family doctor and 46 percent of patients visiting a specialist paid for the consultation. The survey found that although good communication existed between patients and doctors, patient complaints and needs were not taken into account with health service decisions.

78. Two Public Opinion Surveys have been done in 2002 and 2003. These surveys of 1,200 citizens and a smaller number of in-depth interviews experts were financed by the World Bank and implemented by Center for Public Opinion Research “Moldova Moderna” in 2002 and by the Academy of Sciences of Moldova: Institute of Philosophy, Sociology and Law in 2003.

79. Many findings from surveys of the users in 2002 and 2003 were similar. In 2002, around 44 percent of the respondents were aware of the health reforms while in 2003 this number had increased to 60 percent.

80. Most respondents mentioned the strengthening of the primary medical services and investment in health education (on healthy lifestyles) preventive care as priorities for the health care sector. Introducing the institution of family doctors was generally acceptable to the respondents. Although many respondents do not have a clear understanding of the role of family doctors, a large proportion supported the idea of having a family doctor as they felt a family doctor would provide a more personal care with continuity for the person and the family. In 2002, creation of the institution of family doctors was supported by 55 percent of the respondents while in 2003, this figure had increased to 61 percent.

81. In the 2003 survey, 12 percent of the respondents were satisfied with the quality of medical services; 46 percent “generally satisfied”; 28 percent "more or less satisfied”; 10 percent "not satisfied at all".

82. Both surveys found that unofficial payment of doctors, nurses and other medical personnel was widespread: 42 with over than half of respondents in 2003 acknowledging that they had "unofficially paid" their physicians and other health professionals. Around half of those surveyed in 2003 were in favor of "official" user fees to substitute for the unofficial payments although 48 percent felt that in addition to official user fees they would have to pay unofficial charges. An overwhelming majority (77 percent) of the people surveyed in 2003 expressed that they did not "have a permanent doctor" to consult with or follow a course of treatment free of charge.

83. Poverty and difficult living conditions were identified as the most important problems of the Moldovan society as well as the rising prices, increasing crime rate and unemployment. In the 2003 survey corruption was also identified as a major problem. Although health generally and subject matters such as HIV/AIDS were not main concerns of the society, respondent spoke of "womanizing" of poverty with increasingly diminishing capacity of women to pay for medical services. High prices were identified as the main barrier to health services and medicines. Many of the respondents were not able to afford to pay for prescriptions.
In 2002, one third of those interviewed felt that the health system should be reformed along lines of Western countries, while a similar proportion wished to see the Soviet health system reinstated. In 2003, although the proportion wanting reform in line with systems in Western countries had remained the same, the proportion of people wanting a return to the Soviet health system declined to 22 percent. A large proportion of respondents disapproved hospital closures as they felt that the savings would be channeled elsewhere rather than reinvested to improve health system. Many respondents favored building of small hospitals and health centers in each district. The survey found that, generally, the population were pessimistic about the reforms with 53 percent expressing the opinion that the situation would not improve.

A group of experts surveyed in 2002 all agreed that the health system should be reformed, but there was disagreement regarding the direction and content of reforms. A frequently expressed concern was the low level of training of family physicians.
3. HEALTH REFORMS AND KEY LEGISLATIVE CHANGES

3.1. HEALTH SECTOR STRATEGY

86. The Law on Health Protection was adopted in 1995. This established the platform for subsequent Laws and Decrees to reform the health system.

87. In 1997, the Moldovan Government approved a Health Sector Strategy for the period 1997-2003. The Strategy aimed to address structural inefficiencies, reduce human resources and improve financing of the health sector and identified as key objectives: (i) 'addressing health issues' as a priority; (ii) equity and solidarity; (iii) establishing effective structures and processes to implementing and monitor National Health Policy; (iv) establishing intersectoral programs with broad consultation, consensus and community participation.

88. The Strategy identified the major areas of development:

(a) Organizational and Structural Changes: (i) development of PHC; (ii) developing a family medicine centered model with a named doctor responsible for citizens health, (iii) establishing effective interface between PHC and secondary care, (iv) creating incentives for increased health promotion and preventive activities, (v) enhanced management of human resources, (vi) introduction of care guidelines, (vii) decentralization to improve local management of services and increased user participation with definition of the rights of the users, (viii) restructuring of the hospital network, (ix) improve resource allocation mechanisms to develop alternative service provision models.

(b) Modifications to financing system: (i) organization and introduction of compulsory health insurance; (ii) decentralization with autonomous provider units that will be contracted to provide services; (iii) change resource allocation from line-item budgeting to one based on per capita mechanisms; (iv) transfer of management of parallel health systems to Ministry of Health; and (v) allocating State funds to cover vulnerable groups and priority national programs.

(c) Reform of the education and training system for medical staff: (i) changing training curricula in line with best developed practice; (ii) introducing continuing medical education; (iii) reforming medical specialities.

(d) Pharmaceutical reform: (i) introducing rational prescribing; (ii) developing pharmaceutical policies and regulations for medicines management.

89. These themes were developed into the “five pillars” of the health reform strategy and articulated in the joint Government of Moldova/World Bank Health Investment Fund Project. These pillars were: (i) restructuring the network of medical services, in particular redistributing resources from tertiary medical care (where there is overcapacity) to primary care; (ii) Strengthening primary health care network by establishing an efficient network of family physicians; (iii) legalizing illegal payments, eliminating payments for unnecessary or excessive medical services, especially those which burden the poor population; (iv) creating a package of medical services in line with budgetary resources, with an emphasis on primary health care; and (v) centralizing health system financing to improve distribution of funds between levels.

90. Between 1998 and 2000, the Government issued a number of Decisions and Decrees that were followed by the Ministry of Health Orders (Prikaz) to operationally the Health Sector Strategy for 1997-
2003. These legislation acts formed the foundation for the reforms of the PHC reform established the State Hygiene and Epidemiological Service (SHES) for the country. A Government Decree in 1997 promoted structural and organizational changes to establish a new PHC system, created specialty and post of family doctor (Annex 2) and PHC nurse, introduced the principle of the free choice of family doctor and recommended the development of necessary normative acts for creation and development of PHC and family medicine. The same Decree introduced per capita payment system for PHC providers, replacing line-item budgeting.\textsuperscript{xlvii}

91. Between 1998 and 2002, there were 54 Regulation of the Council of Ministers regarding PHC.\textsuperscript{xlviii} Responsibility for managing PHC, hospitals and emergency services (with the exception of Republican Hospitals and Research Institutes) was delegated to the judet/municipality/TAU administrative authorities (councils), to be financed both directly from the state budget and from local budgets. The regulations stipulated that 35 percent of the local health budgets (27 percent of the government health expenditure) should be allocated to PHC, with 45 percent to hospital services, 15 percent to emergency services and 5 percent to specialist hospital services.

92. Several regulations relating to restructuring of the hospital sector were passed in the same period. These required the Ministry of Health and the Judet Health Authorities to initiate hospital rationalization and health sector restructuring to reduce hospital expenditures and release resources to invest in PHC. A medium-term restructuring plan was agreed between the Ministry of Health and Judets Health Authorities which required the judets to reduce number of hospitals and halve the number of hospital beds. (MoH Directive December 1998)

93. The Government also elaborated and approved a ten-year Hospital Restructuring Plan for hospitals in Chisinau Municipality and Republican Facilities. This Restructuring Plan was established as one of the conditions for disbursement of the third tranche of the Structural Adjustments Credit provided by the International Monetary Fund (IMF).

94. In 1999, the Government approved regulations which changed resource allocation method to rayons from historic budgets to a per capita budget allocation, adjusted for age and sex, to achieve a more equitable resource allocation reflecting local needs.

95. In 1998, the Parliament enacted a Law to introduce Mandatory Health Insurance to provide extra budgetary financing source for the health system based on a salary tax of 2 percent from the employee and 2 percent from the employer (see section on compulsory health insurance).

3.2. **Organizational Changes**

96. Between the declaration of independence in 1991 and 1999 Moldova was divided administratively to 40 districts (rayons) and 10 towns.

97. In 1999, the administrative boundaries were rearranged in. Health system decentralization began in 1999 with changes in public governance arrangements which aimed to regionalize government administration. The Law on Local Public Administration in 1999\textsuperscript{xlix} established 11 regional administrative units comprising 10 counties (judets), one metropolitan area (the city of Chisinau) and the territorial autonomous unit (TAU) of Gagauzia. The judets were given increased responsibility and scope for regional planning and administration, including health. The regional health authorities were made responsible for paying regional health services, with support from central government budget and local tax revenues. However, inadequate tax revenues at local level and low government transfers made it difficult for the regional health administration to implement decentralization and the new local-level arrangements. In the judet administrative structure local health budgets were allocated directly to PHC.
Units, sectoral/judet hospitals and emergency services and managed autonomously by each of the units. (See figure 18)

98. The Public Administration Law 123/2003 enacted in 2003 of and the Government Decision 688 and 689 of June 2003 developed a new public administrative structure based on 32 districts, three municipalities, and two territorial and autonomous units. In line with the new Law and Government Decisions the Minister of Health issued Regulation 190 regarding the new structure of the health care system at rayon and municipal levels. The new regulations abolished the judet structure and stipulated that health services should be reorganized into one legal entity: comprising rayon hospital, primary health care, emergency and ambulatory specialist services, with separate budgets for each of the different services but managed by the rayon Chief Doctor.

Figure 18. Organization of health system at district level

99. There are now 32 districts, three municipalities, and two territorial autonomous units. The new territorial structure places the entire budget and income from the Health Insurance Company contract in the hands of the rayon Chief Doctor. Under this new unified structure, PHC units no longer operate as separate legal entities but are accountable to the Chief Doctor at the rayon hospital who administers and is responsible for the budget of the PHC centers, emergency services, hospitals and specialist services. The health funds are transferred from the Health Insurance Company and local government to the rayon hospital administration. The rayon chief physician then allocates the funds to the sub-units s/he directly manages but is required to comply with MOH budgeting norms, which stipulate allocation 35 percent of resources to PHC, 15 percent to emergency services, and 50 percent for hospital services. However, the funds are not ring fenced. Rayon hospitals cannot increase the number of beds without approval from MOH. Hospitals in rayons with less than 90,000 population, provide services in five basic specialties, while hospitals in larger rayons provide more extensive services for their population and those from smaller neighboring rayons.
The contract with the Health Insurance Company (HIC) allowed the rayon chief physician to reallocate up to 25 percent of the PHC budget for hospital care, creating a risk of sequestration of the PHC budget and virement of funds from PHC to hospital services, which occurred in some rayons. This clause was changed in 2005, following discussions during the World Bank Mission in June 2004. The new contract does not allow for sequestration and now sub-accounts for PHC are possible.

3.3. **DEVELOPMENT OF A STATE GUARANTEED MINIMUM PACKAGE OF SERVICES**

A key achievement is the establishment of a Minimum Package of Services for the whole population of Moldova. The Article 36 of the Constitution of the Republic of Moldova guarantees minimum provision of health care services to the population which is free of charge. However, the Constitution did not define what this ‘minimum’ amount should be. The “Basic Law on Health Care” enacted in 1995, followed by the “Law Regarding the Minimum Package of Free Medical Assistance Guaranteed by the State” introduced in 1999 defined the responsibilities of the State as regards health care and defined a basic set of health services for which the State has the responsibility to finance. The Minimum Package includes: (i) Primary health care services provided by general practitioner/family doctor in ambulatory care unit or at home; (ii) Consultative services provided by physician-specialists in polyclinics and hospitals (when patient is included on the list of GP/FD and is referred by the GP/FD); (iii) Limited range of diagnostic tests and elementary investigations conducted in ambulatory laboratories (when prescribed by the GP/FD); (iv) Immunization (through National Immunization Program); (v) Urgent and emergency services for life-threatening situations; (vi) Hospital care for treatment of tuberculosis, mental disorders, oncology, asthma, diabetes, AIDS and “social related-diseases” and a number of other infectious diseases.

At the end of 2000, UNICEF launched the PHC Rehabilitation Project in Hincesti with the aim of testing the financial and technical feasibility of implementing a model of PHC based on a clearly defined package of services supported by treatment protocols. The pilot covered a population of 130,000 people and implemented an essential service package based on 50 cost-effective priority interventions and a package of 109 drugs. The evaluation of the pilot showed that the project was successful in meeting its three objectives of increasing: (i) accessibility, efficacy and quality of healthcare services in primary care sector by implementing the Basic Package of Services, Essential Drugs Policy, health care guidelines and developing Emergency Services; (ii) efficacy and efficiency of health service by rationalizing PHC structures, strengthening PHC management and streamlining health service funding; (iii) community involvement in health services planning, organization and evaluation. The evaluation of the pilot Project showed that at a cost of around US $3 per capita per annum, it was possible to access basic PHC services, including pharmaceuticals and ancillary services and that this was affordable with the by resources available to the local health administration. The Basic Package provided good coverage against the main causes of illness in Moldova and led to improved service utilization and health status of the covered population. However, it was difficult in the pilot to mobilize resources for a community financing scheme.

3.3.1. **Immunization program**

The first National Immunization Program (NIP) of Moldova for the period 1994-2000 was developed and adopted by the Government in 1994. The NIP was able to reach its targets with technical and financial assistance of UNICEF, WHO/EURO, EU, Japan and the USA. The Government adopted a second Immunization Program (2001-2005) in 2001 which put in place an enabling environment to develop an effective National Immunization Program integrated into
PHC delivery with guaranteed funding for the NIP from the State budget and disease reduction targets in accordance with the WHO European Region.\textsuperscript{lv vi}

105. Moldova has been able to achieve excellent immunization coverage for children. As a result in the year 2000 Moldova was certified polio free. An assessment of quality of immunization delivery services conducted in 2001 by the National Center of Preventive Medicine with financial support of WHO Euro showed that immunization services were fully integrated into PHC. The assessment found the National Immunization Program good service provision at every level with equal accessibility of urban and rural population and good cold chain facilities. However, a lack of financing by the national and local authorities adversely affected logistical support to the NIP, especially in relation to transportation of vaccines, records keeping, maintaining cold chain equipment.\textsuperscript{lv vii}

106. A Multiple Indicator Cluster Survey (MICS) of 11,592 households done in 2000 by UNICEF identified that immunization coverage among children 15-26 months old was 94 percent in rural areas, 86 percent in urban areas and 74 percent in Transnistria.\textsuperscript{lviii}

107. In line with the European Region of WHO goal of eliminating measles by 2007 and reducing the incidence of congenital rubella syndrome (CRS) to <1 per 100,000 live births by 2010, the Republic of Moldova has developed a national plan for measles elimination, mumps and rubella control and CRS prevention for 2002-2007. The plan includes: (i) a measles/rubella (MR) vaccination catch-up campaign and rubella vaccination for women of childbearing age; (ii) introduction of two doses MMR vaccination at the age of one and six years; (iii) implementation of surveillance for rash-fever illnesses and CRS. By the end of April 2003, 99 percent of 8-19 year-old persons and 96 percent of university students 20-23 years old were immunized with combined measles/rubella vaccine. 78 percent of women of childbearing age (20-29 years old) received monovalent rubella vaccine.\textsuperscript{lix}

108. A Health Facilities Assessment undertaken by UNICEF in 2001 in several regions found an improvement in the immunization system delivery between 1999 and 2001 by 48.4 percent of facilities had experienced stock-outs of vaccines; 42 percent had an irregular supply of MMR vaccine with 22.6 percent lacking vaccine for more than 3 months. All facilities had vaccine carriers with ice packs for vaccine transportation and had working refrigerators. Vaccines were stored correctly in 97 percent of facilities and temperature was recorded twice a day in 96 percent of facilities.

3.4. HEALTH SYSTEM FINANCING BEFORE THE INTRODUCTION OF MANDATORY HEALTH INSURANCE

109. Prior to the introduction of the MHI, financing of the health sector was derived from five principal sources: (i) revenues from general taxes; (ii) local taxes; (iii) user fees (formal out-of-pocket payments made by patients directly at the point of service); and; (iv) external funding.
110. The sector was funded principally through general taxation, collected at district level. Local governments (district or municipal) agreed with the Ministry of Finance the level of funds to be allocated to the district level health system. Surplus funds were retained by the Ministry of Finance and passed to the Ministry of Health to administer as the state (or “republican”) budget.\textsuperscript{x}\textsuperscript{ix}

111. The Decree 420 of the Ministry of Health (1998) stipulated that 35 percent of the local health budget should be allocated to PHC. In reality hospitals have received up to 80 percent of local health budgets.\textsuperscript{x}\textsuperscript{i} Actual allocations to PHC have reached about 30 percent.

112. Revenues from national level general taxes were used to finance the Ministry of Health. The amount of funds allocated centrally to the Ministry of Health was determined annually according to the “Annual State Budget of the Republic of Moldova” approved by the Parliament. The MoH used its budget to pay for national vertical programs: such as immunization, mental health, tuberculosis and HIV control, the republican hospitals, National Centre for Preventive Medicine, the Institute for Mother and Child Health and research centers managed by the Ministry of Health. Ministry of Health also funded the Centre for Public Health and Management (CPHM) which employs around 50 staff, including statisticians and epidemiologists, and collects and provides on a regular basis annual reports and statistics on the Moldovan Health System. The expenditure for these programs and institutions accounted for 90 percent of the MoH funds. The remaining 10 percent of the MoH budget was used to finance parallel health services managed by the Ministry of Interior (including the penitentiary system), ministry of defense, and the railways. A parliamentary Committee on Health and Welfare monitored the activities of the Ministry of Health.

113. Between 1991 and 1999, administratively, Moldova was divided into 40 districts (rayons) and four municipalities. The Law on Local Public Administration enacted in 1999 established 11 Judets
Responsibility for planning, financing and managing local primary health care, secondary care services provided at district and regional hospital (comprising certain inpatient services specified in the minimum package), and emergency services were delegated to the 11 regional health authorities. These regional health administrations reported to the Ministry of Health. The Judet health administration allocated the local health budget to four main areas: (i) hospital inpatient services (45 percent of total); (ii) primary health care (35 percent); (iii) emergency services (15 percent), and; (iv) certain specialist services such as ophthalmological services (5 percent). Each of these departments were budget holders and administratively autonomous with responsibility to the regional health department and through them to the ministry of health. Each department had a director and their budgets were ring-fenced.

Figure 20. Allocation of the public sector budget prior to Health Insurance Reforms

However, since 2004, the public administrative structure of Moldova has changed along with health system financing and administration. (See section on organizational changes)

3.5. **Health System Financing after the Introduction of Mandatory Health Insurance**

In 1998, the Law on Mandatory Health Insurance was enacted to introduce financing from social insurance and move to a mixed system of financing. Government resolutions in 2002 enabled the creation of 11 territorial branches of the Health Insurance Company (HIC) and defined the basis of the contract between the HIC and health care providers on the basis of volume of activities for Basic Benefit Package of Health Care Services under the Mandatory Health Insurance (BBP-MHI) and prices based on tariffs set by the MOH. The methodology of the costing is according to the methodology approved by Government Resolutions.
In 2002, the Government Decision enabled piloting of the CHI in Hincesti district for a six-month period from July to December 2003.\textsuperscript{lxvi} Mandatory Health Insurance was successfully piloted. During the pilot the MHI contributions were established as 2 percent payroll tax for employers and the employees in the rayon. The MHI contributions for pensioners, children, students, officially registered unemployed were established equal 169.68 lei (12.8 USD) for half year and the total amount of public funding of the rayon health care system increased by 1.8 times. The PHC centre in Hincesti became a part of the rayon hospital after the merging of all health care institutions into one legal entity. At start of the pilot there was approximately 40 percent deficit in the number of family physicians in the rayon. With introduction of the MHI this deficit was partly corrected by employing physicians in residency training. During first three months of the pilot the workload of PHC increased by 35 000 additional visits to the PHC physicians the proportion of visits by rural citizens increased from 42 percent in year 2002 to 73 percent in year 2003. In the same period, the number of ambulance visits decreased substantially in comparison with the same three-month period in 2002.\textsuperscript{lxvii} However, it appears that the State Guaranteed Minimum package was larger than the benefits package included in the Basic Benefit Package of Health Care Services under the Mandatory Health Insurance: an anomaly which needs to be addressed.\textsuperscript{lxviii}

In December 2003, the Government passed a regulation defining services to be covered by the Mandatory Health Insurance and available only for the insured population. In addition, 21 national programs, available to all Moldovan citizens regardless of insurance status, were identified. The national roll-out began in January 2004 with appropriate modifications to the Law on Mandatory Health Insurance\textsuperscript{lxix lxx lxxi} Changes in the Law also makes to possible for individuals or legal entities to establish 'medical institutions' to contract with the Health Insurance Company or its territorial branches.\textsuperscript{lxxii}

The contributions are now set on a payroll tax of 2 percent of monthly salary payable by the employee and 2 percent by the employer.\textsuperscript{lxxiii} MHI covers those who are permanently employed persons (defined in the Law as holders of Labor Cards). In addition, contributions are made from the state budget for unemployed persons including students attending vocational training, full-time university students and disabled persons. Transfers from local government budgets cover children under the school age, children in primary and secondary education, those officially registered as unemployed, and pensioners.

The benefits for the insured were stipulated in the Government Resolution which defined BBP-MHI which includes: (i) emergency pre-hospital medical assistance; (ii) primary medical assistance; (iii) specialized ambulatory medical assistance; (iv) stationary medical assistance; and (v) other services related to medical assistance.\textsuperscript{lxxiv}

The services stipulated in the BBP-MHI and the contracts between the HIC (and its territorial branches and the providers follow the Minimum Package of Services approved by the Government which was changed to include: "(i) anti-epidemic prophylactic measures and medical services within the national programs stipulated in the state budget; (ii) pre-hospital medical assistance, in case of major medico-surgical emergencies that endanger the life of the person; (iii) primary medical assistance provided by the general practitioner, which comprises: clinical examination (subjective and objective), with recommendations for examinations and treatment; (iv) medical assistance, stipulated in the BBP-MHI.\textsuperscript{lxxv}

The PHC services delivered by the FM specialist according to the HIC contract include: "supervision of baby’s growth; immunization according to the vaccination calendar; preventive examinations for adults and family planning; pre-natal care, supervision of pregnant women and post-natal care of women after childbirth, including providing pregnant women with iron medication 100 percent compensated at the prescription of the family doctor; interventions in case of illness, including the
volume of health care services provided by the family doctor (health care in new cases of illness and acute
state of chronic diseases); interventions, including preventive, in the cases of frequently met diseases;
and surgical emergencies provided by the primary health care entity in the health care institutions and at
home; ambulatory examination for certain categories of patients; supporting activities."

122. The HIC agrees an annual contract with the rayon administration with pre specified price and
volume of services to be provided. PHC providers are paid according to a per capita contract and hospitals
are paid according to per discharged patient and per case for emergencies.

123. Since the introduction of the MHI, in the first three months of 2004, the number of PHC visits
was about 2,900,000, an increase of over 20 percent, as compared with the same period of 2003.

124. While many of the FSU countries have attempted to introduce health insurance schemes the
success is limited. Moldova is attempting to use MHI as an instrument to improve efficiency and
quality of health services rather than a means to raise all health system financing, realizing that in the
transition years, health financing needs to be mixed and from several sources. At present, income from
MHI is low and the financing comes predominantly from general and local taxes and out-of-pocket
expenditures. Health insurance is being used not just a tool to mobilize resources but as a catalyst for
change. Implementation of MHI is progressing well. Revenues continue to closely follow projections. As
part of health insurance based model, the Government has approved the basic package of services for
2005, which have expanded in scope in comparison with 2004. The package now includes the services of
narrow health specialists, dentists and financial subsidies for drugs for patients with hypertension.  For the
uninsured, the Government has allocated 30 million Lei to cover in-patient and specialized out-patient
treatment of patients who suffer social diseases, such as TB, oncological, psychiatric diseases, HIV/AIDS
etc.

125. The World Bank mid-term review Aide Memoire in (Ref) had indicated that the new territorial
structure placed the entire budget/contract in the hands of the rayon chief physician and left the PHC
budget at risk of potential sequestration. Sequestration by the rayon directors was allowed under the
insurance contract (up to 25 percent of the PHC budget for hospital care). In discussions with the HIC
Director, the June World Bank mission received assurances that the next version of the contracts would
eliminate the clause which allowed for potential sequestration of PHC funds. Following this intervention,
the Bank team was pleased to learn that in the 2005 contracts, this issue has been favorably resolved. In
addition, the 2005 contracts provide for allocation of resources on different bank accounts (hospital, PHC,
etc).

3.5.1. Out of Pocket Payments

126. Private expenditure for health comes from three sources: (i) unofficial payments to health care
providers; (ii) user charges, and; (iii) expenditure on pharmaceuticals.

127. The decline in public financing of health care has been substituted by an increase in informal
payments and the introduction of a formal set of user fees.

128. User payments were introduced in 1999 and apply to certain services and pharmaceuticals not
covered under the Minimum Package guaranteed by the State. Formal user charges were introduced to
create transparency with payments to providers (in an attempt to reduce informal payments made to
providers) and also to raise additional source of funds for the health sector to partially offset the
diminished funding from the public sector.
129. Out-of-pocket payments have been increasing since 1992 and now exceed public expenditure on the health sector. In 1998, a household expenditure survey done by the Department of Statistics, showed household expenditures of 4.2 Lei per capita per month (amounting to 184 million Lei per year and 2 percent of GDP) and about and half as much as the public sector expenditure on health. However, a household survey carried out by UNICEF in 1996 showed that households spent around 9.9 Lei per capita per month on health: (amounting to a total of 440 million lei per annum and equal in amount to public sector expenditure).

Table 3. Estimate of Private Sector Health Care Expenditures

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<tbody>
<tr>
<td>Average per capita monthly health care expenditure per capita (lei)</td>
<td>4.0</td>
<td>4.2</td>
<td>9.9</td>
<td>15.2</td>
</tr>
<tr>
<td>Total estimated private sector expenditure on health (million lei)</td>
<td>175.3</td>
<td>184.1</td>
<td>439.4</td>
<td>220</td>
</tr>
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130. By 2000, average per capita out-of-pocket (OOP) expenditure was 15.2 Lei per month per household, amounting to around 220 million Lei and 50 percent of the total health expenditure in 2000. Around 80 percent of the OOP expenditure was for pharmaceuticals, 12 percent for investigations, 6 percent for consultation and 3 percent for transport. Evidence from the UNICEF household surveys indicate that the increase in household out-of-pocket spending has had a larger negative impact on poor and low income households, consuming a larger portion of their household income and causing them to forgo needed care.

131. According to informal estimates of out-of-pocket expenditure, private financing is likely to double total health care spending in 2004-05 financial year by contributing a further US$10 per capita.

3.5.2. External Funding

132. External funding is also a significant source of funding for the health sector. In 1999, the World Bank approved a new Country Assistance Strategy for the Republic of Moldova with a second structural adjustment loan. The World Bank Health Investment Fund Project, to develop a health sector centered on PHC began in 2001. The Project is funded by World Bank credit of US $10 million complemented by a US $10 million grant from the Government of the Netherlands and co-financing of US $1.6 million by the Moldovan Government. The Project has established a ‘Health Investment Fund’ to upgrade emergency and PHC centers and reduce excess capacity in the hospital sector. The health sector also receives project-based funding and assistance from the European Union, UK DFID, Japanese International Cooperation Agency, SIDA, UNICEF, UNDP, UNFPA, the Global Fund, and WHO. There are several NGOs which are active in Moldova and include, amongst others, the International Red Cross and the Open Society Institute.
3.6. RESOURCE ALLOCATION AND PROVIDER PAYMENT SYSTEMS

133. An important achievement of health reforms is increased resource allocation to PHC level. The proportion of health expenditure allocated to PHC has gradually increased from 10 percent of the total government health expenditure in 1999 to 26 percent in 2003, while hospital expenditure declined in proportion to this increase. (Figure 21)

![Figure 21. Allocations in PHC as a percentage of total government health budget](image)

Source: Department of Public Health and Management

134. Prior to the establishment of the HIC and contracts, rayon hospitals received budgets from local governments according to inputs and activities such as the numbers of staff, bed days and outpatient visits. Republican hospitals received their budgets from the MoH. PHC providers were paid according a weighted per capita adjusted for age and gender. Since 2004, the regional health administration has a contract with the HIC stipulating volume of services to be provided.

135. The territorial purchasers of the HIC contract with hospitals are paid according to block volume of services based on the number of cases and performance indicators regarding quality, user satisfaction and organizational change.

136. Hospitals can levy additional charges for services not included as part of the State Guaranteed Package of Services (as specified in the “Law regarding Minimum Package of Free Medical Assistance Guaranteed by the State”), on a fee-for-service basis, at prices set by the MOH in accordance with the “Regulation on Fee for Health Services”.

137. The HIC and its territorial branches allocate 35 percent of the fund available for routine health care to PHC. This total sum divided by the number of persons insured (and those covered by State and local funding) gives the amount of funds available per insured persons entitled to PHC services. The territorial purchasers of the HIC contract with PHC providers through the rayon health authorities on a per capita basis. There is no risk adjustment. The capitation amount paid is based on the number of insured
persons on the family doctor’s list multiplied by the per capita rate and is paid monthly in arrears. The contract with PHC providers stipulates attainment of certain targets and performance indicators in relation to; observation of the development of children under five; implementation vaccination program; regular preventive checks of adults, and; detection, treatment, and supervision of patients with chronic and social diseases (tuberculosis, cancer, cardiovascular diseases, diabetes, hepatitis and cirrhosis, HIV/AIDS. The insured persons have the right to change their family doctor after three months of registration.

3.7. RATIONALIZATION OF THE HOSPITAL SECTOR

138. Hospital sector has significant excess capacity in Moldova. When health spending began to fall, revenues were insufficient to maintain such an extensive network. Reduced health care funding, excess utility costs, large arrears made it impossible to sustain such an infrastructure, Studies which explored rationalization opportunities concluded that significant capacity could be eliminated without adverse effect on health care delivery. lxxii

139. Several regulations relating to restructuring of the hospital sector were issued between 1998 and 2000 to rationalize the hospital sector. These regulations required the Ministry of Health and the Judet Health Authorities to initiate hospital rationalization and health sector restructuring to reduce hospital expenditures and release much needed resources to invest in PHC. A medium-term restructuring plan, agreed between the Ministry of Health and judet Health Authorities, required the judets to reduce number of hospitals and halve the number of hospital beds. (MoH Directive December 1998) The Government also elaborated and approved a ten-year Hospital Restructuring Plan for hospitals in Chisinau Municipality and Republican Facilities. This Restructuring Plan was established as one of the conditions for disbursement of the third tranche of the Structural Adjustments Credit provided by the International Monetary Fund (IMF). Between 1995 and 2002 the number of hospitals (including Republican facilities) declined from 265 to 65. (Figure 22)

Figure 22. Number of hospitals in Moldova

![Number of hospitals in Moldova](image)

Source: Department of Public Health and Management Statistics

140. In the same period the number of beds was reduced from 42,000 to 22,000. (Figure 23)
Figure 23. Number of hospital beds (total and per 10,000 population)

Source: Department of Public Health and Management Statistics

141. The annual savings resulting from closures of facilities are estimated to be around US$10 million (equivalent to 25 percent of total health spending) and these savings have been used for reduction of arrears, increasing allocations to primary care, increasing salaries, and improving availability of materials and supplies.\textsuperscript{lxxxiii}

142. In 2002, a comprehensive restructuring plan was approved for the Municipality of Chisinau, including the Municipal and Republican facilities. This plan, however, has not yet been implemented.

143. The number of hospital admissions between 1995 and 2000 declined in line with reduced hospital capacity. In the same period the average length of stay fell from 16.4 to 11.9 days per admission (still very high by European standards but in line with FSO countries). (Figure 24)
Figure 24. Number of admissions per 100 people and average length of stay per admission

Source: WHO Regional Office for Europe Health for All Database.

However, the hospital utilization levels are still low: suggesting that further substantial reductions in capacity can be achieved without adversely affecting service delivery. (Figure 25)

Figure 25. Hospital capacity utilization

Source: WHO Regional Office for Europe Health for All Database.
4. KEY DEVELOPMENTS IN PRIMARY HEALTH CARE

4.1. DEVELOPMENT OF HUMAN RESOURCES IN PRIMARY HEALTH CARE

145. Moldova uses central planning to determine health workforce requirements. Human Resources Unit in the Ministry of Health is responsible for determining human resource requirements.

146. Moldova has an excess of doctors and nurses although the numbers have been declining due to low salaries and emigration. (Figure 26) As demonstrated earlier in this report, significant inequities exist in geographic distribution of doctors and nurses and the decline has hit the rural regions particularly hard. It is difficult to attract and retain doctors and nurses to rural areas and this remains one of the major challenges faced by the Health System in Moldova.

Figure 26. Total number of doctors and nurses (000s) 1995-2001

147. Although the total number of doctors has been declining, the proportion of trained in family medicine has increased.

4.1.1. Training of family physicians and nurses

148. According to data from different sources the numbers of family physicians in Moldova vary between 2,000 to almost 4,000. However, many statistics do not distinguish between a therapeutists, a general practitioner with no specialist training in family medicine and those retrained in family medicine. (Figure 27)
According to the Department of Public Health and Management, in 2002, there were 2,143 family doctors. (Figure 28)

Family doctor training program began in Moldova in 1996. The Faculty of Family Medicine was established at the State Medical University in 1998. A Chair in Management Training and Public Health
was created in 2000. Two model family practices were established in Chisinau and have been used as training practices. FM Chair has 15 faculty including four associate professors and eight assistant professors. It has strong support from the State University.

151. The Faculty has been providing four different training programs to train family physicians: (i) A three-year specialist residency program in family medicine; (ii) Four-month retraining course, which started in 1998, and; (iii) Four-week retraining course, supported by the World Bank which started in 2003, and, (iv) short-term thematic courses supported by UNICEF since 1998.

152. Between 1996 and 2001 the Faculty provided ‘some training’ in family medicine to over 2,000 doctors in residency and short course programs and was selected by the World Bank in 2003, as the implementing agency for retraining of PHC doctors in family medicine.

153. Between 1998 and 2004, UNICEF Moldova office provided short courses on mother and child health issues (antenatal care, immunization, child growth and development monitoring, Integrated management of Childhood Illnesses), to over 7,000 family doctors and nurses.

154. In 2002, international technical assistance was used, with financing from the World Bank Health Investment Fund Project and UNICEF, to develop a curriculum for training of trainers program (TOT) and to train FM and family nurse trainers. A four-week training program was designed comprising: (i) Participatory teaching techniques (e.g. subjective objective assessment plan (SOAP), adult learning, problem based learning (PBL), role-plays, and case stories); (ii) organizational skills, and (iii) the role of the family doctor/family nurse.

155. A total of 34 FM trainers and 20 family nurse trainers were trained in the TOT program and given certificates. The FM and family nurse trainers trained in the TOT program also worked with the international consultants to develop a retraining curriculum to retrain doctors working in PHC in FM. Initially a retraining course of 18-week duration was developed to train 750 family physicians and 1500 family nurses. However, due to lack of funds this program was scaled down to four weeks. In addition, UNICEF provided financial support for further two-weeks of additional training, on integrated management of childhood illnesses (IMCI), antenatal care (ANC) and supervision of healthy child development (SHCD), to extend the training to six-weeks. UNICEF financed development of the curriculum, remuneration for trainers as well as the subsistence and travel costs of all the trainees trained in the program for the additional two weeks.

156. The four-week element of the training comprises of four modules:

Module I – Concepts of primary care include, history taking, consultation skills, prevention, national immunization program, diagnostic skills, assessing disability, managing drug abuse and violence.

Module II – Syndromic management and clinical and examination skills, antenatal care, minor surgery, cancer screening and antibiotic use.

Module III – Teamwork, conflict management, managing common acute emergencies.

Module IV – Managing specific illnesses such as heart failure, gastrointestinal problems, diabetes, complicated pregnancy, asthma, urinary tract infections, care of the elderly patients.

157. With support from the WB Health Investment Fund Project (HIFP), five regional FM Training Centers were established (in Orhei, Balti, Lapusna, Ungheni and Cahul) and refurbished. The centers were provided with appropriate educational materials and visual aids to enable training to take place. The refurbishment and equipping of the University Family Practice Training Centre was equally financed from the WB HIFP and the State University of Medicine and Pharmacy.
158. The State University of Medicine and Pharmacy was contracted in 2003 to implement the training program. Doctors and nurses are being trained in the six-week short course retraining program (four-weeks of FM and family nursing and short courses of IMCI, ANC, SHCD, and CGDM) in groups of 15 and 25 respectively. A total of 30 groups of Family physicians and 60 groups of nurses will be trained in five regional training centers and the University Family Practice Training Centre in Chisinau.

159. By June 2004 274 physicians and 447 nurses were retrained in the FM and family nursing retraining program.

160. By the end of September 2004, the University had finalized training of 400 GPs (54 percent) and 770 nurses (52 percent). By the end of 2004 it is expected that 450 GPs (60 percent) and 875 nurses (60 percent) will have received this training. Evaluation of the training thus far, indicates a high satisfaction of participants. Pre and post tests have shown significant impact of the training. (Personal correspondence Ms Betty Hanan, World Bank Task Team Leader for Moldova)

161. There are several concerns regarding training and family: (i) The short nature of the training; (ii) No career structure for graduates of FM programs; (iii) Inadequate incentives for FM physicians.

162. It has been estimated that around 20–30 percent of family medicine graduates go back to work in posts in hospitals. To address the problem of low salaries and incentives, the MoH has developed new guidelines stipulating mechanism for wage calculations, which will allow in 2005 to increase wages, especially for GP in rural areas, where there is an acute shortage of staff. MOH is confident that these changes will go a long way to solve staff shortages in rural areas. (Personal correspondence Ms Betty Hanan, World Bank Task Team Leader for Moldova)

4.1.1.1. Residency program in Family Medicine

163. A three year residency program was established in 1997. The program comprises:

Year 1: (i) Family Medicine in specialized centers such as university clinics and FM training centers; (ii) Internal medicine (25 weeks); (iii) Pediatrics (16 weeks)

Year 2: Sub specializations such as endocrinology, obstetrics and gynecology, dermatology, tuberculosis, infectious diseases, hematology, emergency medicine, imaging.

Year 3: Sub specializations such as dermatology and 32 weeks of family medicine with large proportion dedicated to rural medicine.

164. The program is changing with introduction of three months of FM training in Year 2 and three months of compulsory rural practice in Year 3.

4.1.2. Training of Health Managers

165. International technical assistance was used, with financing from the World Bank Health Investment Fund Project, to develop a Tot curriculum and train 26 trainers in health management.

166. The Tot program consisted of four modules, each of one-week duration, and comprising: (i) General health management; (ii) Quality Management; (iii) Financial management, and; (iv) Business planning and teaching / training methodologies.

167. The trainers trained in the TOT program were involved in a working group established to develop a training curriculum to train 200 health managers. The nationwide training of health managers has been
designed to upgrade the management skills of health administrators, especially in the context of the nationwide implementation of MHI, which is completely changing the system’s modus operandi. The curriculum for training of health managers included: (i) general and human resource management; (ii) strategic planning; (iii) total quality management; and (iv) financial management and accounting.

168. The training of health managers, implemented by the School of Public Health, began in 2003. The training is co-financed by the Sores Foundation of Moldova and the Open Society Institute of New York (OSI). The initial target of 200 managers was increased to 300 health managers (comprising rayon chief physicians, deputy chief physicians, managers of PHC institutions and hospital managers who will be trained in 12 groups of 25. The objective of training is to upgrade management skills of health administrators to enable implementation of the health reforms, and in particular the health insurance scheme. By June 2004, 96 health managers had been trained.\textsuperscript{lxxxvii} By the end of 2004 the University is expected to have provided management training of 200 health managers.

169. In addition, UNICEF Moldova, in close partnership with CDC-Atlanta has provided support to the development of training curricula and materials on Management of Mother and Child Health Programs with elements of Total Quality Management, Evidence Based Medicine, Epidemiology, and surveillance systems in public health. Between 2001 and 2004 more than 100 health care managers received training on the above mentioned issues.

4.1.3. Continuing Medical Education

170. CME is governed by regulations on revalidation and the Health Law. It consists of a total of 450 hours accumulated over five years needs to be done by every doctor to progress in the health service.

4.1.4. Family Medicine Association

171. The FM Association of Moldova was established in 2000 and held its first congress in the same year. The Association is supported by the WHO, and have had activities/projects supported by UNICEF, and Sores Foundation.

4.2. Incentives for Human Resources

172. A Government Resolution, which came into force on 01 January 2004, also changed the procedure for salary calculation at public health institutions. This Resolution indicates the maximum rates of compensation for employees at public health institutions agreed by the Ministry of Health, the National Health Insurance Company, and the Sanatatea Trade Union and proposes that the executives of the public health institutions involved in the MHI system should allocate 50 percent of the revenues accumulated from chargeable medical services to remuneration of health professionals by increasing pay levels, giving additional pay in form of bonuses and monetary assistance based on performance, complexity and quality of work.\textsuperscript{lxxxviii}

4.3. Organization of Primary Health Care Providers

4.3.1. Types of Primary Health Care Providers

173. PHC network consists of four types of PHC providers: (i) Centers for Family Medicine, based on the former district polyclinics and often serving large populations of over 50,000; (ii) Health Centers, based on former SVAs (selkskiye vranchnii punkt); (iii) Family Doctor offices based on former rural
ambulatories covering populations over 1001, and; (iv) Health posts for family doctors assistants for villages/areas with populations less than 1000.

174. There are 190 Centers for Family Medicine, Health Centers and Family Doctors offices managed by the regional health authorities. In addition, there are PHC centers managed by other ministries and private enterprises.

175. Regions are divided into family doctor 'sectors, each with a population of 1,000-1,800 people.

4.3.2. Access to Primary Health Care

176. Most Moldovan citizens have good geographic access to PHC services. A household survey done in 2000 by UNICEF to assess level of access to health services found that 87 percent of households were at a distance of less than 5 km and needed less than one hour to reach nearest PHC facilities. There was urban-rural difference in geographic access: around 93 percent of the urban and 82 percent of the rural households was situated within less than 5 km of a PHC centre, and; 79 percent patients from the rural areas as compared with 93 percent from urban areas were able to reach a PHC centre in less than an hour: around two thirds (65.6 percent) of patients from rural areas walked to the PHC centers, as compared with 58 percent from urban areas.

177. Although all Moldovan citizens are entitled to a Guaranteed Minimum Basic Health Services significant financial barriers to health care exist.

178. The UNICEF household survey in 2000 found that because of financial barriers 15.3 percent of the household had ‘total’ and 40.1 percent ‘low’ inaccessibility to health services. Accessibility varied with education, socio-economic status and place of residence. Vulnerable population groups were most adversely affected, with 72.8 percent of households with a head of family who had low educational level, 71.6 percent of those from the poorest centile, and 58.6 percent of those from rural areas low accessibility because of inability to afford services. The survey identified that 33.5 percent of the population were not financially protected against eventual health problems with lower socio-economic groups (47.9 percent) and rural (41.3) less protected.

179. Just over half of households surveyed (50.6 percent) had an adequate financial access to services in the case of last episode of illness but 30.4 percent of the respondents mentioned that because of financial barriers they had to postpone a medical consultation when necessary. Of those who were able to access medical care 18.5 percent were unable to purchase the treatment prescribed because of financial reasons.

4.4. Refurbishment of PHC Centers

180. A number of PHC have been refurbished with financing from the WB HIFP. The Health Investment Fund Component of the World Bank Project is being implemented in three phases. The first phase targeted PHC facilities; the second addressed PHC and emergency care, and the third phase is also targeting PHC and emergency care.

181. In the first phase health centers from Chisinau Municipality and PHC units from Central Judets (Balti, Ungheni, Lapusna, Tighina and Taraclia) were selected for refurbishment and equipping through competitive and transparent selection of sub-projects. In the second phase additional competitive mechanisms were put in place and transparent criteria established to select regions which were invited to submit restructuring and investment proposals. In particular, priority was given to rural areas with lower access to health benefits. PHC centers with three or more family physicians covering populations of four-
to-five thousand were selected across the country. Under phase two, equipment valued at EUR 1 million was delivered by the end of July 2004. Delivery of equipment under a third lot was completed in November 2004. Forty five ambulances were delivered in April 2004 and 30 new ambulances are to be delivered by the first quarter of CY05.

182. In total, 280 PHC will be refurbished in two phases, with support from the WB HIFP.182 By mid 2003, refurbishment of 55 PHC facilities, selected in the first phase, was completed. Field visits and focus groups sessions undertaken subsequently at end of 2003 have demonstrated increased satisfaction of users and health professionals.183 By end of 2004, a further 50 PHC facilities were rehabilitated with substantial improvement to conditions for the FM team and the users.184

4.5. Utilization of PHC Services

183. The utilization of PHC services, as measured by the number of visits to family physicians, increased by 17 percent between 2000 and 2002, thereafter declining to a level observed in 2000. (Figure 29)

![Figure 29. Number of visits to family physicians](image)

Source: Department of Public Health and Management statistics

184. Between 2000 and 2002, the number of referrals from PHC to secondary and tertiary services increased by 10 percent. (Figure 30)
4.6. **GUIDELINES**

185. To date, very few evidence-based guidelines and protocols have been developed except for those relating to IMCI, antenatal care, and child growth and development monitoring developed with support of UNICEF and good uptake in the PHC pilot in Hincesti region.

186. The WB HIF Project is providing support to the MOH to develop clinical protocols for most common illnesses. The Clinical Protocol Specialist has been working with local experts since early October 2004. Working Groups have been established to work under the guidance of the consultant. The groups are to select priority diseases for which Treatment Protocols should be developed. A questionnaire was prepared and transmitted to all hospitals to review the situation on the use of clinical protocols. Diseases will be selected on the basis of their major impact on morbidity, mortality and cost of services.
5. PRIMARY HEALTH CARE SERVICE DELIVERY: FACILITY SURVEY

187. The PHC facility survey explored five areas: (i) Range of services provided; (ii) Availability of equipment; (iii) Use of clinical guidelines; (iv) Immunization services, and; (v) Essential drugs.

188. The analysis initially compared urban and rural PHC centers. The analysis was then repeated comparing PHC centers in advanced versus less advanced districts.

5.1. RANGE OF SERVICES PROVIDED

5.1.1. Urban and rural comparison

189. Most of the basic services were frequently (90-100 percent) provided in both urban and rural PHC centers surveyed. Although almost all of these services were less commonly provided in rural centers the differences were significantly not different. (Table 4)

<table>
<thead>
<tr>
<th>Service</th>
<th>Urban (%)</th>
<th>Rural (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>General consultation</td>
<td>100</td>
<td>98.3</td>
</tr>
<tr>
<td>Pediatric consultation</td>
<td>100</td>
<td>95</td>
</tr>
<tr>
<td>Pediatric developmental checks</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Nutrition clinics</td>
<td>100</td>
<td>95</td>
</tr>
<tr>
<td>Antenatal care</td>
<td>100</td>
<td>97</td>
</tr>
<tr>
<td>Postpartum care</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Diabetes</td>
<td>100</td>
<td>97</td>
</tr>
<tr>
<td>Asthma</td>
<td>100</td>
<td>93</td>
</tr>
<tr>
<td>Heart disease</td>
<td>100</td>
<td>97</td>
</tr>
<tr>
<td>Mental Health</td>
<td>100</td>
<td>88</td>
</tr>
<tr>
<td>Hepatitis</td>
<td>100</td>
<td>97</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>100</td>
<td>95</td>
</tr>
<tr>
<td>Diarrhea</td>
<td>100</td>
<td>95</td>
</tr>
<tr>
<td>Acute Respiratory Illness</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Home visits</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Ambulance service</td>
<td>89</td>
<td>90</td>
</tr>
<tr>
<td>Family Planning</td>
<td>100</td>
<td>92</td>
</tr>
<tr>
<td>Health education and prevention clinic</td>
<td>100</td>
<td>97</td>
</tr>
</tbody>
</table>

190. Several services, such as minor surgery, typically provided in PHC level in European countries were infrequently provided. There were urban and rural differences which were significantly not different. (Table 5)
Table 5. Less frequently provided essential PHC services

<table>
<thead>
<tr>
<th>Service</th>
<th>Urban (%)</th>
<th>Rural (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intrapartum care</td>
<td>44</td>
<td>33</td>
</tr>
<tr>
<td>STIs</td>
<td>78</td>
<td>78</td>
</tr>
<tr>
<td>Minor surgery</td>
<td>44</td>
<td>50</td>
</tr>
<tr>
<td>Hospital admission privileges</td>
<td>44</td>
<td>22</td>
</tr>
<tr>
<td>Patient observation as a day case</td>
<td>78</td>
<td>75</td>
</tr>
<tr>
<td>Laboratory</td>
<td>78</td>
<td>57</td>
</tr>
</tbody>
</table>

191. Immunization services were more likely to be provided in rural centers and this difference was statistically significant. In contrast, HIV services were more likely to be provided in urban centers which were much more likely to have pharmacy services: these differences were statistically significant.

Table 6. Services with statistically significant urban-rural difference in provision levels

<table>
<thead>
<tr>
<th>Service</th>
<th>Urban (%)</th>
<th>Rural (%)</th>
<th>Urban-Rural difference (%)</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Immunization</td>
<td>89</td>
<td>100</td>
<td>-11</td>
<td>0.009</td>
</tr>
<tr>
<td>HIV</td>
<td>100</td>
<td>55</td>
<td>45</td>
<td>0.009</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>100</td>
<td>52</td>
<td>48</td>
<td>0.000</td>
</tr>
</tbody>
</table>

5.1.2. Comparison by reform status

192. Although most of the essential PHC services were more frequently provided in advanced reform region these differences were statistically not significant.
Table 7. Frequently provided essential PHC services

<table>
<thead>
<tr>
<th>Service</th>
<th>Reform (%)</th>
<th>Low reform (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>General consultation</td>
<td>100</td>
<td>98</td>
</tr>
<tr>
<td>Pediatric developmental checks</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Immunization</td>
<td>100</td>
<td>98</td>
</tr>
<tr>
<td>Nutrition clinics</td>
<td>100</td>
<td>95</td>
</tr>
<tr>
<td>Antenatal care</td>
<td>88</td>
<td>98</td>
</tr>
<tr>
<td>Postpartum care</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Diabetes</td>
<td>88</td>
<td>98</td>
</tr>
<tr>
<td>Hypertension</td>
<td>100</td>
<td>98</td>
</tr>
<tr>
<td>Heart disease</td>
<td>100</td>
<td>97</td>
</tr>
<tr>
<td>Mental Health</td>
<td>88</td>
<td>90</td>
</tr>
<tr>
<td>Hepatitis</td>
<td>88</td>
<td>98</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>100</td>
<td>95</td>
</tr>
<tr>
<td>Acute Respiratory Illness</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>STIs,</td>
<td>88</td>
<td>77</td>
</tr>
<tr>
<td>Family Planning</td>
<td>88</td>
<td>93</td>
</tr>
<tr>
<td>Health education and prevention clinic</td>
<td>100</td>
<td>97</td>
</tr>
<tr>
<td>Nursing care</td>
<td>100</td>
<td>90</td>
</tr>
<tr>
<td>Home visits</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Ambulance service</td>
<td>100</td>
<td>89</td>
</tr>
</tbody>
</table>

193. Differences between advanced and less advanced reform regions were observed in the level of service provision for a number of less frequently performed services, but these differences were statistically not significant. (Table 8)

Table 8. Less frequently provided PHC services

<table>
<thead>
<tr>
<th>Service</th>
<th>Reform (%)</th>
<th>Low reform (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intrapartum care</td>
<td>63</td>
<td>31</td>
</tr>
<tr>
<td>HIV</td>
<td>75</td>
<td>59</td>
</tr>
<tr>
<td>Minor surgery</td>
<td>63</td>
<td>48</td>
</tr>
<tr>
<td>Patient observation as a day case</td>
<td>88</td>
<td>74</td>
</tr>
</tbody>
</table>

194. Interestingly, a number of services were significantly more likely to be provided in less advanced reform areas. (Table 9)
Table 9. Services with statistically significant difference in provision levels between advanced and less advanced reforms

<table>
<thead>
<tr>
<th>Reform (%)</th>
<th>Low reform (%)</th>
<th>Mean Difference (%)</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pediatric consultation</td>
<td>75</td>
<td>98</td>
<td>-23</td>
</tr>
<tr>
<td>Asthma</td>
<td>63</td>
<td>98</td>
<td>-36</td>
</tr>
<tr>
<td>Diarrhea</td>
<td>63</td>
<td>100</td>
<td>-38</td>
</tr>
</tbody>
</table>

195. This may be because, the re training of family in the cohorts working in less advanced reform areas benefited from training in UNICEF sponsored IMCI programs.

5.2. Availability of equipment

5.2.1. Urban and rural comparison

196. A large number of basic equipment, which one would expect to find in PHC centers, was present in most of the centers surveyed. (Table 10)

Table 10. Essential equipment found to be frequently available

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Urban (%)</th>
<th>Rural (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refrigerator</td>
<td>100</td>
<td>88</td>
</tr>
<tr>
<td>Stethoscope</td>
<td>89</td>
<td>98</td>
</tr>
<tr>
<td>Sphygmomanometer</td>
<td>89</td>
<td>72</td>
</tr>
<tr>
<td>Tonometer</td>
<td>100</td>
<td>98</td>
</tr>
<tr>
<td>Thermometer</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Dressing kits</td>
<td>89</td>
<td>87</td>
</tr>
<tr>
<td>Examination table</td>
<td>89</td>
<td>88</td>
</tr>
<tr>
<td>Spatula</td>
<td>89</td>
<td>93</td>
</tr>
<tr>
<td>Tape meter</td>
<td>100</td>
<td>97</td>
</tr>
<tr>
<td>Adult scale</td>
<td>89</td>
<td>65</td>
</tr>
<tr>
<td>Measuring bar on wall</td>
<td>78</td>
<td>68</td>
</tr>
<tr>
<td>Disposable needles and syringes</td>
<td>89</td>
<td>90</td>
</tr>
<tr>
<td>Intravenous line</td>
<td>89</td>
<td>95</td>
</tr>
<tr>
<td>Sight chart</td>
<td>78</td>
<td>73</td>
</tr>
<tr>
<td>Child scale</td>
<td>89</td>
<td>100</td>
</tr>
</tbody>
</table>

197. A number of essential equipment, which would be expected to be present in a PHC were infrequently (<60 percent) found in the PHC centers surveyed. Although there were urban and rural differences these were statistically not significant. (Table 11)
Table 11. Essential equipment found to be infrequently available

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Urban (%)</th>
<th>Rural (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delivery kit</td>
<td>56</td>
<td>73</td>
</tr>
<tr>
<td>Pelvimeter</td>
<td>67</td>
<td>90</td>
</tr>
<tr>
<td>Vaginal speculum</td>
<td>67</td>
<td>93</td>
</tr>
<tr>
<td>Dry heat</td>
<td>56</td>
<td>75</td>
</tr>
<tr>
<td>Cylindrical sterilizer box</td>
<td>22</td>
<td>48</td>
</tr>
<tr>
<td>Floor lamp (surgical)</td>
<td>0</td>
<td>13</td>
</tr>
<tr>
<td>Suture kits</td>
<td>44</td>
<td>45</td>
</tr>
<tr>
<td>Catheter set</td>
<td>33</td>
<td>43</td>
</tr>
<tr>
<td>Otoscope</td>
<td>56</td>
<td>40</td>
</tr>
<tr>
<td>Nasal speculum</td>
<td>56</td>
<td>37</td>
</tr>
<tr>
<td>Nebulizer</td>
<td>33</td>
<td>20</td>
</tr>
<tr>
<td>Autoclave</td>
<td>33</td>
<td>30</td>
</tr>
</tbody>
</table>

198. Reflex hammers and ECGs were more likely to be found in urban centers, in contrast simple minor surgical equipment were found more often in rural centers. (Table 12)

Table 12. Essential equipment with significant urban-rural differences in availability

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Urban (%)</th>
<th>Rural (%)</th>
<th>Mean Difference (%)</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reflex hammer</td>
<td>78</td>
<td>32</td>
<td>46</td>
<td>0.01</td>
</tr>
<tr>
<td>ECG</td>
<td>89</td>
<td>45</td>
<td>44</td>
<td>0.03</td>
</tr>
<tr>
<td>Obstetric stethoscope</td>
<td>67</td>
<td>93</td>
<td>-27</td>
<td>0.03</td>
</tr>
<tr>
<td>Kidney basin</td>
<td>33</td>
<td>73</td>
<td>-40</td>
<td>0.05</td>
</tr>
<tr>
<td>Sponge bowl</td>
<td>67</td>
<td>92</td>
<td>-25</td>
<td>0.03</td>
</tr>
</tbody>
</table>

5.2.2. Comparison by reform status

199. For almost all the equipment frequently available there was a difference between more- and less-advanced reform districts, with the PHC centers in the advanced-reform districts more likely to possess the equipment. This difference was statistically significant for expensive equipment such as ophthalmoscopes and otoscopes (Figure 13) but for other equipment the difference was not statistically significant. (Table 14)

Table 13. Essential equipment with significant differences in availability

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Reform (%)</th>
<th>Low reform (%)</th>
<th>Difference (%)</th>
<th>Significance (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ophthalmoscope</td>
<td>100</td>
<td>38</td>
<td>87</td>
<td>0.000</td>
</tr>
<tr>
<td>Otoscope</td>
<td>88</td>
<td>36</td>
<td>51</td>
<td>0.005</td>
</tr>
<tr>
<td>Floor lamp (surgical)</td>
<td>50</td>
<td>7</td>
<td>43</td>
<td>0.001</td>
</tr>
</tbody>
</table>
Table 14. Essential equipment with differences in availability (statistically not significant)

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Reform (%)</th>
<th>Low reform (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child scale</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Thermometer</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Stethoscope</td>
<td>100</td>
<td>97</td>
</tr>
<tr>
<td>Sphygmomanometer</td>
<td>75</td>
<td>74</td>
</tr>
<tr>
<td>Tonometer</td>
<td>100</td>
<td>98</td>
</tr>
<tr>
<td>Dressing kits</td>
<td>88</td>
<td>87</td>
</tr>
<tr>
<td>Examination table</td>
<td>100</td>
<td>87</td>
</tr>
<tr>
<td>Spatula</td>
<td>75</td>
<td>95</td>
</tr>
<tr>
<td>Tape meter</td>
<td>100</td>
<td>97</td>
</tr>
<tr>
<td>Adult scale</td>
<td>88</td>
<td>66</td>
</tr>
<tr>
<td>Measuring bar on wall</td>
<td>88</td>
<td>67</td>
</tr>
<tr>
<td>Disposable needles and syringes</td>
<td>100</td>
<td>89</td>
</tr>
<tr>
<td>Delivery kit</td>
<td>88</td>
<td>69</td>
</tr>
<tr>
<td>Pelvimeter</td>
<td>100</td>
<td>85</td>
</tr>
<tr>
<td>Obstetric stethoscope</td>
<td>100</td>
<td>89</td>
</tr>
<tr>
<td>Vaginal speculum</td>
<td>100</td>
<td>89</td>
</tr>
<tr>
<td>Intravenous line</td>
<td>100</td>
<td>93</td>
</tr>
<tr>
<td>Sight chart</td>
<td>100</td>
<td>70</td>
</tr>
<tr>
<td>Sponge bowl</td>
<td>100</td>
<td>87</td>
</tr>
<tr>
<td>Instrument tray</td>
<td>88</td>
<td>77</td>
</tr>
</tbody>
</table>

200. There was also a difference in the availability of equipment that was infrequently possessed by the PHC centers. These equipments were more likely to be possessed by PHC centers in more advanced reform district but the difference was statistically not significant. (Table 15)

Table 15. Difference in availability of equipment not frequently possessed by PHC centers

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Reform (%)</th>
<th>Low reform (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reflex hammer</td>
<td>63</td>
<td>34</td>
</tr>
<tr>
<td>ECG</td>
<td>50</td>
<td>51</td>
</tr>
<tr>
<td>Anaphylaxis box - adrenaline etc</td>
<td>50</td>
<td>77</td>
</tr>
<tr>
<td>Pocket flash with adjustable focus</td>
<td>63</td>
<td>33</td>
</tr>
<tr>
<td>Nasal speculum</td>
<td>63</td>
<td>36</td>
</tr>
<tr>
<td>Nebulizer</td>
<td>25</td>
<td>21</td>
</tr>
<tr>
<td>Oxygen concentrator</td>
<td>50</td>
<td>43</td>
</tr>
<tr>
<td>Autoclave</td>
<td>38</td>
<td>30</td>
</tr>
<tr>
<td>Dry heat</td>
<td>63</td>
<td>74</td>
</tr>
<tr>
<td>Cylindrical sterilizer box</td>
<td>50</td>
<td>44</td>
</tr>
<tr>
<td>Suture kits</td>
<td>63</td>
<td>43</td>
</tr>
<tr>
<td>Catheter set</td>
<td>63</td>
<td>39</td>
</tr>
<tr>
<td>Kidney basin</td>
<td>75</td>
<td>67</td>
</tr>
</tbody>
</table>
5.3. **IMMUNIZATION SERVICES**

5.3.1. *Urban and rural comparison*

201. Triple vaccine and oral polio were equally present in almost all the facilities surveyed. However, urban facilities were more likely to have measles, tetanus and BCG vaccines. The difference, in the case of the latter two, was statistically significant. (Table 16)

Table 16. Availability of vaccines

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Urban (%)</th>
<th>Rural (%)</th>
<th>Difference (%)</th>
<th>Significance (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>DTP</td>
<td>100</td>
<td>100</td>
<td>0</td>
<td>-</td>
</tr>
<tr>
<td>Polio</td>
<td>100</td>
<td>98</td>
<td>2</td>
<td>0.32</td>
</tr>
<tr>
<td>Measles</td>
<td>100</td>
<td>73</td>
<td>27</td>
<td>0.08</td>
</tr>
<tr>
<td>Tetanus</td>
<td>89</td>
<td>77</td>
<td>12</td>
<td>0.05</td>
</tr>
<tr>
<td>B.C.G.</td>
<td>89</td>
<td>28</td>
<td>61</td>
<td>0.00</td>
</tr>
</tbody>
</table>

5.3.2. *Comparison by reform status*

202. Tetanus was statistically more likely to be available in PHC centers situated in reform region (p<0.05), however, statistically no difference was observed for DTP, OPV, measles and BCG.

5.4. **FAMILY PLANNING**

5.4.1. *Urban and rural comparison*

203. There was statistically significant difference in the availability of family planning materials in very low availability in the rural areas. (Table 17)

Table 17. Availability of family planning materials

<table>
<thead>
<tr>
<th>Material</th>
<th>Urban (%)</th>
<th>Rural (%)</th>
<th>Difference (%)</th>
<th>Significance (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condoms</td>
<td>89</td>
<td>27</td>
<td>62</td>
<td>0.00</td>
</tr>
<tr>
<td>Oral contraceptives</td>
<td>100</td>
<td>23</td>
<td>77</td>
<td>0.00</td>
</tr>
<tr>
<td>Injectable contraceptives</td>
<td>44</td>
<td>2</td>
<td>42</td>
<td>0.00</td>
</tr>
<tr>
<td>Intra Uterine Device (IUD)</td>
<td>89</td>
<td>8</td>
<td>81</td>
<td>0.00</td>
</tr>
</tbody>
</table>

5.4.2. *Comparison by reform status*

204. Injectable contraceptives were more readily available in PHC centers situated in advanced reform district and this difference was statistically significant. There was no statistically significant difference in the availability of condoms, oral contraceptives and IUD.
5.5. **ESSENTIAL DRUGS**

5.5.1. *Urban and rural comparison*

205. There was a difference in the availability of essential drugs in urban and rural PHC centers, with urban centers more likely to possess these. These differences were statistically significant for several drugs (but not so for others).

<table>
<thead>
<tr>
<th>Drugs</th>
<th>Urban (%)</th>
<th>Rural (%)</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adrenaline</td>
<td>100</td>
<td>93</td>
<td>0.045</td>
</tr>
<tr>
<td>Insulin</td>
<td>89</td>
<td>23</td>
<td>0.000</td>
</tr>
<tr>
<td>Metoclopramide (antiemetic)</td>
<td>100</td>
<td>38</td>
<td>0.000</td>
</tr>
<tr>
<td>Metronidazole</td>
<td>89</td>
<td>43</td>
<td>0.010</td>
</tr>
<tr>
<td>Acetyl Salicylic Acid</td>
<td>100</td>
<td>92</td>
<td>0.024</td>
</tr>
</tbody>
</table>

Table 18. Availability of essential drugs (Statistically significant difference)

<table>
<thead>
<tr>
<th>Drug</th>
<th>Urban (%)</th>
<th>Rural (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Penicillin G</td>
<td>78</td>
<td>52</td>
</tr>
<tr>
<td>Atropine</td>
<td>100</td>
<td>80</td>
</tr>
<tr>
<td>Hydrocortisone/prednisolone</td>
<td>100</td>
<td>97</td>
</tr>
<tr>
<td>Aminophylline</td>
<td>100</td>
<td>97</td>
</tr>
<tr>
<td>Syntocinon or ergometrine</td>
<td>78</td>
<td>53</td>
</tr>
<tr>
<td>Frusemide</td>
<td>100</td>
<td>97</td>
</tr>
<tr>
<td>Rehydration salts</td>
<td>89</td>
<td>87</td>
</tr>
<tr>
<td>Antihistamine</td>
<td>10</td>
<td>98</td>
</tr>
<tr>
<td>Paracetamol</td>
<td>100</td>
<td>98</td>
</tr>
<tr>
<td>Penicillin or ampicillin</td>
<td>89</td>
<td>77</td>
</tr>
<tr>
<td>Co-trimoxazole</td>
<td>100</td>
<td>75</td>
</tr>
<tr>
<td>Iron and Folic Acid</td>
<td>100</td>
<td>75</td>
</tr>
</tbody>
</table>

Table 19. Availability of essential drugs (Statistically no significant difference)

5.5.2. **Comparison by reform status**

206. Although there were differences in the availability of essential drugs, with more PHC centers in the advanced reform district likely to possess these drugs, the differences were statistically not significant. (Table 20)
Table 20. Availability of drugs by reform status

<table>
<thead>
<tr>
<th></th>
<th>Reform (%)</th>
<th>Low reform (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Penicillin G</td>
<td>63</td>
<td>54</td>
</tr>
<tr>
<td>Adrenaline</td>
<td>100</td>
<td>93</td>
</tr>
<tr>
<td>Atropine</td>
<td>100</td>
<td>80</td>
</tr>
<tr>
<td>Hydrocortisone/prednisolone</td>
<td>100</td>
<td>97</td>
</tr>
<tr>
<td>Insulin</td>
<td>50</td>
<td>30</td>
</tr>
<tr>
<td>Aminophylline</td>
<td>100</td>
<td>97</td>
</tr>
<tr>
<td>Metoclopramide (antiemetic)</td>
<td>25</td>
<td>49</td>
</tr>
<tr>
<td>Syntocinon or ergometrine</td>
<td>38</td>
<td>59</td>
</tr>
<tr>
<td>Frusemide</td>
<td>100</td>
<td>97</td>
</tr>
<tr>
<td>Metronidazole</td>
<td>38</td>
<td>51</td>
</tr>
<tr>
<td>Rehydration salts</td>
<td>100</td>
<td>85</td>
</tr>
<tr>
<td>Antihistamine</td>
<td>100</td>
<td>98</td>
</tr>
<tr>
<td>Co-trimoxazole</td>
<td>100</td>
<td>75</td>
</tr>
<tr>
<td>Iron and Folic Acid</td>
<td>100</td>
<td>75</td>
</tr>
<tr>
<td>Gliceryl trinitrate</td>
<td>0</td>
<td>15</td>
</tr>
</tbody>
</table>
6. TASK PROFILE OF DOCTORS WORKING IN PRIMARY HEALTH CARE

6.1. USE OF MEDICAL EQUIPMENT

6.1.1. Comparison by urban-rural status

207. Doctors working in urban areas were more statistically more likely to use or have access to diagnostic or therapeutic equipment on site in their health centers used by their colleagues. However, these were infrequently used (50 percent or less) except for the ECG machine (77 percent in urban centers). These levels are lower than what would be expected in PHC centers in Europe. (Table 21)

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Urban (%)</th>
<th>Rural (%)</th>
<th>Significance (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>cholesterol meter</td>
<td>43</td>
<td>13</td>
<td>8.3E-06</td>
</tr>
<tr>
<td>gastroscope</td>
<td>20</td>
<td>1</td>
<td>4.0E-05</td>
</tr>
<tr>
<td>ultrasound for abdomen/fetus</td>
<td>28</td>
<td>6</td>
<td>8.1E-05</td>
</tr>
<tr>
<td>X-ray</td>
<td>50</td>
<td>14</td>
<td>1.2E-07</td>
</tr>
<tr>
<td>spirometer</td>
<td>37</td>
<td>8</td>
<td>3.0E-06</td>
</tr>
<tr>
<td>ECG</td>
<td>77</td>
<td>50</td>
<td>2.7E-04</td>
</tr>
<tr>
<td>defibrillator</td>
<td>20</td>
<td>8</td>
<td>2.5E-02</td>
</tr>
</tbody>
</table>

208. Doctors working in rural areas were more statistically likely to use or have on site equipment for minor surgery. (Table 22)

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Urban (%)</th>
<th>Rural (%)</th>
<th>Significance (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>suture set</td>
<td>23</td>
<td>38</td>
<td>4.1E-02</td>
</tr>
<tr>
<td>set for minor surgery</td>
<td>15</td>
<td>39</td>
<td>5.6E-04</td>
</tr>
</tbody>
</table>

209. There was also a difference in the use of diagnostic equipment that was infrequently used (less that 50 percent) but the difference was statistically not significant. (Table 23)
Table 23. Urban rural differences in infrequently used equipment

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Urban (%)</th>
<th>Rural (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>otoscope</td>
<td>44</td>
<td>35</td>
</tr>
<tr>
<td>protoscope</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>blood glucose test set</td>
<td>47</td>
<td>34</td>
</tr>
<tr>
<td>ophthalmoscope</td>
<td>40</td>
<td>36</td>
</tr>
<tr>
<td>audiometer</td>
<td>13</td>
<td>10</td>
</tr>
<tr>
<td>peak flow meter</td>
<td>19</td>
<td>17</td>
</tr>
<tr>
<td>eye tonometer</td>
<td>29</td>
<td>31</td>
</tr>
<tr>
<td>urine catheter</td>
<td>17</td>
<td>30</td>
</tr>
</tbody>
</table>

6.1.2. Comparison by reform status

210. For most diagnostic and therapeutic equipment there was statistically significant difference in the use or access on site by family doctors working in PHC centers situated in advanced reform region. (Table 24)

Table 24. Equipment used by family doctor or staff in the PHC centers situated in advanced or less advanced reform regions

<table>
<thead>
<tr>
<th>Equipment</th>
<th>advanced %</th>
<th>intermediate %</th>
<th>low %</th>
<th>significance (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>haemoglobinimeter</td>
<td></td>
<td></td>
<td></td>
<td>0.01</td>
</tr>
<tr>
<td>blood glucose test set</td>
<td>56</td>
<td>29</td>
<td>33</td>
<td>0.00</td>
</tr>
<tr>
<td>blood cell counter</td>
<td>63</td>
<td>30</td>
<td>13</td>
<td>0.00</td>
</tr>
<tr>
<td>ophthalmoscope</td>
<td>74</td>
<td>19</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>spirometer</td>
<td>39</td>
<td>13</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>eye tonometer</td>
<td>52</td>
<td>19</td>
<td>7</td>
<td>0.00</td>
</tr>
<tr>
<td>urine catheter</td>
<td>37</td>
<td>17</td>
<td>7</td>
<td>0.01</td>
</tr>
<tr>
<td>set for minor surgery</td>
<td>44</td>
<td>17</td>
<td>20</td>
<td>0.00</td>
</tr>
<tr>
<td>microscope</td>
<td>50</td>
<td>37</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>otoscope</td>
<td>69</td>
<td>24</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>peak flow meter</td>
<td>34</td>
<td>9</td>
<td>0</td>
<td>0.00</td>
</tr>
</tbody>
</table>

211. Doctors in PHC centers situated in advanced reform region were also statistically more likely to use or have access to on site to equipment that was very infrequently used (Table 25). There was statistically no difference in use of X-ray, audiometer and cholesterol meter.
Table 25. Equipment infrequently used by family doctor or staff in the PHC centers situated in advanced or less advanced reform regions

<table>
<thead>
<tr>
<th>Equipment</th>
<th>advanced</th>
<th>intermediate</th>
<th>low</th>
<th>significance (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td>defibrillator</td>
<td>27</td>
<td>6</td>
<td>0</td>
<td>0.00</td>
</tr>
<tr>
<td>protoscope</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>0.01</td>
</tr>
<tr>
<td>sigmoidoscope</td>
<td>8</td>
<td>0</td>
<td>0</td>
<td>0.02</td>
</tr>
<tr>
<td>gastroscope</td>
<td>26</td>
<td>0</td>
<td>0</td>
<td>0.00</td>
</tr>
</tbody>
</table>

6.2. APPLICATION OF MEDICAL TECHNIQUES

6.2.1. Comparison by urban-rural status

212. Most of the medical techniques used in the surveyed were 'seldom/never' applied by family physicians (in 80 percent or more of the cases). These included: cryotherapy; applying a plaster cast; removal of a sebaceous cyst; resection of ingrowing toenail; removal of rusty spot from cornea; insertion of IUD; excision of warts; maxillary puncture, and; myringotomy of eardrum. There was no statistically significant difference in application frequency of these medical techniques.

213. Some medical techniques, such as fundoscopy, applying a plaster cast or joint injection, were used 'occasionally', 'usually', or '(almost) always' by family physicians in 30-40 percent of the cases. However, there was no statistically significant difference between family physicians from urban and rural PHC centers.

214. Three procedures (wound suturing, strapping an ankle and setting up an intravenous infusion) were 'occasionally', 'usually', or '(almost) always' were used by family physicians 60 percent of the time or more often. Wound suturing and setting up an IV infusion was more likely to be done by family physicians in rural areas whereas strapping an ankle was more often done in urban centers. (Figure 31) These differences were statistically significant. (p<0.001)
6.2.2. Comparison by reform status

215. Most of the medical techniques used in the surveyed were 'seldom / never' applied 80 percent or more of the time. These included: cryotherapy; applying a plaster cast; removal of a sebaceous cyst; resection of ingrowing toenail; removal of rusty spot from cornea; insertion of IUD; excision of warts; maxillary puncture, and; myringotomy of eardrum. There was no statistically significant difference in application frequency of these medical techniques in advanced, intermediate and early reform areas.

216. Several medical techniques (resecting ingrowing toe nail, wound suturing, fundoscopy, joint injection, applying a plaster cast, strapping an ankle and setting up an intravenous infusion) were 'occasionally', 'usually', or '(almost) always' done 40 percent of the time or more often. Family physicians from PHC centers in advanced reform region were generally more likely to use these techniques as compared with family physicians from PHC centers in intermediate or early reform regions. (Figure 32) These differences were statistically significant for resecting ingrowing toe nail, fundoscopy, joint injection and strapping an ankle (p<0.001).
Figure 32. Frequency of applying medical technique  
(1=never and 4=always)

6.3. First contact management of commonly encountered conditions

217. The doctors interviewed were presented with a list of 27 health problems commonly encountered in PHC and for which the family physicians would be expected to act as the first contact point and manage the problem.

6.3.1. Comparison by urban-rural status

218. Common pediatric conditions were frequently managed by family physicians in PHC setting and more frequently in urban centers. There was statically significant difference in management of enuresis (p<0.05). (Figure 33)
Figure 33. Frequency of managing common pediatric conditions
(1=never and 4=always)

There was no discernible difference in the management of common gynecological problems that were frequently managed by family physicians in PHC setting. (Figure 34)

Figure 34. Frequency of managing common gynecological conditions
(1=never and 4=always)

Many of the common adult problems in men were likely to be frequently managed by family physicians in urban and rural PHC centers. There was statistically significant difference (p<0.001) in management of men with toothache, sprained ankle and hand burn, which were more likely to be managed in rural setting. (Figure 35)
Figure 35. Frequency of managing common adult conditions
(1=never and 4=always)

A similar picture was observed for management of common adult conditions in women which were frequently managed by family physicians in urban and rural centers but there was no statistically significant difference. (Figure 36)

Figure 36. Frequency of managing common adult conditions in women
(1=never and 4=always)
However, psychosocial problems were less likely to be managed by family physicians in PHC setting in both rural and urban areas. There was no statistically significant difference between family physicians from urban and rural PHC centers. (Figure 37)

**Figure 37. Frequency of managing common psychosocial problems**
(1=never and 4=always)

6.3.2. **Comparison by reform status**

Common pediatric conditions were frequently managed by family physicians in PHC setting and more frequently by doctors in PHC centers situated in advanced reform region. This difference in the management of these conditions by family physicians in PHC centers from advanced, intermediate and early reform regions was statically significant (p<0.001). (Figure 38)

**Figure 38. Frequency of managing common pediatric conditions**
(1=never and 4=always)
There was also a difference in the frequency of managing common gynecological problems which were more frequently managed by family physicians in PHC centers in advanced reform region as compared with those from intermediate and early reform (doctors from early reform area most frequently managed a woman to confirm pregnancy but this was not statistically different as compared with advanced reform). These differences in the management of these conditions was statically significant (p<0.001). (Figure 39)

**Figure 39. Frequency of managing common gynecological conditions**

(1=never and 4=always)

225. Many of the common adult problems in men were likely to be more frequently managed by family physicians in PHC situated in advanced reform regions as compared with those doctors in intermediate and early reform regions. These differences were statistically significant (p<0.001). (Figure 40)
226. A similar picture was observed for management of common adult conditions in women which were more frequently managed by family physicians in advanced reform region as compared with those from early reform region. Statistically, these differences were significant (p<0.001). (Figure 41)

227. Psychosocial problems were less frequently managed than other common conditions but were much more likely to be managed by family physicians in PHC centers from advanced reform region as
compared with those from intermediate and early reform. These differences were statistically significant (p<0.001).

Figure 42. Frequency of managing common psychosocial problems
(1=never and 4=always)

6.4. HEALTH PROMOTION AND DISEASE PREVENTION

228. The respondents were asked about their involvement in health education, promotion and disease prevention activities.

6.4.1. Comparison by urban-rural status

229. Around 95-96 percent of family physicians routinely checked blood pressure of their patients. There was no statistically significant urban and rural difference.

230. Blood cholesterol level was not measured routinely but if indicated by clinical condition or if requested it was more likely to be measured by family physicians from urban PHC centers (64 percent) as compared with family physicians from rural centers (44 percent). This difference was statistically significant (p<0.05).

231. Around 60-70 percent of family physicians from urban and rural PHC centers routinely did cervical smear tests. There was no statistically significant urban and rural difference.

232. Breast cancer screening was performed by 93-95 percent of family physicians from urban and rural PHC centers routinely did cervical smear tests. There was no statistically significant urban and rural difference.

233. A large majority of doctors interviewed (70-100 percent) were involved routinely in health education activities during routine consultations relating to smoking, drinking alcohol and health diet. There was no statistically significant urban and rural difference.
234. All the doctors surveyed were involved in providing immunization and surveillance of children under the age of four.

235. The proportion of the family physicians providing family planning, antenatal and intrapartum care varied. Family physicians from rural PHC centers were more likely to provide these services than those from urban areas. (Figure 473) This difference was statistically significant for antenatal care (p<0.05)

**Figure 43. Percentage of doctors providing family planning services, antenatal and intrapartum care**

6.4.2. **Comparison by reform status**

236. Family physicians working at PHC centers in advanced and intermediate reform regions were significantly more likely to routinely check blood pressure, perform cervical smear and breast screening for cancer. (Figure 44)

237. The majority of family physicians working at PHC centers in early reform regions provided health education advice routinely. However, family physicians from advanced and intermediate reform regions were significantly much more likely (p<0.001) to provide special health education sessions for smoking, diet and drinking. (Figure 44)
238. All family physicians provided immunization and surveillance for children aged under four years and less. However, proportion providing antenatal, intrapartum and family planning services varied. Almost all the family physicians surveyed provided antenatal care and 93-96 percent provided family planning services. Statistically, there was no significant difference between regions. (0) Family physicians in advanced reform region were much more likely to provide intrapartum care, as compared with family physicians from intermediate and early reform regions. This difference was statistically significant (p<0.001). (Figure 45)
6.5. **CHRONIC DISEASE MANAGEMENT**

239. This element of the task profile survey aimed to identify the extent to which family physicians and primary care doctors were involved in management of common chronic conditions that would be expected to be managed within PHC setting. The doctors were presented with a list of 17 conditions and were asked to identify the extent to which they were involved in the management of these — i.e. almost always, usually, occasionally and seldom/never.

6.5.1. **Comparison by urban-rural status**

240. Interestingly there was no statistically significant difference in management of chronic conditions encountered in PHC by rural and urban family physicians. A number of conditions such as herniated disc lesion, salpingitis and peritonsillar abscess were infrequently managed. A number of conditions were 'often' managed (60 percent of family physicians usually or almost always involved in management) and included hyperthyroidism, hordeolum, ulcerative colitis, concussion, Parkinson's disease, depression and myocardial infarction.

241. The rest of the conditions were frequently managed which included chronic bronchitis, peptic ulcer, acute cerebrovascular accident (CVA), chronic heart failure, pneumonia, uncomplicated type II diabetes mellitus and rheumatoid arthritis.

6.5.2. **Comparison by reform status**

242. A number of conditions, such as herniated disc lesion, salpingitis and peritonsillar abscess were infrequently managed, and there was no difference in percentage of family physicians managing these conditions working in PHC centers from advanced, intermediate and early reform regions.

243. Several other conditions, which were often ('occasionally or usually') managed, were more likely to be managed by family physicians from PHC centers in advanced reform region. However, the differences were statistically not significant. (Figure 46)
However, for the large majority of conditions, which were frequently (usually or almost always), were more likely to be managed by family physicians from PHC centers in advanced reform region as compared with family physicians from early reform regions. These differences were statistically significant. (Figure 47)
6.6. JOB SATISFACTION

6.6.1. Comparison by urban-rural status

245. A large majority of the doctors interviewed 'strongly' or 'more-or-less' agreed that they were interested in their work and also found real enjoyment. This proportion was similar for family physicians working in urban and rural regions and there was no statistically significant difference. (Figure 48)

Figure 48. Percent of doctors interested in job and who find real enjoyment (by urban and rural location)

246. However, around 70 percent of the doctors felt that much of their efforts were wasted and over 80 percent felt that they were overloaded with administration.

247. Only 10-15 percent of doctors felt that the rewards matched the effort made by them but only around 20 percent would take a non-medical job if the chance arose. (Figure 49)
6.6.2. Comparison by reform status

248. The large majority of the doctors interviewed 'strongly' or 'more-or-less' agreed that they were interested in their work and also found real enjoyment. This proportion was similar for family physicians working in advanced, intermediate and early reform regions and there was no statistically significant difference (although 100 percent of the doctors from early reform region responded positively). (Figure 50)
249. Around 70 percent of the doctors working in advanced and intermediate reform regions felt that much of their efforts were wasted as compared with around 30 percent of doctors working in early reform regions. This difference was statistically significant (p<0.001). Similarly 75-95 percent of doctors working in advanced and intermediate reform regions felt overloaded with administration, as compared with around 65 percent of doctors working in early reform regions. This difference was statistically significant (p<0.05). (Figure 50)

250. As with the urban-rural analysis only 10-15 percent of doctors felt that the rewards matched the effort made by them but only around 10-15 percent would take a non-medical job if the chance arose. There was no statistically significant by reform regions. (Figure 51)

Figure 51. Percent of doctors who feel effort and reward do not correspond and who may take a non-medical job
7. FINDINGS OF THE QUALITATIVE RESEARCH

7.1. PHC REFORMS AND PERCEIVED BENEFITS

Policy makers and PHC managers identified many benefits for the users and the health system, in particular: increased user satisfaction, improved physical and financial access, continuity of care, single person responsible for care, comprehensiveness of care and increased awareness of rights.

7.1.1. Increased user satisfaction

Most of the respondents felt that new PHC system would increase user satisfaction, as the family doctors would be able to address many health problems at PHC level — reducing the need for referrals to secondary care. Further, the doctors trained in new models of medicine paid more attention to the doctor-patient relationship, which in turn increased patient trust and their respect for family physicians. This improved relationship also encouraged the doctors to deliver higher quality health services to increase user satisfaction.

“… the introduction of FM will make the systems more accessible, will allow to develop a system in which almost 80 percent of the population is satisfied with health care provided by PHC.” (Policy Maker - MOH)

“…. as only one doctor manages the whole family and the patient from birth till old age, the doctor will know more about the individual, his family, his risk factors, illnesses and address his health problems. Is this not it good for a patient? And why should the patient not be satisfied?” (Manager – FMC)

“The number of patients attending the centre has increased. The attitude of patients towards the family physician is changing. They begin to respect the family doctors.” (Urban family doctor)

7.1.2. Improved access to health services

Increased access to health services was emphasized by the majority of respondents as a key achievement of FM: positively impacting on out-of-pocket payments and in particular improved coverage of children, pregnant women and the elderly.

“For some social groups, the elderly and the children, access has become easier and free… they [the patients] are coming to us with their open souls and request our advice on many issues.” (Urban family physician)

7.1.3. Continuity of care

FM reforms were seen by many informants as being important in addressing problems with continuity of health care, especially in managing chronic illness. Family physician is now seen as a key link in the management of patient’s health and not just a referral agent.

“The family doctor is considered now the principal doctor in the whole chain of doctors contacted by the patient.” (Urban family physician)
256. Having a single named doctor for most health care problems was identified as one of the most important benefits to the patients and their families. Having an identifiable named doctor meant that the patients did not waste time looking for a doctor.

“It is easier for patients now to access health services as the FD is now involved in managing all kind of problems for the patient: medical and non-medical.” (Rural family physician)

7.1.5. Comprehensive health services

257. Another perceived benefit for patients, was the enhanced comprehensiveness of services provided at PHC level with. Many respondents felt that a more holistic approach to health care was being adopted with a visible shift from a curative biomedical model to a psychosocial model with greater health education and health promotion activities.

“…my older colleagues support the old system, for me the new one is perfect. You know the expression: ‘the FD is treating the person, the other doctors are treating his disease’.” (Urban family physician)

7.1.6. Increased awareness of rights

258. Interviews revealed that changes in health care system increased patients’ awareness of their rights, which in turn positively influenced the doctor-patient relationship: encouraging patients to demand services to which they are entitled and doctors to provide higher quality services.

“Patients are more aware of their right to free PHC and this has increased demand.” (Urban family physician)

7.1.7. Enhanced engagement of the policy makers and cross learning

259. Many respondents felt that the reforms encouraged greater involvement of policy makers in the decision making. In particular the policy makers needed to bring themselves up to date with PHC and new concepts in health systems development and look for lessons learnt from other countries.

“We had to learn much and fast as we had a crisis…we were influenced by neighboring countries which implemented Alma Ata, the WHO recommendations and the TACIS project on PHC.” (Policy maker)

7.1.8. Efficient care delivery and use of resources

260. Efficient utilization of available resources was the most frequently cited benefit to the health care system, as illustrated by comments from policy makers and managers of PHC:

“In economically challenging times we need cost-effective provision of health services – family medicine offers this.” (MOH official)

7.1.9. Improved first contact and gate keeping function of PHC level

261. Most of those interviewed felt that first contact and gate keeping functions of PHC level had improved although there were not enough incentives to reduce unnecessary referrals to hospitals.
“The situation is much better now, there is a good emergency system organized, and all the families have their own FD who can help them every moment… now the FDs are the main guardians of family health. We decide when it is necessary to refer the patients to hospital.” (Rural family physician)

7.2. Barriers to change and development of PHC

262. Barriers to change were intensely discussed during the interviews which uncovered reasons why the changes were resisted and may be difficult to achieve. Key barriers to the reforms were identified as: (i) Changes in Public Administrative Law; (ii) Low pay levels; (iii) Increased paperwork and bureaucracy; (iv) Difficulty attracting doctors to rural areas; (v) Poor image of family medicine because of short specialist training; (vi) Difficulty accessing training; (vii) Resistance from specialists; (viii) Inadequate referral and counter referral mechanisms with high referral rate to secondary care; (ix) Accreditation; (x) Nostalgia for the past; (xi) Fear of the unknown; (xii) Poor communication; (xiii) Top down approach; (xiv) Punitive culture.

7.2.1. Legal and administrative barriers

263. The most significant barrier to development of PHC was identified as the recent changes in the public administration laws which abolished the judets and established a district structure with a unified health administration at district level managed by the rayon chief doctor. With these changes PHC ceased to become an autonomous legal entity and became one of the three departments managed by the rayon chief doctor — but without the possibility of having a direct contract with the HIC and ring-fenced funds. Consequently, most family doctors felt disempowered and were discouraged by the loss of autonomy. Most of those interviewed felt that this was a retrograde step, which led to the “rayon hospital emerging as the most powerful player in the health system” and would hinder the implementation of PHC reforms, especially, as some informants commented, that the rayon chief doctors were “taking PHC funds and using them for hospitals”.

“PHC will be the poor relative [again].” (Policy maker)

“The Glavn i Vrach is the director of the rayon hospital and his priorities lie with the hospital and not primary care.” (Policy maker)

7.2.2. Low salaries

264. Financial barriers were identified by all informants as being critical and that poor financial support for the reforms slowed down the pace of change. Although, the MOH has developed guidelines on mechanism for wage calculation which will increase wages in 2005, especially for GP in rural areas, this remains an issue that needs to be addressed.

“Family doctors are not appreciated and the income is not enough. Rural physicians get slightly more salaries but this is not enough. In the past they were given apartment and their utilities were paid but not now.”

“Attrition is a problem. If paid decently and given appropriate incentives they would not leave. Salaries should at least be enough to pay the rent. Need to pay doctors US$300 to stay: now doctors are paid on average less than 100 Lei.” (Manager)
“Low salaries are a social problem … need a big difference in salaries [to now] … as in Hungary, where they had problems – almost had social explosion and the [Hungarian] government increased salaries.”

“Teachers and doctors are the poorest of the poor … monthly salary of US$30 and delay of one year in some places. This is a source of shame for many.” (International agency manager)

7.2.3. **Increased paperwork and bureaucracy**

265. Most doctors complained bitterly about the amount of paperwork and bureaucracy, which prevented then from doing their work, decreased their motivation and their support for the reforms.

“The paperwork is a whole disaster… it is necessary to revise the work normatives for us.” (Urban family physician)

7.2.4. **Difficulty attracting doctors to rural areas**

266. Most respondents commented on the difficulties of attracting doctors to rural areas. This difficulty was not just due to low salaries but to generally difficult living conditions in rural areas, poor infrastructure, no appropriate residential facilities and difficulty finding schools where the health professionals could send their children for education.

“No one wants to work in poor and rural areas because of adverse economic conditions and difficult living conditions. MOH increased salaries by 100 percent for rural family doctors but large areas are still not covered.” (MOH official)

7.2.5. **Poor image of family medicine because of problems with retraining program**

267. Training of the family physicians was perceived to be far too short and too theoretical by most of the key informants interviewed, who felt that and the content did not reflect the services provided in the Minimum Package of Services. Consequently, the quality of services provided at PHC level was highly variable and often low. The brevity of the training sent the wrong signal to users who were concerned about the competence of the trained family physicians and the quality of services provided. As the retraining was provided at FM training centers, many rural doctors found it difficult to access the program. Further, as the training was delivered in Moldovan, this created language barriers for Russian speaking for doctors and those from the autonomous territory of Gagauzia.

“There is a real disconnect between the [FM retraining] curriculum content and the basic benefits package. We tried to align the curriculum with the basic package but this did not happen. Instead, the training program was reduced from 17 weeks to four weeks, with two further weeks supported by UNICEF.” (Trainer)

“The current program of training is too short and this creates a negative image of family medicine. The content also needs modifying. We wanted a long retraining program but funding shortages meant we had to shorten it. We want to map it onto the Health Insurance Program.” (Policy maker)

“I have three children but I don’t call my family physician. Four weeks of training is not enough… I can buy any drug I want from the pharmacists”
7.2.6. **Resistance from hospital specialists**

The majority of informants identified significant opposition to reforms from the narrow-specialists, especially those working in the Republican Hospitals — who were identified as the most formidable opposition group.

“The narrow specialists try and pervert the course of reforms by providing misinformation about family medicine. They see family medicine as stealing their bread.” (Policy maker)

“There is a power play with the specialists working at the Republican Hospitals who have labeled the MOH as the Ministry of primary health care. They are trying to depict family physicians as incompetent. There is big resistance. It is very hard to fight with these professionals.” (MOH official)

7.2.7. **Inadequate referral and counter-referral mechanisms with high referral rate to secondary care**

Most respondents pointed out that the referral and counter-referral mechanisms were not functioning well and the gate keeping function of PHC was not fully developed, in part due to: lack of guidelines in managing common conditions which identified when patients should be referred, and; the simple per capita payment system which provided no incentives to PHC providers to reduce referrals.

"Although many health professionals recognize the role of PHC as the gatekeeper in the health system, in practice, this is not achieved. According to [Health] Law, Ordinal 375 29/12/2003, all the referrals to hospital should be done by family physicians to be paid by the MHI. However specialists are trying to prevent operationalization of this Law and in practice the referral and counter-referral system does not work.” (MOH official)

7.2.8. **Accreditation**

It was felt that the accreditation of providers was still according to past criteria and did not reflect the current needs or the package of services provided as part of the Basic Benefits Package under the Mandatory Health Insurance Fund.

“We need stronger accreditation and contracting institutions. We should stop contracting some institutions but this is a political decision: but between now and April [2005] we're unlikely to see any changes because of elections.” (Policy maker)

7.2.9. **Fear of the unknown and crossing boundaries**

Policy makers and PHC managers were highly concerned that introduction of reforms was hindered by a lack of understanding of FM. The respondents identified that the fear of FDs to practice outside their former specialties due to inadequate training, slowed the pace of reform implementation.

“I was much happier when I was working as a regular therapist. It was very hard for me to study a new specialty. Family medicine must be studied from the very first years in the Medical University, but not introduced in one night by some people from Chisinau. It is very hard to restructure yourself when you are near retirement.” (Rural family physician)

“The transition to family medicine was very quick; the doctors were forced by administration to accept a bigger amount of work without being asked about their opinion… in these circumstances it is necessary to be very well trained.” (Rural family physician)
“The positive thing is that they have a doctor for the family, the negative aspect – the pediatrician is treating adults.” (Rural family physician)

“The things are very complicated right know. In the past we had to deal only with adults. Now we have responsibility for children, pregnant women and elderly.” (Rural family physician)

“It is very hard to change people’s mentality. For instance myself: in spite of training I continue to act as a therapist. It is very hard to change yourself.” (Rural family physician)

7.2.10. Nostalgia for the old times

272. Nostalgia of the old system, which was ‘free’, was a theme that repeatedly emerged in the interviews of the medical personnel, management and the general public. Many commented that the public were very unhappy about paying charges and the transition process was inadequately communicated. It was feared that some of the recent policies, especially the changes in public administration law which established district based health systems at local level led by hospital specialists, were bringing back features of the old system and this posed a risk for sustainability.

“The environment is nor favorable. Many want to back to the old days…they have a power base in the Parliament… we are now moving to a mix of old and new — the Semashko model with a health insurance system — and this is a risk to sustainability of reforms.” (Policy maker)

“The public are not happy as they were used to free health care. They did no want to give up [their] social rights, and could no understand why these rights should be given up. [The government] needed to explain to the population the transition process.” (International agency manager)

“In the past all the funds went to hospitals. The specialists from the hospitals are crying for the old times.” (MOH official)

“The old system was a perfect one. Yes, maybe expensive for the state, but at least everybody had a decent life. The new system transformed us into beggars. I will finish my career in a couple of years and am very concerned about my future. The only things I gained from the reforms are hypertension and stomach pain.” (Urban family physician)

7.2.11. Poor communication

273. Poor communication was frequently emphasized as the main reason why people failed to understand the nature and goals of the reforms. This led to reduced “buy-in” and a negative perception of reforms by health professionals and citizens but also gave an opportunity to those against the reforms to create “false stories”. Most felt that the changes should have been accompanied by education of specialists, managers and the public on the reforms. The stakeholders were not adequately informed, and although the reforms extended new rights to users, poor communication and a lack of understanding of reforms created negative attitudes to the changes. For instance, some citizens felt that the MHIF scheme was “another way of stealing our money.”

“Patients are not satisfied by the quality of medical assistance offered by the FDs and are forced to seek medical assistance when they have to pay... nobody knows how the work should be organized — there are a lot of contradictions between the doctors… the population is very aggressive because of the lack of information.” (Rural family physician)
“…with the patients there have been problems — they’ve been very confused and we had to explain to them the reforms and to calm them down.” Urban family physician)

7.2.12. Top-down approach

274. The majority of the health professionals interviewed felt that the reforms were “top-down” and introduced too hastily without enough consultation, and “led from Chisinau”. Many complained of “a real disconnect” between the policy makers and the practitioners. Many felt that they were “forced to change without understanding the reasons and the need for change. This created animosity between policy makers and practitioners.

“…I was forced to become a family doctor in one night and nobody asked me if I wanted this” (family doctor-urban)

“The population wasn’t ready to accept changing. This happened because of the lack of the information and because social mentality does not correspond to demands of developed societies. Basically from the very beginning was necessary to create conditions for the reforms and only after that to implement the reforms. In our country everything is vice versa.” (Rural family physician)

“I’ve been ‘transformed’ into a FD from pediatrics without my agreement, but to tell the truth I can say that nothing has changed, we do the same work as we’ve done before the reform.” (Rural family physician)

7.2.13. Lack of incentives

275. A key finding from most of the interviews was that lack of incentives has retarded the pace of reforms as FGP were not motivated to adopt changes or improve quality of care. Most of the family doctors interviewed felt that their remuneration did no reflect the quality or the volume of work they did.

“We’ve been promised a lot, but received nothing. And our salary is not corresponding to our volume of work but instead unfairly divided between professionals with different ages.”

7.2.14. Punitive culture

276. Most practicing doctors expressed that the punitive culture which prevailed in the Soviet times was still pervasive. This created a culture of “working to keep the administrators and the prikaz happy” rather than making effort to improve the quality of services for the benefit of the patient.

“All the time we are frightened that the administration will fire us. We have no influence. In our centre those with influence are the chief of the polyclinic, chief of the rayon hospital and the economist of the rayon hospital.” (Urban family physician)

7.2.15. Poor appreciation of PHC and family medicine

277. Most informants interviewed agreed that being a narrow specialist was much more desirable than being a family physician. The reasons for this were that the health system was still led by narrow specialists, FM lacked role models and the short retraining period for FM meant that most narrow specialists regarded FM was a second rate specialization which could not provide comprehensive services of good quality.
“It is complicated to explain to the patient the new concept, the patients still prefer the doctor from a narrow specialty, which they consider to be more qualified.” (Rural family physician)

“There is nothing done to motivate [family] doctors to work. Everybody agrees now that the decision about the FM was the correct one… and the psychological barrier is overcome. But we must change the attitude towards the FDs by increasing their value.” (Urban family physician)

7.2.16. Low managerial capacity at rayon level

Many respondents feared that decentralization, to eleven territorial branches of HIC, 32 administrative districts and three municipalities, would excessively fragment the system and dilute scarce management resources further. Most did not believe that the rayon chief physicians had the appropriate managerial capacity to manage district level health system and this would slow down the PHC reforms. Although rayon hospital managers are receiving health management training through the WB HIF Project, this is insufficient to enable rayon managers to discharge their roles.

“All 35 heads of district hospitals are clinicians… they have not had any management raining to learn anything that’s new. We need good mangers who understand [concepts such as] efficiency, productivity, quality and not just clinicians.” (Policy maker)

“I am strongly convinced that the principal problem with reforms is the incompetence of local authorities.” (Rural family physician)

7.3. CRITICAL SUCCESS FACTORS AND ENABLERS

The key informants identified a number critical success factors which helped the successful implementation of PHC reforms, including: the economic crisis, sustained support from the MoH, legislative changes early in the reforms which created an enabling environment, introduction of FM, introduction of the MHI system and support from HIC, hospital rationalization, support from the university and involvement of international organizations.

7.3.1. Economic crisis

Some saw the economic crisis as an opportunity, as this forced change, although others were gloomy about the prospects of the country because of economic difficulties.

“Economic pressure means that we are forced to adopt a more economical approach. There is no return. Where there is chaos, there is opportunity. This is our chance to change the system.” (Policy maker)

“Working population is leaving the country. This is a big problem. How do you see the future [laughs]… future is bright… not here” (Policy maker)

7.3.2. Creating an enabling environment

Sustainable change needs an enabling legal environment, as identified by many respondents, who felt that the Ministry of Health showed strong and visible leadership for PHC, provided sustained support and introduced key legal changes early in the reforms.
“The environment is still favorable to family medicine. The MoH is supporting PHC and University supports FM.” (Manager)

“Early on in the reforms, we put in place the right legal frameworks. This was critical to developing PHC and encouraged its development. With the Government Decree 668 in 1997 we established a department of PHC at MOH. Prikaz 200 in 1997 enabled the creation of Chair of FM and the residency program in family medicine.” (MOH official)

7.3.3. **Support from the Health Insurance Company**

282. Creation of a single purchaser in the form of the HIC helped unify service standards and establish a common basis for services provided to the citizens.

“The Health Insurance Company has understood that PHC is cost effective... we now have a defined service package … but it needs to understand that simple per capita is not adequate.” (Policy maker)

7.3.4. **Structural changes which accompanied the FM model**

283. The structural changes which led to the merger of the tripartite system into unified PHC centers were key platforms for the reforms.

“We reorganized the whole delivery system and introduced Family Medicine Centers, Health Centers and Doctor’s Offices. Now all the patients have a named doctor who takes care of all problems. Patients go to hospital after referral by family doctors.” (Policy maker)

7.3.5. **Effective and sustained communication**

284. The need for effective and sustained communication with a clear message addressed to all stakeholders was highlighted as being critical.

“To accelerate the implementation of the reforms [the MOH should] actively inform the doctors about everything that is happening. We never knew anything because nobody is informing us. They just frighten us.” (Rural family physician)

7.3.6. **International support**

285. All the key informants (policy makers, managers, employees of international agencies) interviewed identified that the contribution of international agencies, and in particular the World Bank had been critical. Most felt that the sustainability of health care reforms depended critically on continued and consistent support from international agencies. Many of the key informants acknowledged the value added by the World Bank and WHO: which was not just monetary but also technical.

“The World Health Organization and the World Bank were very supportive. They brought to us the concepts of equity and efficiency and introduced us to the Ljubljana Charter.” (Senior manager / policy maker)

“I think that without the WB nothing was possible. The reform without WB would die for sure.” (Rural family physician)

286. Although some felt that the power of the World Bank was limited, as there were pressures on the current Government to resist change, as remarked by one policy maker:
“The World Bank has limited influence now because the Government is under pressure not to change, although the MOH wants to change. Governments do not want loans. IMF already closed two loans.” (Policy maker)

“Our first experience with WB was a bad one, because our hospitals were closed and we were told that the WB requested this. Now the opinion has improved because we’ve heard that WB is financing the insurance program and is giving equipment for FD’s offices.” (Rural family physician)

7.3.7. A visible and articulated strategy

287. The National Strategy for 1997 to 2003 was perceived to be by many key informants as being an important step as it explicitly identified key milestones that had to be reached with the reforms.

“The MOH understands that this is not a fad or fashion but needs to be sustained. PHC was articulated as a key objective in the National Strategy and we have been trying to achieve our objectives [identified in the Strategy].” (Policy maker)
8. KEY ACHIEVEMENTS OF PHC REFORMS

288. Moldova has been able to achieve significant milestones with PHC reforms despite a resource-constrained environment. There is strong and sustained high-level support for FM reforms and a strong legal base with which to carry reforms forward.

8.1. ORGANIZATIONAL AND REGULATORY CHANGES

289. Several laws have been enacted and regulations passed to create an enabling environment for FM and PHC reforms: family medicine is recognized in Law as a specialty and a new PHC system has been established, based on the FM model.

290. The tripartite system of pediatric, women’s and adult clinics have been consolidate into unified PHC centers providing services for all citizens. New organizational forms have been established for FM with limited autonomy and the ability to contract with the HIC.

291. The scope and content of FM services have been defined in Law. PHC services have been defined for the State Guaranteed Minimum Benefits Package and the Basic Benefits Package under the Mandatory Health Insurance Fund.

292. Since 1992, the excess health infrastructure in the country has been reduced from over 300 hospitals to 65 — a restructuring effort unprecedented in any country in the region, resulting in over $10 million in savings annually: equal to about 25 percent of publicly financed health spending.

293. The gate keeping function of PHC has been established with family physicians acting as the first point of contact for patients — although a lack of strong referral and counter referral mechanisms mean that many narrow-specialists can be accessed directly at hospitals. Consequently the gate keeping function of PHC is sub optimal.

294. A large number of PHC centers have been refurbished and equipped.

295. Users have been given the freedom to choose their family physicians and can change their family physician after three months of registering.

296. Limited accreditation has been introduced and a number of PHC and hospital facilities have been accredited.

8.2. FINANCING, RESOURCE ALLOCATION AND PROVIDER PAYMENT SYSTEMS

297. The health expenditure, at 4 percent of GDP, is low by OECD and ECA Region standards. Out-of-pocket payments, which form almost half of the total expenditure, are high by ECA standards but in line with other FSU countries. The Mandatory Health Insurance System, an additional source for resource mobilization, has been successfully introduced.

298. Moldova has been particularly successful in increasing the proportion of health system funding allocated to PHC and has specified in Law that 35 percent of the public health expenditure should be allocated to PHC level.

299. A key achievement of the reforms is the introduction of a Single Payer System which allows integration of state and local budget revenues with MHIF contributions to fund the Basic Benefits Package under the Mandatory Health Insurance Fund for the insured and those in exempt categories.
300. New provider payment methods, based on simple per capita mechanism for PHC centers, have been successfully introduced.

8.3. **Service Provision**

301. There is excellent coverage of immunization and widespread provision of basic PHC services in all regions. Many of the basic PHC services for managing common conditions are provided in most PHC centers which also manage common chronic illnesses and apply simple diagnostic and therapeutic interventions. However, as compared with OECD countries, the scope and content of services provided in PHC setting in Moldova are still basic and there is much room for expanding the scope of services provided in PHC.

302. The task profile survey shows statistically significant differences in the application of medical techniques, use of medical equipment, and management of common first contact and chronic conditions by family physicians working in PHC centers situated in advanced reform regions as compared with those working in PHC centers from intermediate and early reform regions.

303. The facility survey shows that the service profiles in advanced, intermediate and early reform regions to be very similar — reflecting the Law which specifies a common set of services for PHC units throughout the country.

304. A limited number of care guidelines have been developed with support from UNICEF, and the WB HIF Project is providing support to the MOH to develop additional guidelines in line with the services provided in the Basic Benefits Package under the Mandatory Health Insurance Fund.

305. The task profile survey demonstrates that family physicians in advanced reform region provide more systematic health education and promotion activities and more frequently manage common psychosocial problems as compared with those family physicians intermediate or early reform regions.

306. There is evidence from the qualitative research that the new model is welcomed by the users and health professionals who identify many benefits, which amongst others include, user-centeredness of the model, having a named doctor, user choice, improved continuity and more comprehensive nature of FM model, empowerment of FM team and an increased emphasis holistic care.

8.4. **Resource Generation**

307. A critical mass of FM specialists and nurses have been trained in different courses, but many of the key informants interviewed feel that the training programs (except for the residency) are too short. An able cadre of FM and FM nurse trainers have been trained in ToT programs, and many of these trainers are now involved in retraining of doctors and nurses.
9. CHALLENGES WHICH REMAIN TO BE ADDRESSED

308. Many of the key stakeholders wish to see acceleration in the pace of reforms, in particular: (i) Broadening the role of family physicians and strengthening the competence level of the PHC team; (ii) Refining the payment mechanisms with introduction of performance related pay to encourage innovation, enhanced quality and provision of additional services — for instance greater health promotion and prevention activities, and to attract and retain doctors in rural areas; (iii) Incentives, such as increased payment levels for family physicians and retrained nurses; (iv) Modifying resource allocation by introducing systems that are pro-poor and enhance allocative efficiency, such as differential per capita pay to PHC centers based on need and difficulty of access — to favor rural and poorer areas which have higher health needs; (v) Developing capacity to manage strategic change; (vi) Better definition of referral and counter-referral mechanisms to establish a continuum of care; (vii) Improved communication to reduce misunderstanding and resistance; (viii) increasing autonomy of PHC units vis a vis the rayon hospitals, and; (ix) Developing a strong M&E capacity.

9.1. EXPANDING THE ROLE AND COMPETENCES OF PHC TEAM

309. The retraining programmes have been successful in rapidly scaling up FM in Moldova but are too short to convert narrow specialists to generalist family physicians. Existing training programmes need to be extended and further strengthened to produce family physicians of higher competence and to counteract criticisms leveled by narrow specialist and opponents of reforms at FM institution.

9.2. BALANCING INNOVATION WITH STANDARDIZATION

310. Countrywide standards on scope and quality of services are necessary to establishing standards and foster equity. However, the HIC should introduce flexible contracts to encourage innovation and expand PHC. To achieve this, greater autonomy needs to be given to the PHC providers and legislation altered to allow PHC units to develop flexible patterns of service provision.

311. To achieve a secondary-to-primary shift, the capacity of PHC level to diagnose and resolve problems at PHC setting must be expanded through extended training of FM team members and by allocating greater resources to improve capacity of PHC level to manage and resolve problems at PHC level.

312. Contracts with the HIC have been successfully introduced and can be used as an effective tool to improve equity, service quality, efficiency and effectiveness. Current contract introduced by the HIC and the BBP-MHIF will help enhance equity by providing a uniform package of services to the whole country. Much work needs to be done in the next few years to institutionalize this system. However, to further develop PHC, over time, there needs to be a move from contracts based on simple per capita payment to more sophisticated ones, with explicit quality and performance criteria and commensurate incentives in form of performance related pay, to reward PHC teams which achieve these. However, such a shift will require: (i) significant analytical and execution capacity at the HIC to develop, implement, manage, and monitor more sophisticated contracts; (ii) robust information systems at PHC level to capture relevant and timely data on activities and outcomes; (iii) flexible contracts with varied scope of services and appropriate incentive systems; (iv) enhanced choice of users to encourage development of a more sophisticated demand side (v) better training of the health professionals working in PHC, and; (vi) expanded management capacity.
9.3. INCENTIVES

313. Lack of incentives and poor salary levels of FM specialists are two major problems that need addressing in immediate term. It is critical that in the early stages of the reforms, incentives are introduced to retain the ‘early adopters’ and leaders. Failure to do so will adversely impact on the morale and adversely affect sustainability of the reforms.

314. A key problem with the image of FM is that the family physicians have to work longer hours then specialist, undertake excessive administrative tasks without commensurate pay or professional recognition (by peers and citizens). This dampens the enthusiasm of doctors to enter residency programmes and narrow-specialists to retrain in family medicine. A visible salary differential between GPs and FM specialists would send a strong signal that FM is valued.

315. The Moldovan Government has identified this as an issue and recently introduced changes to pay scales to increase remuneration of family physicians, and in particular those working in the rural areas. However, this is a policy priority and should be closely monitored.

9.4. EQUITY AND ALLOCATIVE EFFICIENCY

316. Although FM reforms have been introduced to all regions resource allocation does not reflect health needs or poverty levels. There are clear differences in the level of resources provided to urban and rural regions. In particular Chisinau City attracts much higher funding levels than other regions.

317. Allocative inefficiencies between levels of care and type of institution persist. In particular, Republican Hospitals in Chisinau still consume a significant proportion of the health system budget.

318. The next phase of reforms should place an emphasis on changing resource allocation mechanisms to take into account poverty and health needs and substantially modify the current patterns which currently favor urban areas and Republican hospitals.

9.5. DEVELOPING HUMAN RESOURCE CAPACITY TO MANAGE STRATEGIC CHANGE

319. Introduction of the PHC reforms is a complex strategic change process. More emphasis needs to be placed on change management and rapid development of a critical mass of managers and health professionals who can act as change agents.

9.6. INTEGRATION, CONTINUUM OF CARE AND REFERRAL SYSTEMS

320. Although an effective FM-centered PHC system is being introduced in Moldova, there are no incentives to achieve a substantial secondary-to-primary shift: limiting the ability of PHC level to develop extended primary care and move beyond a gate keeping role.

321. Vertical integration is limited — in effect PHC and the hospital levels operate as two sub systems with precarious links between them. As the financing of the two systems are unlinked, there is a real risk, in future, of cost-shifting between levels – especially as the simple per capita payment system without performance indicators will eventually lead to increased referrals to reduce workload at PHC level, undermining gate keeping, continuity and comprehensiveness functions of the PHC level. Similarly, volume based payment systems will encourage early discharge of patients to PHC level.

322. Without mechanisms that encourage development of an effective interface between primary and secondary levels, it will be difficult to develop an integrated system with a continuum of care.
9.7. **COMMUNICATING THE REFORMS**

323. A lack of communication between and within levels of the health system and to the public was cited by most of those interviewed as a critical problem. The benefits of a family medicine centered PHC system is not adequately communicated to citizens and health professionals. There is hence, at best, a limited understanding of family medicine and modern PHC amongst health professionals, citizens and politicians. There are also misperceptions of family medicine amongst some health professionals who see this as a Western construct and a retrograde step from the ‘advanced’ Soviet medicine.

324. Inadequate communication and limited engagement of the operational level in decision making or discussions mean that many perceive the reforms to be ‘top-down’. This is a barrier to successful scale-up, sustainability and fully realizing real benefits of a FM centered PHC system.

325. The WB HIP in Moldova has significantly invested in communication and advocacy and a highly professional team engaged to develop and implement communication strategies. In the five countries studied, Moldova HIP appears to have invested most significantly in communication activities. It is of particular note, therefore, that despite a well-organized communication programme the diffusion of messages is limited. This leads to the obvious conclusion that much more needs to be done to build on the existing programmes and more widely engage stakeholders: a key ingredient for successful strategic change.

326. Misperceptions of PHC and shortcomings in communication despite a highly professional programme in Moldova may be attributed to the emphasis given to communicating the reforms related to MHI to the public and policy makers. In particular, much effort has been invested in communicating the rights and obligations of citizens as regards health insurance. This may have crowded to the communication activities related to PHC and diluted the message around FM.

327. A clear and all-embracing communication strategy is necessary to increase visibility of PHC reforms, inform users and other key stakeholders of the expected benefits to increase ownership of the process.

9.8. **BALANCING POWER BETWEEN PRIMARY AND SECONDARY LEVEL**

328. Recent administrative changes have reduced the autonomy of PHC departments at rayon level and recentralized power in the hands of the chief rayon doctor, who is also the director of the rayon hospital. This is a retrograde step and will hinder the development of PHC which is now subordinated to the secondary care level.

9.9. **MONITORING, EVALUATION AND ANALYTIC CAPACITY**

329. There was no base lining of PHC outputs and activities in the pilot sites in Moldova to enable before- and after-intervention analysis or compare and contrast pilot sites with matched non-pilot sites.

330. Although large amounts of data are collected regularly by the Department of Public Health and Management, which publishes detailed information on epidemiological trends, these tend to be focused on public health indicators. Currently, the quality of services delivered in PHC is not monitored. There is, hence, a need to identify a set of core indicators and M&E systems to capture relevant, reliable and timely data to assess whether the PHC reform objectives are achieved and to inform policy decisions.

331. The existing M&E systems at the Department of Public Health and Management and the MoH need to be augmented and appropriate analytical capacity developed, to include elements relevant to PHC.
9.10. **Sustainability**

332. Although impressive, the achievements are fragile given the systematic reduction of public funding for health system, low pay levels, visible discontent amongst the health professionals and the recent changes in the Public Administration Law which has abolished judet structure and autonomous PHC units and has handed over the management of PHC to rayon hospital directors.
10. LESSONS LEARNT

10.1. CRITICAL SUCCESS FACTORS FOR SUSTAINED DEVELOPMENT OF PHC

333. Cercone and Godinho have identified three factors that have supported the reforms to date. First, change was in the interest of all key-decision makers. At the same time, political risk through making change was spread throughout all levels of government. Second, agreement was reached between the central Ministry of Health and the Regional Health Authorities on a medium-term restructuring plan for the reform process. Third, consensus was reached among donors and the World Bank on the direction and pace of reform.xcv

334. The study has identified a number of additional critical success factors. These include: (i) Being strategic; (ii) Investing in not just technical inputs but management of change; (iii) Simultaneously working at policy, strategy and operational levels; (iv) Appropriate governance structures; (v) Responsiveness; (vi) Branding and image building to improve the status of FM specialist, as compared with narrow-specialists; (vii) Improved incentives for continual improvement; (viii) Improved communication between and within levels of the health system and to the public; (ix) Developing a holistic approach to reform, and; (x) Having an agreed exit strategy.

10.2. BEING STRATEGIC

335. There is good opportunity for the World Bank to be more strategic in the ECA Region, where it has a highly valued presence.

336. Many of the respondents highlighted the value of cross-learning and experience-sharing within the country and from countries implementing similar reforms in the ECA region.

337. Countries in the region which have WB supported PHC reforms can significantly benefit from experience of each other through well-supported dissemination strategies. Dissemination of experience and lesson sharing within and between countries is inadequate. Given the varied levels of development of PHC in ECA countries there is a real opportunity for cross learning and experience-sharing. This opportunity must not be missed and the World Bank needs to invest meaningful resources to encourage regional collaborations, regular exchanges and dissemination of achievements and lessons which will enable the Bank to leverage the successful projects and reform programmes it has supported.

10.3. MANAGING STRATEGIC CHANGE

338. Although it is necessary to invest in key individuals to develop champions of reform, this must be balanced with wide engagement of stakeholders to achieve consensus on reform objectives.

339. Combining bottom-up and top-down approaches with simultaneous investment in key individuals, institutional development at different levels, and institutionalization will help increase chances of sustainability.

340. Balancing short-term success and sustainability is important. Achieving system change takes time. Short-term projects have value, but in the Moldovan context sustained support over a ten-year period is a realistic time scale to achieve and institutionalize change.
10.4. **LEVEL OF INTERVENTION**

341. It is necessary to establish strong vertical and horizontal links and simultaneously work both at policy, strategy and operational levels — policy level to create an enabling environment; strategy level to institutionalize changes and operational level to create shared ownership, reduce resistance, share lessons and develop a critical mass of professionals to implement policies and change.

342. Without linkages, policies will not be adopted and local level initiatives and innovations have no impact on informing central policies and cannot diffuse horizontally to other regions.

343. In the PHC reform programme supported by the WB HIP, there has been a visible effort to work at policy, strategy and operational levels. The case study shows that communication needs to be supplemented by mechanisms to encourage greater involvement of the operational level in decision making and discussion relating to policy development.

10.5. **APPROPRIATE GOVERNANCE STRUCTURES**

344. Inappropriate governance structures, as this case so vividly illustrates, can limit what can be achieved and limit chances of sustainability. Governance structures need to afford autonomy to PHC level and ring-fence their budgets/resources to prevent budget sequestration by hospital sector. Although following discussions between the WB team and the MOH the contracts between HIC and the rayon health authorities have been modified to reduce risk of sequestration, subordination of PHC to secondary care level does not bode well for sustained development of a strong PHC level.

10.6. **RESPONSIVENESS**

345. The fluidity of the socio-political and the economic context in Moldova (as in other countries studied) means that political economy of health reforms and factors influencing strategic change must be continually analyzed to ensure that generic solutions are not applied to problems embedded in a complex and fluid socio-political context. Given this fluidity of the context, programmes should adopt a flexible approach to implementation — allowing timely adaptation to changes and responding to windows of opportunity, but without sacrificing a strategic approach.

10.7. **BRANDING FAMILY MEDICINE**

346. Much effort needs to be invested in Moldova, as in the other countries studied, to build brand equity of FM and PHC. In FSU and CIS countries, there is limited understanding of what modern PHC and FM can achieve. PHC and FM, in the eyes of many, equate to 'basic' set of services — an unfortunate legacy of Alma Ata. Most policy makers, managers and health professionals, as well as the public have failed to move beyond this imagery of PHC created over 25 years ago. Continued use of terminologies such as 'basic set of services' helps to further reinforce this misperception.

347. There needs to be a long term strategic process of image building and rebranding of FM to position it in its appropriate place in the health sector.

10.8. **INCENTIVES**

348. Limited incentives and poor salary levels of FM specialists are two major problems that result in low morale amongst the PHC team members and reinforce the poor image of FM.
Although the changes new payment mechanisms do provide some incentives, there needs to be a much stronger indication that FM is valued on par with hospital specialties. A visible salary differential between GPs and FM specialists, as well as between the narrow-specialist who work in PHC and FM specialists would send a strong signal that FM is valued. Non-economic incentives, such as clearer development paths, opportunity of attachment to academic units and continuing medical education are useful mechanisms that should be used.

10.9. COMMUNICATION

Inadequate and ineffective communication breeds resistance and creates barriers to change. The ‘fear of the unknown’, frequently quoted by the key informants, needs to be addressed through a well-developed communication strategy aimed at users, health professionals, managers and decision makers.

10.10. HOLISTIC APPROACH TO REFORMS

A fragmented approach to reform is a recipe for failure. Developing a holistic approach to reform with simultaneous multifaceted interventions is necessary to achieve sustained reforms which are institutionalized. Key interventions include; legal changes to create an enabling environment; organizational restructuring to create new provider organizations with increased autonomy; new financing methods and resource allocation mechanisms that address inequities and allocative inefficiencies which prevail; provider payment methods that overcome limitations of systems based on line-item-budgeting and salaries and introduce incentives, and; contracts to improve transparency and accountability, and; evidence-based care guidelines to enhance quality and establish minimum standards.

10.11. MONITORING AND EVALUATION

One of the most important findings of this study was the paucity of appropriate systems for monitoring and evaluation of PHC reforms. As with the other four countries studied, there was no baseline information against which PHC reforms or programme success could be measured. There is an urgent need to develop appropriate metrics and information systems to monitor progress of PHC reforms and systematically gather information to verify progress against objectives.

10.12. EXIT STRATEGY

Much has been achieved in the PHC reforms in Moldova. World Bank support has been critical in reaching current levels of development, but clearly much needs to be done over a ten year period. It is important that a clear exit strategy is developed and agreed with local counterparts to ensure a sustainable PHC system is developed.
11. APPENDIX

11.1. ANNEX 1: METHODOLOGY --- FRAMEWORK FOR ANALYSIS

354. Kutzin suggests a three-step approach to evaluating health reforms describing clearly: (i) key contextual factors driving reform; (ii) the reform itself and its objectives, and (iii) the process by which the reform was (is being) implemented. To this approach three further elements can be added: (1) describing clearly the changes introduced by the reforms; (2) analyzing the impact of these changes on health system objectives and goals, and (iii) establishing whether the reforms have achieved the policy objectives set by the Government – or the agency leading the reforms.

355. An evaluation should describe key features of the main policies, structural changes, new financing and care provision mechanisms and processes introduced as a result of reforms. Where possible, the evaluation should also describe and measure changes in health system performance and try and establish causal linkages between intervention and outcome – to assess the extent to which the changes observed can be attributed to the reform implemented. However, in real life attribution and establishing causal links are not easy. Health reforms do not happen in a laboratory. They are not ‘a historical’ or ‘a contextual’ but tend to follow a trajectory of development and changes over a period of time – and hence can be considered to be part of a continuum rather than a discrete event. Further, reforms are not isolated and clearly discernable experimental interventions in a controlled setting but are multifaceted and complex organizational change programmes.

356. A further difficulty with evaluation of health reforms arises with measuring health outcomes which are often influenced by multiple personal and non-health factors – such as the stage of economic development in the country, income and education levels, environment and housing.

357. In practice, it is extremely difficult to separate and control for the contextual factors from the policy interventions and clearly establish causal links. Given these difficulties any method used to evaluate complex policy interventions will have limitations in establishing causal links. A further difficulty arises in comparing different countries or settings where it often difficult to draw conclusions from international healthcare systems comparisons. Nevertheless, a systematic approach to evaluation can yield useful information which can be used to reach plausible conclusions about cause and effect.

358. A number of frameworks have been developed for analyzing the performance of health systems. For instance, the WHO Performance Assessment Framework (WHO PAF) is used for comparative evaluation of health systems performance of the member countries and provided the basis of the World Health Report 2000. The WHO PAF assesses health systems performance in terms of attainment of a number of goals – average health level, distribution of health, average responsiveness, distribution of responsiveness and fairness of financial contribution. Both the World Health Report 2000 and the WHOPAF generated significant debate on measuring health system performance and Framework has been further developed and refined.

359. There are other frameworks that focus on efficiency, financing, equity of access and financial sustainability. In relation to PHC, there are evaluation frameworks that focus on measuring quality.

360. These frameworks have strengths but also limitations. Many of the existing frameworks for health systems/PHC performance assessment and evaluation measure health sector inputs, resources utilization, activity levels and changes in processes rather than outputs or outcomes. This is probably because health sector inputs and processes are easier to measure and the data on these can be obtained in the short term.
Any analytical framework used to assess health systems should capture not just inputs and processes but also outputs and outcomes of the system, as well as the interrelationships between the system components. Moreover, the wider context, within which the health system functions and interacts, also needs to be understood and contextual changes captured in the analysis.

361. A health system is made up of elements that interact. The sum of the system element is greater than its parts. The interactions of these elements affect the achievement of health system goals and objectives. Therefore, any framework for analyzing health systems should be able to capture not just the changes in goals and objectives but also system elements.
11.2. **ANNEX 2: PROVIDER FACILITY SURVEY**

<table>
<thead>
<tr>
<th>Section</th>
<th>Subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. General information about PHC facility</td>
<td>Classification by the type of facility and administration; Demographic data; Geographic data; Sanitation and conditions</td>
</tr>
<tr>
<td>2. Scope of services</td>
<td>A list of services provided by PHC facility, characterizing: Breadth of services; Extended care; Support services</td>
</tr>
<tr>
<td>3. Organization</td>
<td>A list of questions characterizing general management of PHC facility, management of finances and provision of services. Inclusiveness into decision making</td>
</tr>
<tr>
<td>4. Availability Data</td>
<td>Questions about the availability of: Personnel and changes in staffing; Buildings and utilities; Medical and non-medical equipment. Medical equipment is divided into general, obstetric/gynecological, ophthalmology, ENT, respiratory, sterilization and surgical; Drugs and other consumables, with subdivision on vaccines and contraceptives; Services and workload of personnel.</td>
</tr>
<tr>
<td>5. Comprehensiveness</td>
<td>A list of 11 activities at first contact, such as:                           - Emergency, Chronic Illness, Antenatal care, Postnatal care, Vaccination, Certification and administrative forms Questions about investigation procedures and referrals.</td>
</tr>
<tr>
<td>6. Quality</td>
<td>Data on supervision activities, use of clinical guidelines, availability of essential drugs and ability to use them. Data on quality on such activities as: Vaccination, Prenatal consultation, Family planning, Other preventative programs, Management of equipment and the data routinely collected</td>
</tr>
<tr>
<td>7. Financial data</td>
<td>Evolution of budgets and expenditures</td>
</tr>
</tbody>
</table>
### 11.3. ANNEX 3: NIVEL TASK PROFILE INSTRUMENT

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demographic data; Education and training; Employment status; normal</td>
<td>Working hours; Characterization of the population and location of the practice; Working arrangement; teamwork; Average workload; home visits; emergency services; Practice organization: staff and equipment; Medical record keeping; use of computer</td>
</tr>
<tr>
<td>1. Practice and personal information</td>
<td></td>
</tr>
<tr>
<td>A list of 14 medical techniques, such as: wedge resection of in growing</td>
<td>Toenail; Wound suturing; Insertion of IUD; Fundoscopy; Strapping an ankle; Setting up an intravenous injection etc. and perceived involvement of the GP if patients in the practice population need such procedures – indicated using a five-point scale ranging from '(almost) always' to 'seldom/never'.</td>
</tr>
<tr>
<td>2. Provision of medical technical procedures</td>
<td></td>
</tr>
<tr>
<td>27 Short case descriptions of patients' health problems such as: Child with</td>
<td>a rash; Woman aged 18 asking for oral contraception; Man aged 24 with chest pain; Man aged 50 who burnt his hand; Woman aged 50 with a lump in her breast; Woman aged 60 with acute symptoms of paralysis/paresis; Man aged 29 with lower back pain; Couple with relationship problems; Woman aged 50 with psychosocial problems related to her work and perception regarding prevalence of these conditions and presentation to the FP – indicated using a five-point scale ranging from '(almost) always' to 'seldom/never'.</td>
</tr>
<tr>
<td>3. Provision of first contact care</td>
<td></td>
</tr>
<tr>
<td>Questions about the routine of the GP concerning: Measuring blood</td>
<td>pressure; Measuring blood cholesterol level; Taking cervical smears for cancer screening; Examination for breast cancer screening. Questions about involvement of GPs in: Health education clinics on smoking cessation, food intake and alcohol consumption; Intra-partum care; Pediatric surveillance clinics; Family planning / contraception; Homoeopathic medicine</td>
</tr>
<tr>
<td>4. Provision of screening, preventive care etc.</td>
<td></td>
</tr>
<tr>
<td>A list of 17 diseases, such as: Hyperthyroidism; Peptic ulcer; Congestive</td>
<td>heart failure; Peritonsillar abscess; Uncomplicated diabetes type 2; Depression and perceived involvement of the GP in the treatment if these cases occur in the practice population could be indicated on a five-point scale ranging from '(almost) always' to 'seldom/never'.</td>
</tr>
<tr>
<td>5. Provision of disease management</td>
<td></td>
</tr>
<tr>
<td>Seven statements on aspects of GPs’ work, such as: 'My work still interests</td>
<td>me as much it ever did'; 'Assuming that pay and conditions were similar, I would do non-medical work'; Agreement expressed on a five-point scale, varying from 'agree strongly' to 'disagree strongly'.</td>
</tr>
<tr>
<td>6. Job satisfaction</td>
<td></td>
</tr>
</tbody>
</table>
11.4. **ANNEX 4: DECREES ON RESPONSIBILITIES OF THE FAMILY PHYSICIAN**

362. DECREE Nr. 163 from 21.05.98 regarding the continuous medical reforms of primary health care providing by general practitioner and family physicians

363. In correspondence with the Decision of the Government of RM Nr. 1134 from 09.12.1997 “Regarding the development of primary health care”, and in order to accelerate the reform process of the health system with transition to new form of primary health care on the basis of the general practitioner/family doctor, the qualitative preparation of the professionals from primary sector, unification of the requests regarding the organization and estimation of their activities, increasing the volume and quality of medical care at the pre-hospital level,

**IS APROVED**

The statement of the free choice of GP/FD (Annex Nr.1)
The statement of the GP/FD (Annex Nr.2)
Professional qualification normative of the GP/FD (Annex Nr.3)
The statement of general profile nurse (Annex Nr.4)
Professional qualification of the general profile nurse (Annex Nr.5)
The health passport of the citizen of RM

**The statement of the GP/FD (Annex Nr.2)**

**General aspects:**

364. The GP/FD is a specialist with high medical education and post university training through residency curriculum or retraining, with juridical rights (through the certificate and license) to offer medical—social assistance of multilateral profile.

365. The GP who is offering primary medical assistance for the whole family, indifferently on the age or the sex of its members is considered a family doctor (FD)

366. The title of the GP/FD is offered for the medical specialist after the post university training in correspondence with professional qualification with a respective certificate/diploma who can be employed on the basis of work contract

367. The development of GP/FD rely on university and post university training through residency curriculum with a duration of 3 years or through retraining of the pediatricians and therapists on the basis of existing programme “the general practitioner (GP)/family doctor(FD)”

368. The GP/FD can activate in an individual mode or in a team of other GPs

369. In relation with the social-demographical context of the population, the team may include other specialists, inclusively social workers

**GP/FD can activate in:**

State medical institution
Private medical institution
Individual practice

370. The work of GP/FD is determined by an individual contract with municipal, rayon, insurance companies and other medical institutions.

371. The population covered by the GP/FD is based on the statement of the free choice of GP/FD by the population.

372. The GP/FD is offering primary health care in the FD’s office, at home, in the hospital, offering emergency care, prophylactic measures, diagnostic, treatment and rehabilitation procedures inclusively; with an interaction in medical-social problems of the family.

373. THE GP/FD is determining the activity of medical and social personnel in accordance with the organs for social protection.

374. GP/FD is leading his activity in accordance with the present statement and other legislative acts and normative of Republic of Moldova which determine the problems of health care.

375. The control of GP/FD activity is realized by the MoH.

376. The employment or dismissing of the GP/FD is made in accordance with the contract conditions and work legislations.

377. The obligations of GP/FD:

(a) To offer medical care for all the patients from his own list according to his qualification and in correspondence with the Professional qualification normative:

(i) To organize activities referral to:

- Medical and hygienic training of the population
- The promotion of the healthy life style
- The primary and secondary prophylaxis: the planning and supervising of immune prophylaxis, dispensing of chronic diseases in order to prevent the handicap and complications
- Family planning
- Sexual education
- The education of the healthy child

(ii) To offer emergency care for all the patients (independently on their place of living, nationality, religion, etc) and in case it is necessary – to offer the opportunistic hospitalization for them.

(iii) To organize diagnostic procedures in dependence of the suspected pathology (laboratory and functional diagnosis) by involvement of the special subdivisions which collaborate with the GP/FD on a contract basis.

(iv) To organize if it is necessary, the consultations of specialists of narrow profiles; the hospitalization of certain patients.

(v) To use in his practice the contemporaneous methods of prophylaxis, diagnosis and treatment.

(vi) To organize the prophylactic activities in order to determine the early diseases onset and risk factors.
(vii) To supervise an adequate prenatal and postnatal care in accordance with MoH directives
(viii) To offer an adequate supervising and medical care for the child in accordance with MoH directives
(ix) To do the expertise of the temporary incapacity of work in accordance with the existing instructions and to refer the patient to the medical Commission of vitality expertise

(b) To supervise the sanitary-hygienic, ecologic and epidemiologic situation of the territory in collaboration with sanitary and anti epidemiologic structures
(c) Together with organs for social protection to organize the medical, social and managerial help for vulnerable population (abandoned, elderly, handicapped persons, chronic patients, etc.)
(d) To do statistical analysis of the activity

The basic indicators of the activity of GP/FD:

(a) infant mortality
(b) mortality at home of the persons of the productive age
(c) the complications of the morbidity
(d) the level of hospitalization
(e) the complication of the prenatal, natal and postnatal periods appeared as a result of an inopportunity of primary health care
(f) the prophylactic exams on: (i) oncological profile; (ii) tuberculosis; (iii) immunization (planned, vaccinations, revaccinations, etc.); and (v) STIs and HIV

The rights of GP/FD:

(a) to control the activity of medical personnel responsible for the execution of the basic functions and obligations
(b) to contribute to the improvement of medical health care
(c) to express his opinion in discussion with the specialists of narrow profiles
(d) to analyze the work of the specialists of narrow profiles in accordance with existing normative
(e) to attend conferences, congresses, symposiums and other professional meetings
(f) to become a member of a professional society, with an activity that is not contravening with the goal and objectives of GP/FD
(g) to practice continuous medical education once in 3 to 5 years trough trainings, workshops and post university programs organized by Medical State university
(h) to sign collaboration contracts with insurance companies, economical agencies
(i) to be informed about every diagnostic procedure, treatment or other intervention applied to the patient from his circumscription
(j) to participate in examining of suggestions, complains, demands of the patients from his circumscription
(k) to be paid for his services that are not included in his contract of employment
(l) to control the correct execution of functional obligations, medical recommendation and assistance
(m) to buy, posses, utilize and coordinate on the right of the owner the given office in accordance to the contacts regulations
(n) to seek juridical counseling

Responsibilities of GP/FD
The GP/FD undertakes the personal responsibility for all decisions made during his professional activity and for the quality and culture of provided medical care according to his rights and obligations and for the refusal to provide medical care to each patient; as well as for all illegal actions, health damages which provoked the patient’s death.

**Annex Nr.3**

**a. Professional qualification normative of the GP/FD:**

(i) Professional qualification normative of the GP/FD represents a state document which is establishing the following:

(ii) Professional meaning, the principles and work conditions of GP/FD activity

(iii) Attestation of GP/FD

(iv) Qualification of GP/FD

(v) The responsibility of medical institutions for university and post university trainings in development of GP/FD

(vi) Professional qualification normative as a state document represents the basis of:
   - Training programme for university and post-university development of GP/FD
   - The level of theoretical knowledge and practical skills of GP/FD
   - The estimation criteria of students’ and doctors knowledge on the different stages of medical education
   - The standards for exploration, treatment, rehabilitation and dynamic supervising
   - The demands for the attestation of the GP/FD
   - Contracts of GP/FD with medical institutions, different organizations, universities, states, countries, etc.
   - Employment contracts

**b. The demands for the qualification of GP/FD:**

(i) To know the State Law and normative acts regarding the health care, structure and principles of medical assistance organization

(ii) to be familiarized about his rights and to analyze his activity and to know the principles of collaboration with other professional, services and organizations (the association of FD, insurance companies, etc.)

(iii) To poses and respect the principles of medical ethics and deontology obligations

**c. The basic indicators of the activity of GP/FD**

(i) infant mortality

(ii) mortality at home of the persons of the productive age

(iii) the complications of the morbidity

(iv) the level of hospitalization

(v) the complication of the prenatal, natal and postnatal periods appeared as a result of an inopportunity of primary health care

(vi) The prophylactic exams on:
   - Oncological profile
   - Tuberculosis
- Immunization (planned, vaccinations, revaccinations, etc.)
- STI pathologies and HIV

The GP/FD must possess the following types of activities and according to them to realize the following basic tasks:

(a) The prophylaxis, diagnostic, treatment and rehabilitation – first type of activity
(b) Emergency medical care and care in extreme situations - the second type of activity
(c) Medical maneuvers – the third type of activity
(d) Organizational services – the forth type of activity
12. REFERENCES


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Personal correspondence, Dr Mikhai Ciocanu, Director Department of Public Health and Management. December 2004


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li HGRM regarding the structure and personnel of the villages and cities’ mayoralities nr.688 dated 10.06.2003.


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