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# BARRIERS AND FACILITATING FACTORS IN ACCESS TO HEALTH SERVICES IN THE REPUBLIC OF MOLDOVA



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# Key words

DELIVERY OF HEALTH CARE

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# Abstract

In the context of global efforts to move towards universal coverage in health systems, this report identifies barriers and facilitating factors in accessing health services in the Republic of Moldova. The domains of the Tanahashi framework (availability, accessibility, acceptability, contact and effective coverage) underpin the research and analysis of findings in this report. This framework is particularly useful for ascertaining challenges to universal coverage – defined by the WHO as access to key promotive, preventive, curative and rehabilitative health interventions for all at an affordable cost, thereby achieving equity in access. The study looks in particular at how the population's access to health services has been affected by the recent efforts (2009–2011) to extend health services coverage.

This is the first comprehensive research carried out in the Republic of Moldova that identifies bottlenecks and facilitating factors for access to health care by using the Tanahashi dimensions of health coverage as the assessment framework. While many of the qualitative findings are common knowledge for both providers and users of health services, the added value of the Tanahashi dimensions is that they allow assessment of the interlinkages and symbiotic nature of access barriers, the role of wider social determinants of health, human interaction and motivating factors between providers and users; going beyond the pure technical assessment of the inputs and outputs of health system analysis.

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# Acronyms

CIS	Commonwealth of Independent States
CVD	cerebrovascular disease
DPOI	Dominant Personal Opinion Index
EU	European Union
FDO	family doctor's office
FD	family doctor
FG	focus group
FGD	focus group discussion
FMC	family medicine centre
GDP	gross domestic product
IMCI	Integrated Management of Childhood Illnesses
IMR	infant mortality rate
LGBT	lesbian, gay, bisexual and transgender
LPA	local public authority
MDR-TB	multidrug resistant tuberculosis
MMR	maternal mortality rate
NBS	National Bureau of Statistics
NHBS	National Household Budget Survey
NHIC	National Health Insurance Company
OOP	out-of-pocket
PAS Center	Center for Health Policies and Studies
PHC	primary health centre
PLWH	people living with HIV
PPP	purchasing power parity
SDR	standard death rate
TB	tuberculosis
U5MR	under-5 mortality rate
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund



# 1. INTRODUCTION

An economic downturn in the first decade following independence caused profound disintegration in the health system of the Republic of Moldova. The state was unable to maintain the extensive medical structure built in the USSR and health costs were shifted onto the users of services, leading to significant catastrophic costs and leaving a large proportion of the general population with less or no access to health care and health services. In the past decade the economic situation has started to improve and governments have struggled to reintroduce universal coverage of health services through several major reforms of the health system. Despite the limited resource base, there has been real progress in restructuring the health system by strengthening primary health care and changing health financing through the introduction of health insurance.

In 1996, the government initiated an important reform, reorganizing service delivery by introducing the family medicine model for primary health-care delivery. Increasing government allocations for the health sector were registered during the 2000s – in 2004, a fundamental reform introduced a mandatory health insurance system that led to significant increases in the financial resources allocated to the health sector. The WHO Health for All (HFA) database shows that the Republic of Moldova spends one of the highest shares of gross domestic product (GDP) on health care (estimated at 12%), yet only an estimated 53% of the population is covered by the public sector. The total health expenditure per capita is purchasing power parity (PPP)\$ 341, half the Commonwealth of Independent States (CIS) average of PPP\$ 714 and one tenth of the European Union (EU) average of PPP\$ 3152 (WHO Regional Office for Europe, 2012).

Since the introduction of health insurance there has been growing concern that increased government funding has not translated into greater population coverage under the national health insurance programme. Population coverage has remained

at around 75–80%. Other evidence suggests that access to services increased for those with insurance and that, for the population overall, access to health services is directly related to socioeconomic status.

Further legislation was introduced in 2009 and 2010 to improve access to services for poor people and those who are uninsured. During 2009 and 2010, the government made several amendments to the Law on Mandatory Health Insurance (Parliament of Republic of Moldova, 1998) that aimed to extend benefits to the most vulnerable. These included, but were not limited to, legislative amendments which ensured that all those registered as poor under the Law on Social Aid (Parliament of Republic of Moldova, 2008) automatically receive fully subsidized health insurance. In 2010, the Law on Mandatory Health Insurance extended full primary health care and emergency care services to all citizens, irrespective of insurance status. This was revised in 2011 to limit the universal primary health-care benefit to universal access to primary health-care visits only and not to compensated medicines.

In light of the above, and responding to a request for technical assistance from the Ministry of Health of the Republic of Moldova, this report specifically aims to:

- (a) review the impact of the 2009 and 2010 amendments to the Law on Mandatory Health Insurance for the poor and uninsured (Parliament of Republic of Moldova, 2009, 2010c);
- (b) explore the barriers and facilitating factors in access to health services in the Republic of Moldova, with a specific focus on barriers experienced by socially excluded populations and other vulnerable/high risk groups.

During the period from July 2011 to March 2012, the contents of this report were produced by means of a desk review and qualitative research – focus groups (FGs) and informant interviews – with health service providers and users. The Tanahashi framework was used to guide this work (Tanahashi, 1978). The report is divided into six sections. Section I contains the introduction; section II provides background on the framework to the study. This includes an explanation of the Tanahashi framework, delineating what is addressed in each of its five domains (availability coverage, accessibility coverage, acceptability coverage, contact coverage, effective coverage) and how their application in analysis can help to identify opportunities for health system strengthening towards the achievement of universal coverage with equity. Section III provides details on methods. Section IV summarizes the findings and identifies potential areas for future policy development and research. Section

V highlights the main findings from the desk review; and section VI highlights the main findings of qualitative research based on informant interviews and focus group discussions (FGDs) with various population groups.

The findings in this report will be relevant for successful implementation of the *Roadmap 2011–2014 Accelerating Reforms: addressing the needs of the health area through investment policies* which prioritizes quality, access and efficiency of health services (Ministry of Health 2011a). Particularly salient to the issues addressed in this report, the Roadmap's goals include (but are not limited to): (1) ensuring access to quality health services for the entire population of the Republic of Moldova through the regionalization of specialized and highly specialized care, decentralization of primary health care and introduction of quality management system in all health institutions; and (2) increasing equity in financing health services, by redirecting state contributions to health insurance towards the most-in-need population based on a true social health insurance and through more efficient utilization of health funds (Ministry of Health of Republic of Moldova, 2011a). In addition, the considerations presented in this report are relevant for the implementation of the *Healthcare System Development Strategy*, the goals of which are continuous improvement of the population's health, protecting citizens against financial risks related to accessing health-care services, reducing inequalities in the use and distribution of health-care services; and enhancing user satisfaction (Government of Republic of Moldova, 2007a).

## 2. BACKGROUND ON THE FRAMEWORK OF THE STUDY

The domains of the Tanahashi framework for effective coverage underpin the research and analysis of findings in this report. This framework is particularly useful for ascertaining challenges to universal coverage – defined by WHO as access to key promotive, preventive, curative and rehabilitative health interventions for all at an affordable cost, thereby achieving equity in access. This section provides a general overview of the Tanahashi framework from a global perspective.

An equitable health system is one that provides its population with access to services according to needs and independent of the capacity to pay, thus safeguarding the right to health. Improving access to health services ranks among the strategic health policy goals across the globe. However, like equity, access is neither precisely definable nor measurable in a definite manner.

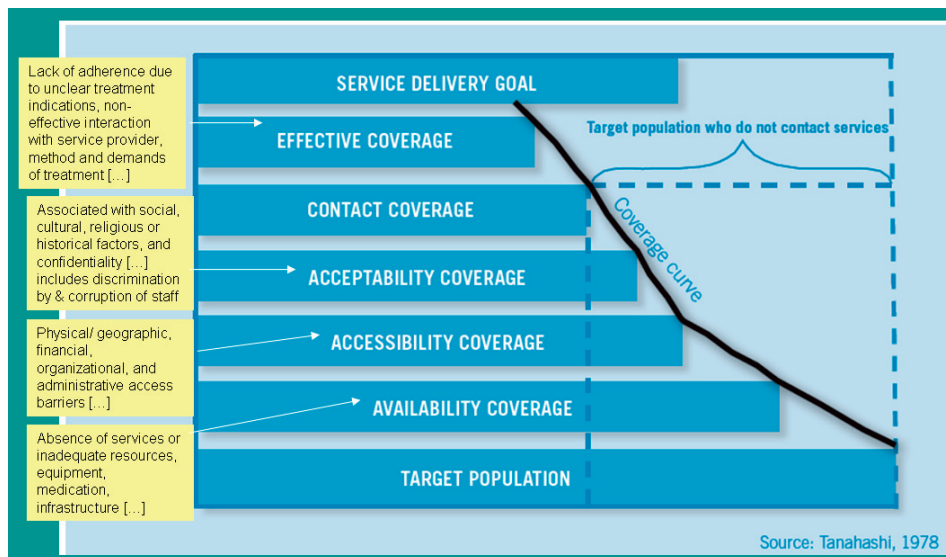
Over the last decades, considerable gains in the average level of health and access to health services have been achieved globally. Several countries have advanced towards the aim of universal coverage, so that all individuals have access to timely and appropriate health services at an affordable cost. However, not all subgroups have benefited equally from these advances. In other words, health systems have become more effective and efficient overall, but remain inequitable because the most vulnerable (e.g. poor and socially excluded) populations do not benefit equally in terms of access to health services and health outcomes.

When possible, people base their choices about when and where to seek care on many socioeconomic and cultural factors that influence their perceived needs and demand. Before their perceived needs result in demand for and utilization of health services, they must interact with the reality of the health system. If health services are to be utilized

they must be available, accessible and affordable. Individual decisions related to care-seeking occur in the context of the availability of an array of services, at various levels of economic affordability and of varying quality (real or perceived). In turn, the availability of services is influenced, by the political, demographic and economic reality of the district or country in which the services are planned, designed, funded and delivered.

For each case that is not detected or treated there are individual, community and health system factors that have contributed to a barrier to care. The variable nature of demand, utilization of services and supply applies to several health conditions and country contexts and defines the extent to which effective coverage is achieved. Effective coverage measures a health system's performance of the service delivery function in terms of providing the population with a set of promotive, preventive and curative services that are believed to be effective in improving health. Equity in effective coverage measures a health system's ability to provide services according to needs and independent of capacity to pay. It does not measure the effectiveness and impact of the intervention. Measurement of the true effectiveness of the health interventions provided is beyond the scope of effective coverage as it is captured by the measurement of health and its distribution. In order to attain a high level of effective coverage, and thereby maximize the probability of achieving significant health gain, interventions should be available, accessible, acceptable, affordable and effective.

**Fig. 1. Tanahashi framework for effective coverage with health services**



Source: Tanahashi, 1978, adapted by authors.

In recent years, WHO has used the Tanahashi model to ascertain effective coverage and identify barriers and facilitating factors in accessing health services. Tanahashi proposes five domains of coverage measurement, based on the conceptual framework: availability, accessibility, acceptability, contact and effective coverage. Fig. 1 and the following text highlight some aspects associated with these domains.

**1. Availability coverage:** The ratio between the availability of resources – human power, facilities, drugs – and the size of the target population gives the measurement of *availability* coverage (Tanahashi, 1978). This considers the resources available for delivering an intervention and their sufficiency. That is, the number or density of health facilities and personnel or the availability of technology (drugs, equipment). In other words, availability coverage measures a health system's capacity in relation to the size of the target population or, ideally, the population in need.

**2. Accessibility coverage:** According to Tanahashi's definition, even when a service is available it must be located within reasonable reach of those who should benefit from it. The capacity of the service is limited by the number of people who can reach and use it – *accessibility* (Tanahashi, 1978). There are two main dimensions of accessibility: physical access and affordability. On the physical dimension, access may be hindered if the resources are available but located inconveniently. For example, the distance from a health service provider is a strong accessibility factor. Time is another factor closely related to distance and transport. The travel time to a health facility to access services and the waiting time to see a health professional seem well-associated with patients' perception of the accessibility of services. However, the value of time (opportunity cost) is different for different groups of people and, consequently, has varying impact as an access barrier also. The second main dimension is the financial barrier to access or financial accessibility (affordability). User fees and transport costs have been shown to impact negatively on access to health services, rendering health services inaccessible to poor and vulnerable households. Out-of-pocket (OOP) health expenditure as a percentage of total health expenditure and the percentage of the population suffering from catastrophic health expenditures can be used as indicators to measure the financial barriers to accessibility.

**3. Acceptability coverage:** Tanahashi defines *acceptability* coverage as the capacity of the health services to be appealing and sought by the people (Tanahashi, 1978). Even if resources are available and accessible, they may not be used if the population does not accept them. Acceptability includes non-financial factors such as culture, beliefs, religion, gender, age-appropriate services and confidentiality; as well as aspects

of affordability that relate to people's perceptions of the value of health services. Acceptability coverage is influenced by people's perceptions; expectations of health services such as expected costs, effectiveness and quality of care; religious views and personal beliefs. Often, these are based on previous experiences and interactions with health personnel. Health personnel's discriminatory attitudes towards some population groups (e.g. socially excluded groups) can create systemic barriers towards acceptable health care for these groups.

**4. Contact coverage:** This is defined as the actual *contact* between the service provider and the user. The number of people who have contacted a service is a measurement of service output (Tanahashi, 1978). It is similar to 'use of services'. For health interventions that require a one-time action, contact coverage may be almost equivalent to effective coverage.

**5. Effective coverage:** The contact between service provider and the user does not always lead to successful intervention by health programmes or effective service. The Tanahashi framework defines *effective* coverage as the proportion of the population in need of an intervention who have received an effective intervention (Tanahashi, 1978). For health interventions that require a one-time action, contact coverage may be almost equivalent to effective coverage. For other interventions (e.g. chronic disease treatment) effectiveness can require diagnostic accuracy, provider compliance with evidence-based treatment, 'continuity' of access by the patient, effective referrals and adherence to prescribed treatment and rehabilitation (WHO, 2010).

In these domains, equity is intrinsically dependent on how it is accounted for in the health system functions of stewardship, financing, resource generation and service delivery. The Tanahashi framework is especially useful for equity analysis because it facilitates identification of groups with unmet needs (also accounting for gender dimension) and quantification of the specific weight of each of the barriers. Services may not be available; or may be far away, unaffordable or unacceptable for certain groups who will never contact the health system or do so infrequently. Since they are socially excluded from health services, these groups are "missing" or "hidden" from the system and are not included in routine studies on utilization in many countries.

Evaluation of coverage using the Tanahashi model of effective coverage can help managers and policy-makers in the Republic of Moldova to assess the impact of the recent legislative policy changes in: (a) addressing bottlenecks in the operation of the services; (b) intervening in the constraining factors responsible for such bottlenecks; and (c) selecting more effective strategies for service development.



# 3. METHODS

## Desk review

In accordance with the overarching aim of the study, the objective of the desk review was to consider how relevant publications produced between 2000 and 2011 covered barriers and facilitating factors in access to health services in the Republic of Moldova and the impact of the 2009 and 2010 amendments to the Law on Mandatory Health Insurance (Parliament of Republic of Moldova, 1998).

The search strategy included both an electronic search and contacting key international donors in the country regarding grey literature. The electronic search included the following key terms: health, health services, access, equity, quality, satisfaction, Republic of Moldova. Additionally, the search included review of local public health journals (e.g. *Curierul Medical, Management in Sanatate*) and masters and doctoral theses in the area of public health. The final data sources included the national database of routine health statistics and annual reports on health sector performance, survey analyses, published working papers and briefings manuals, technical reports and presentations at scientific meetings that explored barriers to access to health services, both published and grey literature.

## Qualitative research

The qualitative component of the research included structured interviews with key informants and FGDs with users of health services. These were conducted during October and November 2011.

The objectives of the qualitative research were to:

- identify the barriers and facilitating factors to health care being experienced

and perceived by socially excluded populations and health-care providers and managers and characterize these in relation to availability, accessibility, acceptability, contact and effective coverage using the Tanahashi framework;

- identify the perceptions of socially excluded populations and health-care providers and managers regarding the impact of the amendments to the Law on Mandatory Health Insurance;
- highlight opportunities to improve equity in access to quality health services;
- link to priorities for health in the health policy roadmap.

## Design and data collection

Qualitative research instruments were informed by the findings emerging from the desk review. Sampling of key informants was designed to include a range of health managers from national, large urban, rayon and rural levels of primary health care and specialized outpatient centres and the National Health Insurance Company (NHIC); as well as managers and assistants in social assistance offices at national and local levels. A total of 11 key informants from the health sector and 6 key informants from the social sector were enlisted:

1. high-level manager, Ministry of Health
2. mid-level manager, Ministry of Health
3. representative of the NHIC
4. manager, large urban health authority
5. manager, large urban primary health-care clinic
6. manager, large urban primary health-care and specialized outpatient clinic
7. manager, rayon-level family medicine centre (FMC)
8. manager, rural health centre
9. manager, rayon-level specialized outpatient service
10. manager, rayon hospital
11. family doctor, rural health centre
12. social assistant, rayon level
13. manager, rayon-level social assistance centre
14. social assistant, rayon-level social assistance centre
15. social assistant, rayon-level social assistance centre
16. social assistant, rural social assistance service
17. social assistant, rayon-level social assistance service.

Data collection was via semi-structured interviews. Key areas of interview discussion included assessment of access to health care at national level and in the interviewee's health facility; major changes in access to care in the past two years; knowledge of legislative amendments designed to increase coverage of the poor and excluded; and changes to practices and their implementation.

A total of 65 participants from both rural and urban areas were interviewed within nine FGs comprising:

1. urban, insured participants from Chisinau;
2. urban, insured participants from rayon centres;
3. rural, insured participants;
4. uninsured migrants;
5. uninsured agricultural workers;
6. uninsured informal workers;
7. socially excluded participants eligible for insurance under the new law but not using their entitlements (not registered for insurance);
8. uninsured Roma participants;
9. inhabitants of rural areas having the highest deprivation index (e.g. Cimislia).

The rationale for the selection of these profiles is threefold: (i) they comprise key groups not covered by health insurance prior to the recent legislative amendments; (ii) they reflect groups explicitly targeted by the legislation; and (iii) all except the control groups are likely to experience health system access barriers related to accessibility, availability, acceptability, contact and effective coverage. Each FG comprised no more than 10 people.

Quotas were determined to ensure a range of experiences depending on sex (at least 40% men), age (50% under 49 years), use of health services (50% have used any level of health care in the past six months) and 10–20% beneficiaries eligible for health insurance due to social protection law. However, it was very difficult to meet all criteria in each FG.

A team of experienced qualitative researchers from the Centre for Sociological and Marketing Studies (CBS AXA) conducted all interviews. Having obtained informed consent, these were audio-recorded. FGDs lasted on average 2 hours and 30 minutes, while structured interviews ranged from 15 minutes to 2 hours. All interviews were transcribed verbatim, translated into English, coded initially for emerging core descriptive content and then further refined in an iterative process of data coding, charting and interpretation.

## Limitations

It was very difficult to identify people with health insurance policies based on social assistance eligibility. Social assistance offices do not collect information on health insurance coverage. Similarly, while the NHIC provided a list of health insurance recipients who were also beneficiaries of social assistance, most addresses were outdated or incorrect and the only person identified refused to take part. The interview at the NHIC shows that only about two or three people per month receive health insurance under the legislative amendment that facilitates access to health insurance for persons covered under the Law on Social Aid.

A high refusal rate was registered among beneficiaries of social assistance. The reasons given included lack of interest; doubt that the situation will change for the better; or lack of money for travel costs (the latter could have been addressed by sending money in advance for out-of-town participants but this was not administratively feasible within the confines of the study).

It was difficult to focus FGDs on only one case of access to health and people brought negative experiences of their social networks too. Participants who were active users of health services dominated the discussions. Many people perceive access to health care to include only situations related to important conditions and do not take account of regular contacts for prevention, annual check-ups, laboratory tests or medical certificates, for example.

## 4. SUMMARY OF FINDINGS AND POTENTIAL AREAS FOR FUTURE POLICY DEVELOPMENT AND RESEARCH

This is the first comprehensive research carried out in the Republic of Moldova that identifies bottlenecks and facilitating factors for access to health care by using Tanahashi dimensions of health coverage as the assessment framework. While many of the qualitative findings are common knowledge for both providers and users of health services, the Tanahashi dimensions add value by enabling assessment of the interlinkages and symbiotic nature of access barriers and of the role of wider social determinants of health, human interaction and motivating factors between providers and users. They also extend beyond pure technical assessment of inputs and outputs of the health system analysis. Thus, the discussion section is structured around perceptions about enablers and deterrents in interactions between health-care providers and users.

This section provides an overview of the emerging findings from both the desk review and the qualitative parts of the study. A brief description of the main challenges in relation to each of the Tanahashi domains highlights selected issues that undermine access across these domains, and suggests key policy and research considerations for each. This is followed by discussion of implications of the study findings in relation to reviewing the impact of changes to the health insurance legislation since 2009 and highlights areas requiring concerted further focus to decrease access barriers for the most disadvantaged populations. Across this analysis, efforts have been made to explore the findings' relevance to the strategic priorities of the Moldovan government, including the 2011–2014 health policy Roadmap 2012 and the *Healthcare System Development Strategy*.

## Availability coverage

The desk review provided information on infrastructure, inputs and equipment, pharmaceuticals and human resources and found good availability of health services overall, with some geographical and urban/rural inequities.

- **Infrastructure.** Within a well-defined hierarchy of primary health-care facilities, some do not meet national norms in terms of surface area and uniform catchment areas. A 2007 assessment of the quality of infrastructure of primary health-care facilities showed that many were old and required refurbishment (Ministry of Health of Republic of Moldova & NCHM, 2007). Those ranking lowest in terms of quality were located disproportionately in rural areas. In the past decade, the primary health-care sector has received both outside and local investment to improve infrastructure, vehicles and equipment. However, there are still shortages of basic equipment and the quality of health services have not improved at the same pace. The hospital sector shows an oversupply in Chisinau, where 50% of all hospitals are concentrated.
- **Inputs and equipment.** The 2007 primary health-care facility assessment highlighted significant problems with inputs such as connection to sewage and water systems. Many also showed shortages of basic equipment and minor surgery facilities were not widely available. Family doctors working in urban areas and in clinics supported by international aid programmes are more likely to use available diagnostic and therapeutic equipment.
- **Pharmaceuticals.** There has been some progress in reducing the number of villages with primary health-care facilities without a pharmacy. Yet, even when there are pharmacies, challenges persist in ensuring the availability of an essential list of pharmaceuticals. A 2011 study showed that less than half of public and private community pharmacies had in stock the cheapest generic drug and less than half had the full list of reference generic drugs. Rural areas were particularly disadvantaged (Sautenkova et al., 2012).
- **Human resources.** During the past decade there has been a reduction in the total number of physicians and mid-level personnel, with a continuing oversupply of specialists concentrated in Chisinau. There have also been

more significant reductions in the numbers of primary health-care physicians and nurses both overall and in rural areas, despite government efforts to make these positions more attractive. Availability of human resources shows hospital and specialized sectors to be well-supplied with health personnel, with levels comparable to those in the EU. The overall deficit of family doctors and nurses is much lower than the EU average but twice that of the Newly Independent States (NIS). The number of primary health-care physicians is in decline and the deficit in family doctors and nurses is unevenly distributed as, historically, some central and southern rayons have been less well-staffed. The burden on existing physicians is high and geographically inequitable – national statistics indicate that family doctors in some regions cover larger numbers of rural populations in underserved rayons and provide more services than in other more highly staffed rayons. Since 2007 the government has introduced monetary incentives to attract new physicians to rural areas but they have had limited effectiveness and outflows are higher than inflows. Despite monetary incentives for relocation, recent medical graduates prefer to leave the medical field altogether rather than work in the primary health sector in deprived rural areas, an indication that improved salaries and benefits alone will not change the situation significantly. Monetary incentives work better for nursing staff, and surveys of nursing graduates show their willingness to relocate for better salaries.

Both key informants and FG participants perceived the availability of health services to be good overall, but a significant number of rural localities still do not have a primary health-care physician. Key informants noted that health staff's availability and motivation to provide quality care in rural areas is limited by the hardship and heavy workloads facing frontline health workers. Many specialized functions have been delegated to one primary health-care physician or nurse who has neither the means nor the physical capacity to provide all the care. One-off monetary incentives for relocation to a rural area do not address these deterrents. Rayon FMCs compensate by developing schedules for rayon-centre physicians to visit understaffed villages, but recognize that this mechanism is not able to compensate fully for a lack of physicians.

FG participants have noted investment in infrastructure in the past decade, but very limited investment in diagnostic and laboratory capacity at rural level. They also consider that the diagnostic and qualified laboratory personnel interpreting results at rayon level are of low quality, and perceive laboratory capacity in Chisinau

to be better but less affordable. Key informants perceived that the availability of laboratories and pharmaceuticals has improved in the past decade since the introduction of health insurance.

### **Implications for policy development and research**

- Following the 2007 assessment of infrastructure (facility, equipment, inputs), it would be opportune to undertake a follow-up to ascertain the current status and progress against the 2007 baseline.
- Further research could be done on the availability of pharmacies for residents of villages that have no primary health-care facility. It would also be beneficial to obtain further data on the availability of screening and prevention, specialist and selected disease-specific services.
- To address the limited availability of diagnostic services at primary health-care level, it would be opportune to evaluate needs for, and improve supply of, basic diagnostic services required to meet the expected functions and roles of primary health centres (PHCs).
- Continuing human resources shortages in primary health care at rural level calls for the design of new solutions to increase the availability of health services; flexible models of service delivery; and incentives responding to the needs of medical graduates.

## **Accessibility coverage**

The desk review analysed geographical access to primary health care and specialized and hospital care; coverage and affordability of health insurance; OOP payments and financial protection. This dimension has been well-researched through comparable household data available for the past five years and additional data sources from cross-country comparative surveys.

- **Geographical access.** Regardless of the quality of the infrastructure or the availability of services required, geographical access to health facilities can generally be considered good, with most people living within 5 km of a health facility and less than one hour away. The existing geographical access barriers are more common in rural areas than in urban. Longer distances and difficulties with transportation impact certain populations (e.g. retired



people, unemployed people) more than others. Factors outside the control of the health sector, such as the quality of roads and lack of regular public transportation, impact geographical access. In qualitative interviews, rural users of health services have mentioned geographical access as a problem when they need to attend a rayon centre several days in a row for laboratory work and diagnostic tests required for diagnosis.

- **Coverage by national health insurance.** Overall financial access has improved following the introduction of health insurance and also due to overall improving incomes within the population. However, a substantial share of the population is still not covered by the NHIC, despite recent efforts to increase universal coverage with basic services, regardless of health insurance status. People who are self-employed (particularly in agriculture), unemployed, younger or on lower incomes are more likely to be uninsured. Rural respondents and people in the lowest quintile are more likely to mention finding the cost of health insurance prohibitive. In categories that should self-insure, the price of the health insurance premium is not the only determinant in the decision whether to buy insurance – the benefit package is perceived to be insufficient at primary health-care and outpatient level, yet the population perceives the facilitating role of health insurance in case of hospitalization. This leads to adverse selection.
- **OOP payments and financial protection.** The desk review findings show that financial protection has improved in the past decade but serious challenges persist. OOP payments and informal payments are pervasive and almost universal and have not decreased following the introduction of health insurance. A cross-country comparative study conducted in 2010 reported that almost all (96.3%) patients had to make OOP payments in various forms (Balabanova et al., 2012). The size of the OOP payments is in direct relationship to a household's financial capacity – those in the highest quintile spent (on average) 8.3 times more for health than households in the lowest quintile. Household budget survey analyses reveal that catastrophic expenditures are registered in all groups. Households with retired people are the most vulnerable. Most OOP payments are related to procurement of pharmaceuticals, as public funding still covers only 28% of total expenditures. The government has significantly increased expenditures on health, yet OOP expenditure in the Republic of Moldova is still quite high – private household expenditure forms 45% of total health expenditure.

This situation especially affects financial access for socially excluded and marginalized populations.

Key informants were reticent to acknowledge the role of OOP payments and the affordability of health services. They focused mostly on health insurance's beneficial role in ensuring universal access to a basic package of services that was not available before 2004. They consider that the current regulatory framework leaves no-one uncovered by health services; legislative amendments allow access by socially vulnerable categories; and those who do not have health insurance are people who can afford it but are not willing to buy it. Some informants voiced concerns about opposite inequity for those who are insured because of the current reform to provide universal coverage regardless of ability to buy insurance.

FGDs shed light on how access to, and the quality of, health services depend on the ability to make informal payments in addition to health insurance. OOP payments have different roles at different levels of care – at primary health-care and specialist level informal payments serve as facilitation fees for shortening waiting times and improving the quality of interaction. However, the largest share of expenditures is related to direct payments for diagnostic tests, prescribed medicines and access to a very limited package of compensated medicines. The expectation of informal payments bars access to hospital services for many categories of populations, especially rural, uninsured or state-insured groups.

For many people who should self-insure, it is more economically advantageous to access primary health care and specialist outpatient care through informal payments rather than health insurance that does not exclude informal payments. On the contrary, production of a health insurance certificate determines worse attitudes from health personnel. In a market in which medical services are incentivized by OOP payments (securing better attitudes or shortcuts), possession of health insurance is perceived to be decreasing patient satisfaction, adding more bureaucracy and diminishing convenience for the patient. Users perceive the cost-effectiveness value of health insurance for primary health care and outpatient specialized care coverage to be very low. Even with reduced premiums, the categories of population that should self-insure do not find sufficient motivation to buy health insurance unless they envisage hospital admission. In such cases the cost-effectiveness value of the premium increases.

## Implications for policy development and research

- Available data suggest that recent legislative changes to increase affordability and decrease the share of OOP payments across all income groups have had a modest impact. These findings call for solutions other than those currently suggested by the national policy of providing significant discounts in health insurance premiums or by mandating health insurance through punitive measures. It seems that establishment of a better package of benefits would increase the value of health insurance. Other solutions to consider are suggested by the recent health financing review paper (Shishkin & Jowett, 2012).
- The study findings reveal persisting high shares of OOP payments for pharmaceutical expenditures and a significant financial burden that undermines treatment compliance. This fully supports priorities set by the health policy roadmap on increasing access to affordable medicines and pharmaceutical products.
- For areas lacking sufficient detail, currently the National Household Budget Survey (NHBS) does not capture measurement of OOP payments for services and pharmaceuticals. It would be useful to extend this module to track the amount of private household expenditures for different health expenditure categories in order to understand how affordability evolves. Additionally, while there is sufficient evidence on financial protection and OOP payments, the findings of various studies and analyses are not uniform and there is a need to explore drivers of catastrophic costs and impoverishing spending.

## Acceptability coverage

This section addresses several aspects of acceptability coverage – patient satisfaction with service quality; social exclusion and discrimination as a barrier to accessing health services; and acceptability barriers for specific population groups. Acceptability coverage of the general population was not assessed in much detail in the Republic of Moldova through either routine statistics or special surveys. There is insufficient quantitative information regarding exclusion from health services for priority groups and by socioeconomic quintiles, and insufficient definition of this type of health coverage in the present evidence.

- **Perceived quality of services.** On a population level, few people did not see a physician because of concerns about the low quality of service or mistrust of the physician. In a household survey undertaken in 2010 among persons who had not seen a physician within the past 12 months despite feeling the need to do so, 8.4% reported not doing so because of concerns about the low quality of services and 5.2% due to lack of trust in a doctor (NBS, 2011).
- **Discrimination.** Health services is an area of public services in which many people feel discriminated against. A quantitative study on the general Moldovan population's opinion on discrimination indicates that, within health services, the general population perceives the poor population to be the group facing most discrimination in access to health care (Malcoci, 2011a). Qualitative data gathered through the same research indicate that the general population perceived discrimination of poor people to be linked to their inability to pay, unemployment, lack of medical insurance and, even when they have medical insurance, their inability to pay extra (so they are treated distantly and badly).
- **Specific vulnerable groups.** Specific groups experience a higher proportion of social exclusion and have difficulties in accessing health care. This applies especially to poor people who cannot pay extra (even when they have health insurance) and also to some specific population groups based on ethnicity, sexual orientation or disease. Social exclusion processes may present challenges for specific groups seeking the health services needed. This may be due to discrimination based on ethnicity or sexual orientation, lack of culturally appropriate or age-specific services, biases based on group members' previous negative experiences with health services, and stigma. Data on the acceptability of health services among socially excluded groups are very limited but highlight the need for a more systematic approach to discrimination.

Key informants mentioned that people have high expectations based on their experiences in the former USSR and on comparisons with health systems elsewhere. These colour their negative attitudes towards health services today. In general, the language used by key informants – blaming patients for their attitudes towards their own health, delays in seeking care and towards health services – reflects a health system that does not meet different patient needs and does not make services friendlier. This is certainly an area that needs further exploration.

FGD findings showed that, overall, people show low satisfaction with the primary health-care level because of the limited scope of services, poor quality of services and waiting times; and higher satisfaction with specialist services and hospital services. People from poor marginalized categories and rural areas feel the most excluded – especially by health staff’s attitudes towards them and by their inability to pay for prescribed treatment – and so prefer to avoid contact with health services until it is impossible to delay any longer. Rural users of health services mentioned poor attitudes at rayon level, preferring to bypass this level and go directly to Chisinau where physician-patient interactions seem to be better. Unemployment and receipt of social benefits and automatic health insurance entitlement is not always regarded with sympathy, by users or providers, and some beneficiaries felt stigmatized.

### **Implications for policy development and research**

- Acceptability has been covered by only one general population study and several targeted studies of people living with HIV (PLWH), the gay community and Roma. Barriers to the acceptability of health services based on perceived low quality of care have been attested but their effect has not been quantified by any systematic research.
- There are few comparative data on socially excluded categories (except PLWH) and very limited data on the acceptability of health services among socially excluded groups. Those that do exist highlight the need for a more systematic approach to discrimination. A systematic study on health services’ responsiveness to patients’ expectations would be a good basis for developing policy options for this domain.
- Data on quality and the responsiveness of services could be strengthened. Further systematic research is required on the impact of discrimination – including that based on income and the inability to pay extra – on the quality of service provision. There are also limited data on the appropriateness of aspects that may also influence the acceptability of services, including opening hours, documentation requirements and confidentiality.

## **Contact coverage**

This section covers the overall utilization of health services and specific areas such as primary health-care level, emergency care and hospital care. The data are

based mostly on administrative statistics and, where available, a few insights from household surveys to provide some additional insights based on insurance status, income, rural/urban location and gender. There were modest findings in relation to the impact of legislative changes on contact coverage.

- **General contact coverage.** Data show increasing trends in contact with health services at all levels (primary health care, emergency, hospital) since the introduction of health insurance. However, inequities persist, as this increase has been documented to be related to health insurance status (for the urban population) and, especially, to socioeconomic status. Moreover, those with higher ability to pay use more specialist and dentistry services, perceived as better quality of care, while lower quintiles resort more to primary health care. There are insufficient data in routine statistics to measure accurately how recent amendments have impacted overall utilization of health services by disadvantaged groups and by the uninsured.
- **Primary health-care contact coverage.** Contact coverage with primary health care is increasing slightly but is difficult to attribute to legislative changes, given limited data on the dynamics for the uninsured population's contact with primary health care. Utilization of health services is still in direct relationship with socioeconomic status – with the same symptoms, a higher proportion of the highest (compared to the lowest) quintile go to see a physician.
- **Contact coverage for emergency care and referral system.** The number of emergency requests almost doubled between 2004 and 2009 but there are limited data to measure quality contact with emergency services. The NHBS 2010 (NBS, 2011) showed that referral patterns for hospitalization have improved but high proportions of rural patients still use emergency services to increase the likelihood of hospitalization, in order to bypass primary health-care's gatekeeping function that limits unnecessary hospitalization.
- **Contact coverage with hospital services.** The hospital admission rate increased significantly in 2010, compared to 2004. Hospital admission is dependent on insurance status, sex and urban location. Average length of stay is longer for insured patients than for uninsured.

Providers and managers show converging opinions that contact with primary health care has improved significantly following the introduction of health insurance. The

family doctor is more accessible as the ratio of time spent in clinic hours is higher than that for home visits. At the same time, providers feel that it is the “bypassers” who do not make appointments that lead to overall patient dissatisfaction with waiting times in PHCs.

Moldovan users of health services continue to value specialist care and disapprove of primary health care’s gatekeeping function for referrals to specialist care and hospital care. Demand for specialist care creates informal bypassing patterns for which health insurance is not used. Rural people perceive rayon-level outpatient specialized care to be more expensive, less acceptable and providing poorer quality services than specialist care in Chisinau, the capital city. Those who can afford to bypass the rayon level of care completely informally self-refer to Chisinau where they try to access tertiary care specialists on a private basis. The acceptability and affordability of these services are valued best by the rural population who can access this level. Those who cannot are frustrated that they are limited to a lower quality of care with longer waiting times and poorer attitudes because of their limited ability to pay. As a mechanism to bypass primary health-care’s gatekeeping function for hospital care, the population uses ambulance services to increase the chance of hospitalization.

### **Implications for policy development and research**

- These findings show important discrepancies in the quality of care between Chisinau and rayon level and excessive centralization of sought-after health services in Chisinau, driving people throughout the Republic of Moldova to seek care at the highest level and bypass rayon level for specialist services. There is a need to develop a concept for regionalization of specialist services at regional/inter-rayon level.
- Qualitative research has enabled better understanding of the human motivations in accessing and providing health care but does not allow quantification of differences in contact due to vulnerabilities, health insurance status and experienced OOP costs. National statistics and household surveys allow monitoring of differences by insurance status but do not allow detailed focus on the needs of uninsured or socially vulnerable people. Additional quantitative research is necessary in order to monitor the effects of government efforts to extend universal coverage. There is a need to develop a better monitoring framework in the routine statistics

to allow extraction of critical data on utilization of health services by the uninsured populations.

- There is insufficient detail related to contact coverage with preventive services and specialized services, and insufficient data related to most disadvantaged groups, to allow monitoring of the effect of recent changes to expand coverage.

## Effective coverage

A limited number of national indicators were identified in the routine statistics to measure effective coverage with specific services, including quality of services and compliance with treatment. At primary health-care level the indicator was coverage with specific follow-up and preventive services, such as antenatal screening, vaccination rates and screening for noncommunicable diseases. Hospital-level reviewed indicators included unnecessary hospitalization rates, content and quality of hospital care and clinical effectiveness for two conditions as captured by national indicators. There were insufficient data on patient adherence and satisfaction, ability to buy all prescribed drugs and ability to carry through with recommended referral. No information was found regarding effective coverage in relation to the impact of legislative changes on effective coverage.

- **Quality of care for effective coverage.** At primary health-care level, there are indications that some good quality of care has been achieved in areas related to coverage with some basic services for pregnant women and children where benefits and interventions are well-defined (e.g. antenatal screening, immunizations, prophylaxis with vitamin D). Insufficient data mean that it is less clear how primary health care performs in screening and management of noncommunicable diseases. There are limited data on objective assessment of quality of care through special studies, as research on quality of services has looked mostly at patient satisfaction that is more related to acceptability.
- **Adherence and treatment completion.** Limited systematic data are available regarding compliance with clinical protocols and treatment compliance. For long-term treatments (e.g. for TB) success rates have been modest, much below national targets. Factors relate to models of service



delivery that lack good interaction between specialized inpatient and outpatient services and interaction between different levels of care and referral patterns, as well as the social vulnerability of a certain number of patients. Adherence to treatment was much better (88%) within the specialized and centralized system for lifelong treatments for HIV/AIDS.

Key informants emphasized several barriers to effective coverage – limited usefulness of current protocols to measure effective coverage and compliance with treatment; poor patient compliance with long-term medication due not only to personal factors but also to low compensation rates and drug unaffordability; and the need to reintroduce performance indicators and provider incentives for improved focus on preventive services.

FGs have confirmed these obstacles and also highlighted the low acceptability of pharmaceuticals, a cultural belief that drugs do more harm than good and an increasing preference for alternative remedies. At the same time, it is not clear whether this trend is related to current health providers' ineffective prescribing practices and the high costs of pharmaceuticals or whether it is an inherent cultural belief. Another related barrier concerns the significant pharmaceutical OOP costs caused by the low compensation rate as well as people's distrust of physicians' competencies and suspected collusion with pharmaceutical interests within prescribing practices. Thus, while contact with a primary health-care physician is affordable and accessible for a large part of the population, the content is often perceived as unsatisfactory because of questioned competency and the low acceptability of prescribed treatment. In cases where the health system is proactive in creating incentives for treatment compliance (e.g. for hypertension, diabetes, mother and child care), certain drugs are provided free-of-charge and benefit packages have been well-defined, effective coverage is much better and patients and communities show more positive opinions.

### **Implications for policy development and research**

- Effective coverage is largely missing from national routine statistics. Only indirect measures of outcome and impact are available and these are not true measures of effective coverage.
- All data sources have highlighted the critical importance of pharmaceutical coverage and physicians' prescription practices for ensuring effective coverage. However, no systematic studies have looked at physicians'

prescription practices and preferences based on non-clinical incentives (e.g. brands versus generics, preference for certain manufacturers and pharmacies, price evaluation, compliance with evidence-based medicine). Use of pharmaceuticals and the relationship between prescription practices and clinical outcomes is virtually absent from any published evidence in the country in the past decade. There is a need to develop a body of evidence in this area, forming a basis on which to develop evidence-based public policies to regulate the pharmaceutical market, pricing and compensation benefits and pharmaco-surveillance systems. This seems to be one of the critical areas to be addressed in both research and policy formulation.

- Data on effective coverage are scarce and routine monitoring of quality of care and clinical outcomes is insufficient. The quality of hospital care is documented even less – most indicators are inputs or process-based and the few indicators intended to measure quality are not informative, although a recent study has shown that there are major problems. In light of this, this report could use only indirect measures, such as incidence, prevalence and mortality. There is insufficient evidence on the socially excluded and marginalized populations.

## **Review of impact of changes to health insurance legislation since 2009**

Recent amendments have sought to increase the proportion of the population insured by including additional measures to increase self-insurance through punitive measures (e.g. fining those who do not buy insurance; conditioning self-employed categories to buy insurance) and through incentives (e.g. subsidies and price reductions). Additional measures have included extending health insurance benefit to those eligible for social welfare benefits, and implementing universal coverage with primary health-care services in 2010. In 2011, this was amended to limit the benefit to physician consultations only.

The desk review did not identify significant impacts from these legislative changes at national level. There have been no significant increases in the number of people self-insuring in the past two years, or any significant uptake in the number of PHC

visits by those without insurance. The extension of universal access to primary health care led to a slight increase in contact coverage for the formerly excluded uninsured populations, but the second amendment that disallowed access to compensated medicines made this a less attractive entitlement and probably reduced the uptake. In addition, some categories entitled to health insurance were not aware how they could access primary health-care services for free.

Health managers have seen the impact of the amendment in higher numbers of patients and increased burden on staff, as they did not plan appropriately for the changes. Those whose budgets were affected by the amendment had a negative perception about increased inequity for the better-off. FG participants thought that abolition of the compensated medicines benefit had completely devalued the attempt at universal coverage, as primary health-care doctors' services incur quite low costs and people were attracted by access to basic medicines. While not driving up overall health costs, policies to decrease the financial burden of private pharmaceutical expenditures are a key area requiring policy debates.

Interviews with both key informants and FG participants eligible for this health insurance entitlement based on poverty level showed that a very small number of populations benefiting from social welfare have received health insurance through this mechanism. Both providers and clients considered the implementation mechanism to be highly restrictive as it excluded people who owned any area of land (even though below subsistence level) and limited this benefit to only six months in any one year. In addition, information about this amendment was very limited even among social assistants and health providers, as well as vulnerable eligible people. Based on estimations, only about 17 500 beneficiaries of social assistance were eligible to apply for health insurance benefit and only 2–3 people per month actually received health insurance through this mechanism.

# 5. FINDINGS OF THE DESK REVIEW

This section provides a narrative description of the main findings from the desk review regarding barriers and facilitating factors to access and equitable access, by each level of coverage with health services using the Tanahashi framework. Over 100 sources were reviewed but still no systematic data were found on the 2009–2011 legislative amendments aimed at improving coverage for socially excluded categories.

## Availability coverage

In considering availability coverage in the Republic of Moldova, it is important to take account of the country's history since 1990 and its impact on the health system. At independence in 1991, the Republic of Moldova inherited a health system with an extensive number of health facilities and staff but limited resources to sustain them. In the five years after independence, a deep economic crisis led to a significant bed reduction in the rural hospital sector. However, in 1997 the country still had one of the most extensive networks of health facilities and health staff in the European Region. The severe financial crisis in the region in 1998 led to an even more dramatic crisis for the health-care system, with reductions in the number of hospital beds, activity levels and personnel. However, secondary and tertiary care facilities were not consolidated and restructured, and there is still significant duplication and oversupply in the capital – of Chisinau's municipal facilities and of large specialist facilities serving the local population (World Bank, 2000).

In order to review existing data on availability coverage, this section includes an analysis of the available infrastructure and its distribution and quality, as well as human resources. The main data sources for availability coverage are the national

routine statistics on inputs into the health system and national and WHO databases. Very few other sources of independent research were identified. The desk review did not identify sufficient data to look at the availability of disease-specific services for specific tracer conditions across all levels of care, and data on availability of promotion and prevention services seem to be quite limited. Therefore, this section will focus on availability and distribution of health facilities and pharmacies and availability of human resources within the health system, particularly at primary health-care level. The national statistics reviewed show little change in the main health inputs indicators that would signify whether recent legislative changes have had any impact on increasing health services coverage.

## Infrastructure

The sector has seen significant reform through the implementation of the primary health-care programme since 1996 and is now based on a general practice model with family doctors. The current infrastructure includes a well-defined hierarchy of facilities, with the NHIC allocating targeted funds separate from the hospital sector. At rayon level, the FMC is responsible for primary health care. While organizationally subordinated to the rayon hospital, specialized outpatient care is housed in FMC premises. In rural areas, health centres and family doctor offices (FDOs) provide only primary care services. At the end of 2010 the primary health-care infrastructure consisted of 37 FMCs covering 216 health centres, 556 FDOs and 359 health offices, plus 46 autonomous health centres, covering 71 FDOs and 44 HOs.<sup>1</sup> Additionally, the municipality of Chisinau has five territorial medical associations, covering 12 FMCs, 5 consultative and diagnostic centres and 53 consultative departments, as the specialized outpatient services were not separated from primary health-care facilities (NCHM, 2011).

Essential services provided in primary-care facilities differ little between urban and rural settings. Services include general and paediatric consultations and referrals; paediatric development checks and immunization; antenatal and postpartum care; nutrition clinics; chronic disease management (e.g. for diabetes, asthma, heart disease); mental health services; family planning; hepatitis and tuberculosis (TB) care; acute respiratory illness care; diarrhoea care; home visits; nursing care; ambulance services; and health promotion and prevention clinics (Atun et al., 2008).

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1 FMCs are found at rayon level. At rural level there are health centres (more than 2 primary health-care physicians), FDOs (1 primary health-care physician) and health offices (1 primary health-care nurse only).

Minor surgery facilities are not widely available in primary health-care facilities. A task-profile survey of family doctors in the Republic of Moldova found that those working in urban areas or in clinics supported through international aid programmes were more likely to use available diagnostic or therapeutic equipment, particularly for common paediatric conditions (World Bank, 2005). The same study showed that family doctors managed psychosocial problems infrequently but common chronic conditions frequently, with no urban and rural differences. The majority of the urban and rural family doctors interviewed (70–95%) routinely checked the blood pressure of their patients, performed cervical smears and manual breast checks for lumps and provided health education. Blood cholesterol levels (when needed) were more likely to be measured by those working in urban FMCs; family doctors from rural areas were more likely to provide antenatal and postpartum care. Generally, family doctors working in advanced reform regions (i.e. those in receipt of international aid) were more likely to provide these services (World Bank, 2005).

The only systematic assessment of the quality of the infrastructure of primary health-care facilities was conducted in 2007 by a team of external and national consultants under a programme funded by The World Bank. The findings showed that almost half (48%) of these facilities were built before 1980. Almost one fifth (275 of 1261) were refurbished in 2000–2007 and one twelfth (105 of 1261) in the 1990s; 52% were never refurbished and 80% had no connection to sewage and water systems (Ministry of Health of Republic of Moldova & NCHM, 2007). Another 144 health facilities underwent major refurbishment and construction in 2009–2010, funded by a World Bank project and contributions from local public authorities (Ministry of Health of Republic of Moldova, 2009a; Ministry of Health of Republic of Moldova, 2010). The 2007 study also reported a large proportion of health facilities that did not meet national norms in terms of the surface area and uniformity of catchment areas for primary health-care facilities. In addition, the study reported 40–90% shortages of the basic equipment required of PHCs according to the norms (Ministry of Health of Republic of Moldova & NCHM, 2007). The facilities ranking lowest in terms of quality were disproportionately located in rural areas. For transportation, a total of 261 new vehicles were supplied to PHC facilities in the period 2001–2008, funded by contributions from The World Bank, Ministry of Health and NHIC (Ministry of Health of Republic of Moldova, 2009b). The total number of ambulances increased from 240 in 2003 to 326 in 2010, covering 83.5% of needs in 2009 (NCHM, 2012).

Since 2004, the number of hospitals has reduced from 107 to 84 – 34 rayon, 10 municipal and 18 republican hospitals under the Ministry of Health; 11 hospitals belonging to

other sectors; and 11 private hospitals. In 2010, total capacity was 22 021 beds. Over 50% of the hospital capacity is concentrated in Chisinau (18 republican, 9 municipal, 8 parallel providers, 9 private). The overall number of beds has reduced slightly, from 66.8 per 10 000 inhabitants in 2003 to 61.9 in 2010 (NCHM, 2012). More notably, the number of beds has decreased at rayon level (9971 in 2003, 8283 in 2010) but the number of hospitals has remained the same; the number of republican and large urban hospital beds has remained largely unchanged. In 2005 the emergency hospital from Chisinau was reassigned from urban to national level, thereby transferring some 500 beds from Chisinau to national level and causing similar shifts in the number of health personnel (see Table 1). In 2009, the bed capacity in the Republic of Moldova was closer to the EU average (52.9) than that in the NIS (83.3) (WHO Regional Office for Europe, 2012). The number of private beds is quite limited – 0.6 beds per 10 000 inhabitants in 2010. Geographically, reductions in the number of beds between 2003 and 2010 were registered mostly in the southern rayons. This is due to the fact that rural hospitals remained open until the 2000s but others were closed in the 1990s. In 2010 the Ministry of Health initiated a reform aiming to improve the efficiency of hospital services by redefining the hierarchy and network of district hospitals, planning to build nine new regional hospitals and redefining the role of rayon hospitals to serve as community hospitals (Ministry of Health of Republic of Moldova, 2011a).

**Table 1. Total numbers of hospital beds, 2003–2010**

	2003	2004	2005	2006	2007	2008	2009	2010
Republican	7 778	7 603	8 227	8 204	8 004	8 224	8 225	8 005
Chisinau & Balti	4 064	4 044	3 510	3 470	3 470	3 470	3 550	3 550
Rayons	9 971	9 105	8 720	8 591	8 382	8 303	8 246	8 283
Other	2 284	2 361	2 504	2 206	2 036	1 801	1 917	2 183
Total number	24 097	23 113	22 961	22 471	21 892	21 978	21 938	22 021
Total, per 10 000	<b>66.8</b>	<b>64.2</b>	<b>64.0</b>	<b>62.8</b>	<b>61.3</b>	<b>61.1</b>	<b>61.6</b>	<b>61.9</b>

Source: NCHM, 2012.

Whilst there has been no systematic evaluation of the quality of hospital infrastructure, one study looked at hospital safety as a measure of resilience capacity to the impact of disasters and capacity to ensure safe operations in case of emergencies. The results showed that only a quarter (24.6%) had a high safety level, 67.2% had an average safety level and 8.2% had a low safety level (Pisla et al., 2010).

In the pharmaceutical sector, between 2003 and 2010 the total number of pharmacies (both private and public) reduced from 2066 to 1972 (Table 2). The number of

community pharmacies has been decreasing since 2005, probably due to takeovers by pharmacy chains and independent pharmacies going out of business. At the same time, there are important differences between cities and rayons – in Chisinau and Balti the number of subsidiaries almost doubled (147 in 2007, 255 in 2010); in rayons, the numbers of community pharmacies and their subsidiaries decreased sharply from 667 in 2005 to 447 in 2006, followed by a slight increase to reach 513 in 2010. The geographical distribution of community pharmacies is also uneven. In 2007, 179 villages had PHCs without a pharmacy; rayons Cahul and Ungheni having 20 or more villages without a pharmacy (Ministry of Health of Republic of Moldova & NCHM, 2007). By 2012, this number has been reduced to 107 villages without a pharmacy (Ministry of Health of Republic of Moldova, 2012).

**Table 2. Total numbers of pharmacies and subsidiaries, 2003–2010**

	2003	2004	2005	2006	2007	2008	2009	2010
Pharmacies	692	718	715	595	601	592	569	564
Subsidiaries	1 374	1 422	1 527	1 345	1 300	1 353	1 442	1 408
Total	<b>2 066</b>	<b>2 140</b>	<b>2 242</b>	<b>1 940</b>	<b>1 901</b>	<b>1 945</b>	<b>2 011</b>	<b>1 972</b>

*Source: NCHM, 2011.*

The structure of pharmacy service delivery differs between large urban and rural areas. In Chisinau and Balti, community pharmacies and their subsidiaries are the most numerous; in rayons, community pharmacies comprise only a quarter of the total as the majority of pharmacies are attached to primary health-care facilities (Table 3). No data were identified on the availability of pharmacies in primary health-care facilities without a doctor.

**Table 3. Total numbers of pharmacies, by location and type, 2010**

	Community	Hospital	PHC	Total
Large urban	401	26	9	436
Rayon	513	40	958	1 511
Total	<b>914</b>	<b>91</b>	<b>967</b>	<b>1 972</b>

*Source: NCHM, 2011.*

A study conducted in 2011 looked at the availability of pharmaceuticals in a nationally representative sample of community pharmacies, checking the availability of an essential list of 50 pharmaceuticals in public and private community pharmacies. The



analysis showed that only about half of community pharmacies had the full list of 50 surveyed medicines (51% of public and 58% of private pharmacies) and around half had the lowest priced generics in stock (49.2% of public and 55.9% of private pharmacies). Rural areas were even more disadvantaged, as only 31.0% of rural public pharmacies and 40.6% of rural private pharmacies had the lowest priced generics compared to 67.7% and 71.5%, respectively, in urban areas (Sautenkova et al., 2012).

## **Human resources**

Trends in the provision of human resources for health in the past decade can be summarized as a slight reduction in the total number of physicians and mid-level personnel, with a continuing oversupply of specialists concentrated in Chisinau. There are more significant reductions in the number of primary health-care physicians and nurses, both overall and in rural areas, despite government efforts to make these positions more attractive.

At the end of 2010, a total of 12 780 doctors (including 1666 dentists and 562 public health specialists) were working in the public, private and parallel systems in the Republic of Moldova. The largest share of doctors (39.0%) was working in the hospital sector, one fifth (21.5%) in the primary health-care sector, another fifth (21.5%) in specialized outpatient services and 15.8% in other health-care institutions. Distribution is uneven both geographically and by health levels. Staffing levels with doctors reached 94.1% in Chisinau, 92.1% in Northern Region, 82.0% in Central Region and were lowest in Southern Region (77.9%); and 91.3% in the hospital sector, 88.7% in primary care and 88.3% in specialized outpatient care. The number of specialists has not changed dramatically in the past decade (NCHM, 2011).

At the end of 2010, the Republic of Moldova had a total of 35.9 doctors per 10 000 inhabitants (including those working in public health and science without direct contact with patients). This compares to the EU-27 average of 32.3 doctors (WHO Regional Office for Europe, 2012). The cities of Chisinau and Balti have twice as many doctors per 10 000 inhabitants as the rest of the country (34.7 in cities and 17.2 in rayons in 2003; 29.1 in cities and 16.3 in rayons in 2010). The total number of doctors has remained stable in the past decade, with a slight decline at rayon level (NCHM, 2012) (Table 4).

**Table 4. Total numbers of physicians by location, all specialties, 2003–2010**

	2003	2004	2005	2006	2007	2008	2009	2010
Republican	3 157	3 112	3 748	3 803	3 519	3 686	3 730	3 626
Chisinau & Balti	3 220	3 153	2 668	2 629	2 767	2 743	2 733	2 729
Rayons	4 601	4 488	4 417	4 335	4 360	4 294	4 321	4 264
Total, absolute number	12 649	12 555	12 577	12 674	12 733	12 684	12 783	12 780
Total per 10 000	<b>35.1</b>	<b>34.9</b>	<b>35.0</b>	<b>35.4</b>	<b>35.6</b>	<b>35.6</b>	<b>35.9</b>	<b>35.9</b>

*Source: NCHM, 2012.*

At the end of 2010, there was a total of 27 519 mid-level health personnel, of whom 20 746 were nurses, 5343 were primary health-care nurses, 790 were midwives and 1860 were laboratory personnel (Table 5). Almost half (43.4%) of all mid-level health personnel were working in the hospital sector; 32.7% in primary health care; 10.9% in specialized outpatient care; and 13.2% in other medical institutions (NCHM, 2011). Total coverage with mid-level health personnel was 64.6 per 10 000 inhabitants, lower than the EU-27 average of 77.5 (WHO Regional Office for Europe, 2012). Of these, there were 58.3 nurses per 10 000, 15.0 primary health nurses, 2.2 midwives and 5.2 laboratory workers. The average distribution of mid-level health personnel to population was less uneven between large urban and rayon/rural areas and is reducing somewhat over time at rayon level but remaining stable at national and city level (NCHM, 2012).

**Table 5. Total numbers of mid-level health personnel, 2003–2010**

	2003	2004	2005	2006	2007	2008	2009	2010
Republican	4 321	4 170	5 289	5 402	4 765	5 061	5 242	5 091
Chisinau & Balti	5 521	5 305	4 452	4 406	4 582	4 523	4 744	4 726
Rayons	14 616	14 106	13 769	13 504	13 301	13 078	13 169	13 186
Other	2 251	2 441	4 456	4 351	5 019	4 716	4 294	4 516
Total, abs #	26 709	26 022	27 966	27 663	27 667	27 378	27 449	27 519
Total per 10 000	<b>67.8</b>	<b>65.5</b>	<b>65.5</b>	<b>65.1</b>	<b>63.4</b>	<b>63.5</b>	<b>65.0</b>	<b>64.6</b>

*Source: NCHM, 2011.*

One study reports that some 10 000 medical staff left the system in the period 1996–1999 and another 10 000 medical employees left between 2000 and 2008 (Vaculovschi et al., 2011). However, these data do not seem to be supported by the national statistics presented above.

In the primary health-care sector, there has been a registered decline in the absolute number of primary health doctors in the past decade (2106 primary health care doctors in 2003; 1899 in 2010), with a registered deficit of 290 family doctors in 2010. In relative numbers the decline was not as significant – 5.8 family doctors per 10 000 in 2003 compared to 5.3 family doctors in 2010 (Table 6) (NCHM, 2012). The ratio is significantly lower than the EU-27 average of 8.5 family doctors per 10 000 but almost twice that of the NIS region average of 2.9 per 10 000 (WHO Regional Office for Europe, 2012). The most important trend is the inequity between large urban and rayon/rural areas – 6.8 doctors per 10 000 in cities and 4.6 in rayons in 2010. Over time the total number of primary health-care doctors is decreasing, especially in the rayons, where a 16% reduction in their numbers was registered between 2003 and 2010. The geographical distribution of family doctors is uneven as, historically, some rayons have had higher levels of primary health-care physicians in the northern region – for example, rayons Briceni (6.64) and Edinet (6.27). The western region has had both lower number of family doctors and experienced sharper reductions in 2010 – for example, rayons Cantemir (2.39), Hincesti (2.95), Leova and Cimislia (2.97 each) (NCHM, 2012).

**Table 6. Total numbers of primary health-care doctors, 2003–2010**

	2003	2004	2005	2006	2007	2008	2009	2010
Chisinau & Balti	640	655	659	658	644	636	630	637
Rayons	1 443	1 412	1 392	1 355	1 328	1 273	1 247	1 209
Total, absolute number	2 106	2 101	2 082	2 054	2 027	1 961	1 929	1 899
Total, per 10 000	<b>5.8</b>	<b>5.8</b>	<b>5.8</b>	<b>5.7</b>	<b>5.7</b>	<b>5.5</b>	<b>5.4</b>	<b>5.3</b>

*Source: NCHM, 2012.*

Staffing with primary health-care nurses has also been on a moderate decline – from 16.6 per 10 000 inhabitants in 2003 to 15.0 in 2010; remaining stable in cities but showing a 13% reduction in rayons (Table 7). Geographical distribution shows the lowest staffing levels in the central region – Hincesti (12.6), Nisporeni (13.2) and Cimislia (14.3) (NCHM, 2012).

**Table 7. Total numbers of primary health-care nurses, 2003–2010**

	2003	2004	2005	2006	2007	2008	2009	2010
Chisinau & Balti	771	722	689	692	690	693	756	778
Rayons	5 208	5 234	5 101	4 939	4 831	4 627	4 625	4 529
Total, absolute number	5 987	5 971	5 805	5 655	5 599	5 353	5 413	5 343
Total, per 10 000	<b>16.6</b>	<b>16.6</b>	<b>16.2</b>	<b>15.8</b>	<b>15.7</b>	<b>15</b>	<b>15.2</b>	<b>15</b>

*Source: NCHM, 2012.*

There is also uneven distribution within rayons. The national norm in the Republic of Moldova is 1500 people per family doctor but the catchment population was 1608 people per primary health-care physician in rayon centres and 2267 in villages, the outliers being Cantemir (3950 total; 5200 rural), Cimislia (3912 total; 6914 rural); and Hincesti (3080 total; 3325 rural) (Ministry of Health of Republic of Moldova, 2009a). A total number of 200 villages are visited by a primary health-care doctor 1–3 times per week and 25 villages have no medical worker (Ministry of Health of Republic of Moldova, 2010). Under the usual standard a health centre has at least 2 physicians but one article reported that, in 2006, 17 health centres were without a primary health-care doctor and 141 health centres had only 1 physician. The same article reported a surplus of 165 primary health-care doctors in urban areas and a deficit of 197 physicians in rural areas, together with a deficit of 408 nurses in urban areas and 756 nurses in rural areas (Zarbailov, Barbă & Golovin, 2009).

An analysis of human resources for health conducted in 2010 indicates that the entire health sector, but especially primary health, has been continually losing its attraction for medical graduates (Galan, 2011). Only one third of recent medical graduates were employed in the health sector in the period 2003–2010; two thirds refused employment in rayons and rural areas, preferring to work in the private or pharmaceutical sectors or migrating for employment outside the country (Table 8) (Galbur, 2010a, 2010b).

**Table 8. Total numbers of medical and mid-level graduates and their employment in the health sector, 2004–2008**

	2004	2005	2006	2007	2008
Doctors					
Graduates	560	440	484	493	554
Employed in health sector	88	56	50	106	116
including rural	9	3	8	15	6
Mid-level					
Graduates	581	628	818	851	1178
Employed in health sector	284	235	259	305	428
including rural	12	6	6	14	33

*Source:* Galbur, 2010a.

The Ministry of Health has introduced incentives to encourage medical personnel to work in rural areas, enacted in a 2007 government decision stipulating benefits such as free housing and compensation for a portion of household bills. This also

introduced an employment allowance of 30 000 lei (around US\$ 2300) for doctors and 24 000 lei (around US\$ 1840) for nurses moving to work in rural areas after graduation (Government of Republic of Moldova, 2007b). At input level an increasing number of physicians and nurses are benefiting from the incentives – increasing from 186 physicians in 2007 and 2008 to 287 doctors in 2011 (Table 9), (Ministry of Health of Republic of Moldova, 2009a, 2010, 2011b).

**Table 9. Total numbers of primary health-care personnel benefiting from government employment incentives, 2007–2011**

<b>Number of:</b>	<b>2007–2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
physicians/pharmacists	186	256	262	287
mid-level personnel	448	675	757	1097
<b>Total expenditures, million lei</b>	<b>6.3</b>	<b>7.4</b>	<b>7.6</b>	<b>10.1</b>

*Source:* Ministry of Health of Republic of Moldova, 2009a, 2010, 2011b.

However, these incentives work less efficiently for physicians than for nurses. A study conducted among medical students and nursing students in 2010 shows that nurses found the benefit package an inducement to move to rural and remote areas but medical students found no motivating factors for employment in rural areas (Galbur, 2010c). A survey of primary health-care workers conducted in 2006 estimated that the desired monthly salary would be €1500 for physicians and €900 for nurses (Zarbailov, Barbă & Golovin, 2009).

At output level, the recent policy to attract doctors has not had any notable impact on the inflow of primary health-care physicians. This is seen in the primary health-care staffing levels in Tables 7 and 9 which indicate that the outflow from the system is higher than the inflow of new medical staff. Even if salaries were increased significantly, the major determinant in the unwillingness to move to rural areas is the quality of kindergartens and schools, roads and the overall quality of life.

## Accessibility coverage

In order to review existing data on accessibility coverage, this section presents an analysis of geographical access to primary health care and specialized and hospital care, coverage with health, affordability, financial protection and OOP payments. This

dimension has been well-researched through comparable household data available for the past five years and additional data sources from cross-country comparative surveys. Available data suggest that recent legislative changes have had a modest impact on increasing affordability and decreasing the share of OOP payments across all income groups.

### **Geographical access and disparities**

Geographical coverage in the Republic of Moldova is quite good. A study on access conducted by the United Nations Children's Fund (UNICEF) in 2000 shows that 97.1% people lived within 5 km of a health facility, with no geographical or residence differences; 93.5% were less than one hour away from a health facility, with 8.1% of rural residents and 3.1% in urban areas more than one hour away (Berdaga, Stefanet & Bivol, 2001). National Bureau of Statistics (NBS) data show that about 5.5% of households in 2008 and 2.9% of households in 2010 did not seek health care when it was needed because a health institution was situated too far from their home. Some rural and regional disparities were also reported in 2008 – 8.5% of respondents from rural areas but only 2% from urban areas reported that distances and lack of transport were the problems that limited their seeking-health behaviour. By geographical distribution, those most affected were households in the southern regions, including Autonomous Territorial Unit (UTA) Gagauzia (11.5% of respondents mentioned distances as limiting factor), and in the northern regions (7.5%) (NBS, 2009a, 2011).

However, geographical access is not uniform throughout the country. In rural areas, the nationwide average distance to an FDO in a village is 1.1 km (median 2 km) but, in 93 villages (6.1%), the population is more than 5 km away. For rural residents, the average distance to a rayon hospital, where inpatient and specialized services are located, is 19.8 km (median 17 km). Basarabeasca is the rayon with the shortest distance from any village to the closest hospital (25 km); Cahul has the longest distance to the rayon hospital (75 km) (NBS, 2009b). Long distances and a lack of transport services restrict access to health care for some population groups – households comprising retired (37.3%) or unemployed people (21.2%) mentioned these barriers most often (UNDP Regional Bureau for Europe & CIS, 2011).

Road quality is an important factor in influencing geographical access. An assessment of the roads to primary health-care facilities in the country has shown that a very low percentage (9%) had decent (asphalt or gravel) roads. Generally, these roads were a

mix of potions of asphalt, gravel and mud tracks. A number of villages do not have regular public transport to the local hospital – Singerei rayon has the worst coverage (a total of 38 villages have no public transport routes to hospital); Anenii Noi, Dubasari and Soroca have the best (Ministry of Health of Republic of Moldova & NCHM, 2007).

### **Coverage with health insurance**

The introduction of mandatory health insurance represented a fundamental reform that has led to significant improvements in the performance of the Moldovan health system. The former system mandated a legal entitlement to health insurance and a wide scope of services for the entire population but had not been delivering on these guarantees. The reform introduced a mandatory health insurance for formal sector employees, and direct transfers from central government budget to the NHIC for specific groups of non-contributors (e.g. pensioners, children, students, registered unemployed); self-employed people were expected to self-enrol. This reduced the breadth of coverage (26% of citizens were uninsured in 2005) but brought the depth of coverage more in balance with available resources. Universal entitlement was replaced by a more narrow benefit package for the insured and a very narrow entitlement for the uninsured. However, serious challenges remain concerning coverage and financial protection policy. A substantial share of the population is not covered by the NHIC, especially self-employed people with low incomes (Shishkin & Kacevicius, 2007). Between 2004 and 2008, NHIC revenues increased more than three-fold but the proportion of the population covered under the insurance scheme remained largely unchanged. The uninsured population is heavily concentrated among rural agricultural workers and hence any successful strategy needs to ensure increased coverage for this group (Jowett & Shishkin, 2010).

Several legislative changes aiming to extend coverage with health insurance were introduced in 2009 and 2010, targeting specifically uninsured and poor people. The 2009 amendment to Law No. 108 entitled everyone to access primary health care, emergency outpatient care and specialized outpatient care for socially conditioned diseases, irrespective of insurance status (Parliament of Republic of Moldova, 2009). A year later, the NHIC removed the entitlement to all compensated outpatient medicine costs for the uninsured, except for diabetes and psychotropic drugs (Shishkin & Jowett, 2012). A 2009 amendment to Law No. 22-XVI aimed to focus coverage on those most in need and those excluded by extending health insurance entitlement to household members receiving social benefits under Law No. 133-XVI (Parliament

of Republic of Moldova, 2009). We found no clear data in the national statistics to indicate how many have benefited from this amendment.

In 2009, amendments to Law No. 128-XVIII revised discounts to those self-insuring – providing 50% discount to all categories entitled to self-insurance and a 75% discount to agricultural workers who bought a policy directly in the first three months of the year. In 2011 the enrolment period was extended until October, leading to significant adverse selection (Parliament of Republic of Moldova, 2011; Shishkin & Jowett, 2012). Contributions have increased from 2% to 3.5% for both employers and employees, and the cost of annual premiums for the self-insured has increased six-fold, from 441 lei in 2004 to 2478 lei in 2010. With enacted modifications, agricultural workers would need to pay 690 lei for their annual premium. Law No. 186 was modified in mid 2010 to require patent holders, a specific self-employed group, to buy health insurance as a condition for receipt of their annual licence (Parliament of Republic of Moldova, 2010c).

The number of self-insured in the Republic of Moldova has almost doubled, from 25.7 in 2009 to 52.7 in 2011 (NHIC, 2008, 2009, 2010, 2011) (Table 10).

**Table 10. Trends in cost of premiums and coverage with health insurance, 2004–2010**

	2004	2005	2006	2007	2008	2009	2010	2011
Price of health insurance (lei)	441	665	816	1209	1894	2638	2478	N/A
Total number of insured persons (1000s)	2264	2411	2498	2634	2569	2448	2761	2837
- self-insured (1000s)	N/A	N/A	22.4	20.1	35.3	25.7	33.5	52.7
<i>Source: NHIC 2008, 2009, 2010, 2011. Note: N/A = not available.</i>								

Household survey data from the NBS indicate that health insurance was held by 79.7% of population in 2008 and 74.0% in 2010. During this time, the proportion of those stating that they were insured by the state decreased (51.3% in 2008 to 46.2% in 2010); every fourth respondent had mandatory insurance through employment (26.7% in 2008, 26.4% in 2010); and very few were self-insured (1.7% in 2008, 1.4% in 2010). By occupation status, those uninsured comprised some 8% unemployed; 22% informally employed; 47% agricultural workers; and 12% economically inactive population. The majority of the uninsured population (76%) was aged between 25 and 54 years. Health insurance status continues to be regressive – 30.2% in the lowest quintile and 16.4% in the highest quintile did not have health insurance in 2008 but this increased to 41.0%



in the lowest quintile and 19.4% in the highest quintile in 2010. The rural/urban divide remains important, in 2010 almost twice as many rural residents did not hold health insurance (32.4% rural, 17.0% urban) (NBS, 2009a, 2011). Factors associated with being uninsured include being self-employed (particularly in agriculture), unemployed, of younger age and having a low income. Respondents who were self-employed in agriculture were over 27 times more likely to be uninsured than those who were employed (Richardson et al., 2011).

Concerning the reasons why people do not hold health insurance – every third respondent mentioned not being employed (33.3%); 17.0% were informal workers; 7.4% of respondents thought they did not need health insurance because they were healthy; every fourth person (26.2%) thought it was too expensive and every tenth person (10.8%) said they had to pay informally anyway. Higher percentages of rural respondents (29.1%) and those in the lowest quintile (36.7%) mentioned the cost of health insurance being prohibitive (NBS, 2009a, 2011).

Specific population groups are still excluded from health insurance coverage in higher proportions – about 46.5% of farmers and 34.4% of agricultural employees declared that they did not have a medical insurance policy in 2009. About 23.8% of individuals in rural areas did not access health services and did not see a doctor because they did not have health insurance; this is 14 times higher than in urban areas. Although children are automatically insured by the state, their parents have very low levels of awareness about rights to free medical services. About 61.1% of households with three or more children do not go to the doctor because they believe that they are not entitled to coverage (UNDP Regional Bureau for Europe & CIS, 2011). Only 23% of Roma households have medical insurance (Cace et al., 2007).

Given that health insurance is financed by a flat rate premium that makes it equitable for employed people but regressive for those who self-insure, economic costs appeared to be the main reason for not buying health insurance before 2008 (Jowett & Shishkin, 2010). Yet, despite the introduction of significant discounts in 2009, there has been little change in the proportion of those self-insuring. This points to the limitations of using discounts to increase the fairness and effectiveness of this regulatory mechanism and provides evidence that price is not the main driver for self-insurance (Shishkin & Jowett, 2012). The drivers limiting the willingness to self-insure are discussed in greater depth in section VI.

As presented above, the total number of self-insured did not increase in 2010. Health insurance coverage is low even in households that are perceived to be “better-off”,

such as those of migrants and their households that receive remittances. A survey among migrants showed that health insurance coverage in migrants was about 24.7% but 54.0% in households receiving remittances. This compares to 60.5% insured in households without labour migrants (after controlling for age factor by excluding those who had reached retirement age – 56 and 62 years for women and men, respectively). The cost of health insurance was not determinative in the decision to self-insure; rather, the migrants perceived health insurance to be of low value given the amount of informal payments expected regardless of self-insurance status. Qualitative findings from the same study suggest that migrants not only do not see the added value of health insurance but also perceive it rather as a barrier to quality health services at primary level – adding waiting time and problems with scheduling, poorer attitudes from health staff and no freedom to choose the health provider (IOM, 2010).

The same perceptions hold true for migrants' households. Health insurance coverage was lower in households receiving remittances (59.9%) than in those that did not (75.0%). The reasons for not buying health insurance show a lower proportion of prohibitive cost in households receiving remittances (32.9% compared to 51.9% in those not receiving remittances); a higher proportion of those who felt that health insurance would cost more than OOP payments for the services; and a higher proportion of people perceiving themselves as healthy and therefore not in need of health insurance (IOM, 2010).

### **Financial access to health services**

In 2000, UNICEF performed the first systematic assessment of financial barriers in access to health services in the Republic of Moldova – 55.5% of households had inadequate financial access<sup>2</sup> to health services (40.0% of sample had partial and 15.5% had total financial inaccessibility to health care), with significant socioeconomic inequity (28.0% in lowest quintile, 8.6% in the highest) associated with older age (28.2% among those over 60 years) and rural residents (18.1% rural, 11.9% urban). At last episode of illness, 48.9% of households had inadequate financial access to health services (30.4% had partial financial access, 18.5% total financial inaccessibility) with the same trend of socioeconomic inequity (63.5% in lowest quintile, 44.9% in highest) (Berdaga, Stefanet & Bivol, 2001). A similar survey conducted in 2001 established a direct relationship between asset quintiles and financial access to health services –

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<sup>2</sup> Total/partial financial inaccessibility was defined as refusing total/partial treatment because of the cost of transportation, drugs, consultations and other associated costs for all episodes of illness registered in a household in the past years, by any level of health care.

twice as many respondents in the lowest quintile (66.7% versus 33.3% in the highest) did not visit a doctor when sick because of lack of money (Suhrcke et al., 2008).

Overall financial access improved after the introduction of health insurance, although it is not possible to make quantitative comparisons because of differences in measurement methods.<sup>3</sup> According to household surveys conducted in 2008 and 2010, 25.4% of respondents in 2008 and 19.2% in 2010 did not access primary or specialized outpatient health care when needed. Of those who did not seek health care when needed, 29.2% in 2008 and 20.9% in 2010 did not do so because of anticipated costs related to visiting a health institution, with inequity between rural and urban residents (28.3% of rural versus 11.3% of urban). Those with health insurance policies did not seek health care when needed in somewhat lower proportions than those without health insurance (24.3% versus 29.5% in 2008, 18.2% versus 22.1% in 2010). By socioeconomic status, it appears that higher proportions of the higher quintiles did not seek health care when needed (16.9% in the lowest quintile versus 22.3% in the highest in 2010). A very small proportion of respondents did not go to hospital when referred from primary health-care level – 5.9% in 2008 and 2.9% in 2010, with no differences by health insurance status (NBS, 2009a, 2011).

At the same time, a similar survey conducted in eight countries of the NIS region in 2010 rated the Republic of Moldova best in terms of access to health care in case of an illness when respondents felt justified to see a doctor. The percentage of patients who went to see a doctor (70%) was ahead of the Russian Federation, Kazakhstan, Belarus and Azerbaijan, (60–65%); Armenia and Ukraine (about 50%); and Georgia (40%). Yet, among those who had not sought care in the past four weeks when they felt it was justified, a total of 63.9% cited unaffordability (of medical services, drugs or both) as the main reason and 39.4% self-treated. Based on affordability, this places the Republic of Moldova fourth after Georgia, Azerbaijan and Armenia (Balabanova et al., 2012). Comparability with the previous survey conducted in 2001 is limited by a different recall period (12 months in 2001) but data show that those not covered with health care cited similar reasons – 53.6% who did not seek care perceived it to be unaffordable, and 38.8% self-treated (Balabanova et al., 2004).

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<sup>3</sup> NHBSs conducted in 2008 and 2010 used a different definition of financial access, measuring the number of individuals who did not access health care when they needed it at last episode of illness by primary/specialized and hospital care and then assessing these reasons with a second question. Unlike the access study in 2000, they did not quantify total and partial financial access. Therefore, data for 2000 are not comparable with 2008–2010 data.

## Direct OOP payments in accessing health services and medicines

Compared to other countries, the percentage of private household health expenditures in the Republic of Moldova increased (from 45.5% in 2003 to 50.3% in 2006) before gradually decreasing again to an estimated 45.3% in 2009, higher than both NIS and EU region averages (Table 11) (WHO Regional Office for Europe, 2012).

**Table 11. Private households' OOP payments on health within total health expenditure (%), 2003–2009**

	2003	2004	2005	2006	2007	2008	2009
Republic of Moldova	45.5	44.3	48.8	50.3	49.6	48.3	45.3
NIS	39.9	39.8	39.3	38.4	38.4	37.5	37.5
EU	16.7	17.4	16.9	16.7	16.6	16.3	15.6

*Source: WHO Regional Office for Europe, 2012.*

In general the Moldovan population has an overall expectation of making direct, OOP, payments when accessing health care. These are defined as direct expenditures incurred either formally or informally by the patients and frequently mentioned as barriers to the affordability of health services. According to a survey conducted in transition countries, they occur more often in the Republic of Moldova than in other countries in transition – respondents stated that they usually/always (30%) and sometimes (18%) pay informally for health services; more than one half (52%) stated that they never or seldom pay bribes, compared to the average for transition countries of usually/always (20%), sometimes (18%) and never/seldom (61%) (EBRD, 2007).

Data from household surveys show that households' direct expenses for health are still limited, in 2009 they represented only 6.2% of total expenditures. But OOP payments vary in relation to income, as richer people tend to spend more on health in both absolute and relative terms (Shishkin & Jowett, 2012). This is also an indication that poorer households do not seek care in the same proportions as higher quintiles. More than half (53.3%) of households with three or more children said that they do not approach health-care providers because of their difficult financial situations, registering the lowest share (3.95%) of expenses for medical assistance within total expenses (UNDP Regional Bureau for Europe & CIS, 2011).

Hospital services are the best documented area for absolute value of direct payments, formal and informal. Three surveys have measured the average value of (formal and informal) OOP payments in cases of hospitalization – increasing from 400 lei in 1997

(UNICEF, 1997) to 846 lei in 2000 (Berdaga, Stefanet & Bivol, 2001) and to 1100 lei in 2011 (PAS Center, 2011). The relative increase is less dramatic if the relative value of PPP is taken into account (Table 12).

**Table 12. OOP expenditures for last hospital admission, 1997, 2000 and 2011**

	1997	2000	2011
Average direct payments for hospital stay (lei)	400	846	1100
US\$ equivalent	86.5	68.0	93.7

*Source: UNICEF, 1997; Berdaga, Stefanet & Bivol, 2001; PAS Center, 2011.*

In 2011, about every fifth person (22.2%) hospitalized reported having paid formally out of pocket for some hospital services, with an average of 1449 lei and a median of 700 lei. A much higher percentage (37.9%) admitted to making informal payments directly to health staff, with an average of 1193 lei and a median of 400 lei. Health insurance was a protective factor in this case, as higher proportions of patients without health insurance made informal payments (45.5% compared to 36.8% insured respondents). At the same time, respondents from rural areas (40.8% rural compared to 36.2% large urban, 30.0% small urban) and those hospitalized in republican hospitals (48.4% compared to 39.7% in municipal hospitals, 31.2% in rayon hospitals) were more exposed to informal payments. The proportion of those making informal payments is in direct relationship with income level – respondents with incomes over 2500 lei per month (50.8%) made twice as many informal payments to health staff as those reporting earnings of less than 800 lei per month (26.5%) (PAS Center, 2011).

The cross-country comparative surveys conducted in 2001 and 2010 confirm that large proportions of patients make OOP payments, although data are limited in comparability as different sets of questions were asked. In 2001, some 45% had paid informally or made a gift during the last consultation, placing the Republic of Moldova third highest after Georgia and Armenia (Balabanova et al., 2004). In 2011, some 36.6% made OOP payments for outpatient services, 29.0% made OOP payments for inpatient services, 91.2% had to pay for drugs costs and 93.4% paid for transport costs. Thus, an overall 96.3% had to make OOP payments in various forms (Balabanova et al., 2012). The OOP amounts placed the Republic of Moldova second highest after Georgia, with OOP expenditures at 0.83% of GDP compared to only 0.17% in the Russian Federation and 0.15% in Kazakhstan.

Data based on household budget surveys for 2008–2010 alone show the shares of patients making informal payments decreasing across all quintiles, particularly in the poorer quintiles. The rate of decrease has been sharper in quintile 1, but the fact that this decrease was greater in 2009 than in 2010 suggests that this was due to lower ability to pay rather than an effect of the legislative amendments. Also, the share of patients making OOP payments has not changed for outpatient services (37% in 2008 and 2010) but is rising significantly for inpatient care, from 61% in 2008 to 94% in 2010 (Shishkin & Jowett, 2012).

The main OOP cost to patients is pharmaceuticals, very few of which are covered either by the state-funded universal package or health insurance contributions (Richardson, 2008). Following the introduction of social health insurance in 2004, spending on pharmaceuticals from public sources increased to 36.7% of total pharmaceutical expenditure. However, the proportion has since fallen back to 20.5% in 2006 and 27.9% in 2009, while total pharmaceutical expenditure as a percentage of total health expenditure has doubled from 17.8% in 2003 to 34.2% in 2010 (Table 13). Thus, pharmaceutical expenditure is a heavy burden that drives ever-increasing OOP health expenditures. Pharmaceuticals are the major category in the structure of OOP payments, accounting for 70% of all costs. Expenditures for drugs and dental services are the major factors that reduce the level of financial protection in the Moldovan health system – poorer households spend almost 85% of their resources on drugs (Negruta, 2012; Ursu, 2010).

**Table 13. Total pharmaceutical expenditure within total health expenditure and public pharmaceutical expenditure within total pharmaceutical expenditure (%), 2003–2010**

	2003	2004	2005	2006	2008	2009	2010
Pharmaceutical expenditure as % of total health expenditure	17.8	23.2	45.6	39.9	35.7	32.7	34.2
Public pharmaceutical expenditure as % of total pharmaceutical expenditure	19.4	36.7	20.1	20.5	24.8	27.9	N/A

*Source:* WHO Regional Office for Europe, 2012. *Note:* N/A = not available.

A recent study reviewing the availability and affordability of medicines found the cost of medicines to be significantly higher in the Republic of Moldova when compared to international prices. The prices of even the lowest priced generics were five times higher than the international reference price and patients were paying 30–40% more for most generics sold in both public and private sectors (Bezverhni et al., 2012).

## Financial protection against catastrophic health costs

There is evidence that the introduction of health insurance reform in 2004 has increased protection against financial risks from medical expenses. According to official data, the OOP share of total health expenditures decreased from 52% in 2003 to 42% in 2005. From 2003 to 2005, the volume of officially registered OOP payments decreased by 5% in real terms (Shishkin, Kacevicius & Ciocanu, 2008). In 2005, the cost of hospitalization was 83% lower for insured patients than for uninsured patients, with many of the poorest households having received better protection from catastrophic health costs (Shishkin, Kacevicius & Ciocanu, 2006).

The annual household budget survey conducted by the NBS showed that the financial burden of health-care expenditures decreased for almost all income deciles in 2004. Only the highest income group spent significantly more (about 18% in real terms) than in 2003. In the first year of the reform health-care spending in low-income households decreased from an average of 4.0 lei to 2.7 lei per month. At the same time, extremely poor households reduced health expenditures from 2.8 lei to 1.3 lei per month. The average household spent 18 lei per month on health care in 2004, 4% of its total expenditures (Ministry of Economy and Trade of the Republic of Moldova, 2004).

Several household surveys have assessed the financial burden on households by measuring the level of financial protection. In 2000, only 27.3% of households had high financial protection, 27.9% had low financial protection and 44.8% had no financial protection. There was significant socioeconomic disparity – 18.0% in the highest quintile but 49.2% in the lowest quintile had no financial protection in cases of illness<sup>4</sup> (Berdaga, Stefanet & Bivol, 2001). Ten years later, a survey conducted in 2011 among those admitted to hospital in the past 12 months repeated this measurement of the level of financial protection (86.5% respondents were insured). A higher proportion of respondents used personal or family income and savings (42.6% personal income, 33.1% family savings and remittances). Among those reliant on uncertain sources of income 15.0% had to sell goods or agricultural products, 11.7% borrowed money, 7.5% used social welfare funds and 4.2% received assistance from their social network. When the method used to measure financial protection in 2000 is applied, 65.6% of the total sample that have paid in cases of hospital admission had high financial

4 The study used the following definitions. High financial protection – hospitalized person paying from personal and/or household income or savings only. Low financial protection – in addition to paying from household income or savings, had to sell household goods, agricultural products or borrow money. No financial protection – had to sell household goods, agricultural products or borrow money and did not have personal or household income.

protection, 10.2% had low financial protection and 18.8% had no financial protection at all. Also, a new category appears – those paying from social welfare payments (5.4%) (PAS Center, 2011) (Table 14).

**Table 14. Comparison of level of financial protection in case of hospital admission (%), 2000 and 2011**

Level of financial protection	2000	2011
High financial protection	27.3	65.6
Low financial protection	27.9	10.2
No financial protection	44.8	18.8
Using social welfare funds	N/A	5.4
<i>Source: PAS Center, 2011. Note: N/A: not available.</i>		

The subjective assessment of the financial burden showed a correlation with the previous measurement – 62.8% thought they had no or minimal difficulties, 24.6% considered them significant and 11.9% found them extremely burdensome, rural respondents qualifying them as significant and extremely burdensome in 41.8% of cases compared to 23.8% of rayon centre residents and 32.1% of respondents from the large cities; for those who underwent surgery (46.7% compared to 32.5% who did not have a surgery); and uninsured (43.5% compared to 35.4% insured) (PAS Center, 2011).

While there are signs that overall financial protection improved, household budget survey analysis revealed that OOP payments are related to a household’s financial capacity. Households from the highest quintile spent on average 8.3 times more for health than the lowest quintile. Catastrophic expenditures are registered in all income groups. The most vulnerable households are those with retired people (Ursu, 2010).

Newer analysis of catastrophic costs, defined as 40% of non-food expenditures, shows a different trend. Based on a time series of data for 2007–2011, wealthier quintiles use more health services; spend more out of pocket in both absolute and relative terms; and experience higher proportions of catastrophic health-care costs. According to the data source, the share of people experiencing catastrophic costs was decreasing in the lowest quintile (3% in 2010–2011); increasing in quintile III (at 6%); and still significant in quintiles IV and V, although on a decreasing trend. The authors explain the cause of this trend to be higher levels of utilization by wealthier people who are then exposed to OOP payments for procedures and medicines (Shishkin & Jowett, 2012).



## Acceptability coverage

Several aspects of acceptability coverage are addressed in this section – patient satisfaction with the quality of health services; social exclusion and discrimination as a barrier to accessing health services; and acceptability barriers for specific population groups. Acceptability coverage of the general population in the Republic of Moldova was not assessed in much detail through either routine statistics or special surveys. There is insufficient quantitative information regarding exclusion from health services for priority groups and by socioeconomic quintiles and insufficient definition of this type of health coverage in the present evidence. Also, the study has not identified sufficient data to cover age-specific services or any studies linking any of the changes in acceptability coverage to recent legislative changes.

### Patient satisfaction with quality of health services

The only indicator that can be linked to acceptability of health coverage in the general population was determined through household surveys of population health conducted in 2008 and 2010. A total 25.4% of the population in 2008 and 19.2% in 2010 did not go to see a physician in the past 12 months when they felt they needed health care. Among the reasons for not seeking care, two were related to the acceptability of services. The percentage of those who did not access health services because of expected low quality was rising slightly (6.9% in 2008, 8.4% in 2010), and lack of trust in the doctor was decreasing slightly (6.3% in 2008, 5.2% in 2010) (NBS, 2009a, 2011). However, these data seem insufficient to draw any inferences about the effect of the amendments.

On acceptability barriers to those who have accessed care, a general population survey found that every fourth respondent (24%) perceived difficulties in accessing health services. The most-cited reasons being waiting time and long queues (22%), staff indifference (18%), corruption (14%), staff incompetence (13%), disorganization in the provision of services (11%), poor quality of services (11%) and staff rudeness (8%). Yet, on a scale from 1 (totally dissatisfied) to 7 (totally satisfied), public satisfaction with the quality of health services was 5.1. This puts health services in the middle ranking of all 30 services included in the survey (Institute for Public Policy & Magenta Consulting, 2011).

A survey of 1231 patients of PHCs in Chisinau indicated that 68.3% have shown low levels of satisfaction with primary health care, their main cited reasons being long

waiting times and not keeping to the scheduled time. The strongest positive predictors of satisfaction were the right to choose a primary health-care provider and the quality of patients' instruction (Etco & Buta, 2009).

Another survey performed a comparative study of patient satisfaction among those visiting two primary health centres of excellence in Chisinau (group A) and rayon FMCs (group B) (Nemerenco & Tintiu, 2008). Where available, it also compared data on satisfaction levels with polyclinics with those from a similar study from 1987 (Testemitanu, Pasecicinic & Gutul, 1987). The historic comparison was quite informative – centres of excellence had reduced the impact of waiting time on patient satisfaction through the use of a much more rigorous advance schedule system. However, the situation in the rayon FMCs had not changed much since 1987, and waiting time was still an important factor in low satisfaction (Nemerenco & Tintiu, 2008) (Table 15).

**Table 15. Comparison of reasons for low satisfaction with primary health care (%), comparison years 1987 and 2007**

	1987	Group A 2007	Group B 2007
Long waiting times	75.8	30.0	70.0
Staff indifference	11.0	6.3	8.8

*Source: Nemerenco & Tintiu, 2008.*

This comparative survey also found that managerial reforms to improve examination conditions; reducing doctors' workload by involving nurses more in clinical examination; and allocating sufficient time for a consultation do increase patient satisfaction as 93.7% of group A was satisfied with medical competencies compared to 79.4% in group B. Also, 86.5% in group A, compared to 31.0% in group B, thought the quality of care was better than in other similar facilities. The survey also confirms that good patient instructions are a predictor of higher satisfaction (Nemerenco & Tintiu, 2008).

Hospital services showed a higher subjective level of satisfaction than the primary health-care level, with 80.2% of respondents being "very" or "rather satisfied" with hospital day care (83.4% rural, 74.9% rayon, 73.2% municipal). Lower percentages were satisfied with care received at night (74.7%) and at holiday times (74.9%). The highest satisfaction levels were recorded for doctors' qualifications (83.3%) and mid-level personnel (79.2%); the lowest for hotel services in hospital (49.8%). People from rural areas, with lower incomes and of older age were more satisfied than the urban, wealthier

and younger population. The objective assessment of quality of care showed that only 16.4% of patients were placed in rooms for one or two patients, while others shared rooms with three to more than seven patients; less than one third (31.3%) had access to their medical file; and every sixth patient (15.3%) did not receive care following a request for a visit from the on-call doctor at night or during holidays (PAS Center, 2011).

### **Social exclusion and discrimination as barriers to acceptability of health services**

The Commission on Social Determinants of Health (Popay et al., 2008) defines social exclusion as:

dynamic, multidimensional processes driven by unequal power relationships interacting across four main dimensions – economic, political, social and cultural – and at different levels including individual, household, group, community, country and global levels.

Increasingly, this is used to identify the groups that face systematic barriers in accessing public services, including health services. In the context of the Republic of Moldova, the concept is relatively new and its introduction into national policies is catalysed by international agencies (SEKN, 2008). The European Commission identified population groups vulnerable to social exclusion, based on vulnerability from migration, ethnicity and behavioural factors: (i) disabled people; (ii) immigrants and ethnic minorities (including Roma); (iii) people without a fixed residence; (iv) former prisoners; (v) drug and alcohol addicts; (vi) aged people; and (vii) children (Commission of the European Communities, 2009).

The notion of social exclusion is not defined in the current Moldovan Law on Social Assistance (Parliament of Republic of Moldova, 2010b) which defines only the categories eligible for social assistance, based on family composition, age and disability: (i) children and young people whose health, development and physical, mental or moral integrity can be jeopardized by the environment they live in; (ii) families that do not properly perform their obligations for children's care, maintenance and education; (iii) families with no or low income; (iv) people affected by family-based violence; (v) people without families, who cannot look after themselves, or need care and supervision or are unable to cope with sociomedical needs; (vi) families with three or more children; (vii) single-parent families with children; (viii) aged people, people with disabilities; (ix) other categories of people and families in difficulty (Parliament of Republic of Moldova, 2010b).

At the same time, the Law on Social Aid (Parliament of Republic of Moldova, 2008) establishes the population groups eligible for social welfare (and the state health insurance policy when certain income criteria are met) using a different evaluation system that includes age, disability, unemployment and carers' functions: (i) people of state retirement age; (ii) people with various degrees of disability; (iii) unemployed people registered with a local unemployment agency, who do not refuse employment and participate in events to stimulate employment or public works; (iv) women in the period between week 30 of pregnancy and 12 weeks after birth in case of stillbirth or infant death during maternity leave or who care for a child up to 3 years old; (v) household members caring for a family member with grade 1 disability status, for children or for family members over 75 years old (Parliament of Republic of Moldova, 2008).

A United Nations Development Programme (UNDP) survey used a different definition of social exclusion:

a process whereby certain individuals are pushed to the edge of society and prevented from participating fully by virtue of their poverty or lack of basic competencies and lifelong learning opportunities, or as a result of discrimination. (UNDP Regional Bureau for Europe & CIS, 2011)

The study reported that every fifth person (21.6%) in the general population of the Republic of Moldova considers him/herself excluded from society, based on self-assessment data from a survey conducted in 2010. A higher degree of exclusion (27.5%) is noted in small towns. By age group, older people feel the most excluded – 34.1% overall, 38.6% of aged women and 28.6% of aged men. A high degree of social exclusion is observed among people without education – 42.1%, 50% of whom are women (UNDP Regional Bureau for Europe & CIS, 2011).

The desk review did not identify any research that systematically assessed the relationship between overall social exclusion and acceptability of health services. Only one quantitative survey documented barriers to health services based on perceived social exclusion (Malcoci, 2011a). In the opinion of the Moldovan general population, people with physical and mental disabilities are generally the most discriminated against (68% and 66%, respectively), followed by poor people (59%), PLWH (56%), elderly people (50%), lesbian, gay, bisexual and transgender (LGBT) people (49%), Roma (48%) and women (32%). Using the Dominant Personal Opinion Index (DPOI),<sup>5</sup> the study calculated

5 The DPOI was calculated using the formula  $(p-n) \times (100-ne):100$ , where  $p$  = frequency of positive opinions;  $n$  = frequency of negative opinions;  $ne$  = frequency of neutral opinions. The index ranges on a scale from -100 to 100. The closer to 100, the lower the level of discrimination.

the opinions on the groups most discriminated against when accessing a range of public services. In health services, respondents from the general population perceived that the poor population faces the most negative discrimination in access to health care (-40), twice as much as PLWH (-19). These are followed by elderly people (-16), people with disabilities (-13) and LGBT people (-3). The general population perceives that Roma (9) and women (43) receive positive discrimination in health facilities. The poor population faces the most negative discrimination in hospitals and clinics (-40), compared to all other services – educational institutions (-36), when seeking employment (-32), in the workplace (-29) and in relations with authorities (-28). The qualitative results of the same research indicate that discrimination of the poor in health services is related to their inability to pay – through unemployment and having no medical insurance. When poor people have medical insurance, but no money to pay extra, many doctors still treat them distantly and very badly (Malcoci, 2011a).

Asked about personal experiences of discrimination, over one third (37%) of respondents thought that their rights have been violated at least once in the past three years. Of these, almost one third (31%) indicated that this concerned their right to health. Every tenth respondent (11%) mentioned that they or their relatives avoid some public services because of a fear of discrimination. Of these, 40% avoid going to health facilities, the most frequently avoided public service (Malcoci, 2011a).

### **Migrants**

Several components of acceptability coverage have been examined by the latest survey among labour migrants. Compared to the general population, a much higher proportion of migrants bypass primary health-care level and go directly to specialized services (22% migrants; 10% in households with no migrants). The reasons are related to perceived low acceptance of primary health-care services which are seen as unnecessary. In qualitative research, migrants perceived health personnel in their destination countries to have much better attitudes than doctors in the Republic of Moldova. The latter's attitudes are in direct relationship to the amount of the informal fee for service because health providers perceive migrants to be wealthier than the general population and a source of income (IOM, 2010).

### **Roma**

There is scarce quantitative evidence about differences in acceptability of health services for the Roma population. The relevant information derives from the only survey conducted in the Roma population in the Republic of Moldova. This 2007 survey found that 9% of Roma household members have been refused medical assistance

at some stage because of insufficient documentation (identity papers) and 2% of the survey respondents had been isolated from other patients while hospitalized (Cace et al., 2007).

As mentioned before, the discrimination survey has shown that the general population perceives the Roma population to be less discriminated against than other groups. At the same time, there is a low level of societal tolerance of the Roma population (their integrated acceptance indicator is 21%). Negative discrimination is perceived to be highest upon employment and in the workplace but in health services Roma received a positive score (Malcoci, 2011a). Qualitative research with key informants has identified that, in addition to workplace discrimination, Roma are discriminated against in education and health-care institutions (Malcoci, 2011). A Roma leader mentioned discrimination in contact with any public service, including hospitals (Cace et al., 2007).

### **PLWH**

Acceptability coverage and health personnel's discrimination against PLWH is one of the best documented areas compared to any other population groups. Surveys conducted in 2008 and in 2011 have assessed the level of discrimination as reported by PLWH, including in health settings, although different data collection tools mean that they are not comparable.

The results of a survey of the needs of PLWH conducted in 2008 showed that half (50.7%) of those in the Republic of Moldova had been discriminated against at least once in their lifetime because of their HIV-positive status. This discrimination was reported more frequently by female respondents (52.2%) than by males (48.8%) ( $p = 0.002$ ). Among those who reported discrimination, hospitals were identified more frequently (55.8%) than any other public services. At the same time, most respondents (94.1% of the total sample) reported seeing a health provider in the past 12 months, so their utilization rate was much higher than for any other public services. However, there was a difference in the attitudes of personnel of specialized HIV departments and other health facilities, as satisfaction rates with health services provided by their current specialized physician were quite high and the majority of respondents (73.9%) stated that they were satisfied or very satisfied (Scutelnicu, Bivol & Osoianu, 2008).

The level of acceptance that health personnel demonstrate towards PLWH has also been quantitatively assessed on the provider side. Physicians working in maternity services showed extremely low levels of tolerance towards PLWH (2%), similar to those

of 15–49 year olds within the general public (1%) (Bivol, Scutelnicuic & Parkhomenko, 2010; Bivol, Scutelnicuic & Vladicescu, 2010). Qualitative research showed specific situations in which PLWH had experienced discrimination in health institutions – for example, refusal to perform certain procedures, particularly those which involve direct contact with blood; refusal to admit PLWH to hospitals; using additional safety measures (e.g. two pairs of gloves); or breaching confidentiality about HIV status to other personnel and patients. The practice of writing an HIV code in red ink on medical records persists (Bivol, Scutelnicuic & Parkhomenko, 2010; Malcoci, 2011a).

A second survey conducted in 2011 showed that almost one third (32%) of PLWH surveyed had felt discriminated against in the past 12 months (43% large urban, 23% small urban, 19% rural; 30% men, 34% women; 29% low-income level, 32% medium level and 41% high level). Those who reported discrimination cited FMCs most frequently (70%), followed by the workplace (16%), police (10%) kindergarten (2%), church (1%) and shops (1%). Likely this is also linked to awareness of a person's HIV status among the people with whom PLWH come into contact. One-fifth of PLWH (22%) avoids accessing some services because of expected discrimination and, again, FMCs were cited most often (79%), far more frequently than any other categories (Malcoci, 2011b).

Comparison of PLWH and general population data showed that a somewhat smaller proportion of the PLWH community (35% compared to 37% in the general population) felt that their rights had been violated at least once in the past three years. However, a higher proportion thought that their right to health had been violated (44% compared to 31% in the general population). PLWH's perception of rights violation showed tendencies of association with higher income and large urban residence (42% large urban, 23% small urban, 32% rural; 37% men, 33% women; 36% low-income level, 33% medium, 53% high) (Malcoci, 2011b).

### **LGBT community**

Stigmatization and discrimination against the LGBT community has been assessed quantitatively and qualitatively by a number of studies. One survey mentioned that 19% of the respondents had felt that their sexual orientation had led to worse treatment from their health-care provider and 44.5% would not feel comfortable revealing their sexual orientation to their health-care provider (Quinn, 2006). Another report classified medical doctors as one of the most homophobic groups in the Republic of Moldova, reporting that mistrust between LGBT people and medical staff has a number of consequences for the general medical health of the LGBT community.

For example, only 15% of the respondents were reported to have undergone testing for sexually transmitted infections (COWI & Danish Institute for Human Rights, 2011).

## Contact coverage

This section presents an exploration of the overall utilization of health services before looking specifically at primary health care, emergency care and hospital care. The data are based mostly on administrative statistics with a few inputs from household surveys (where available) to provide some additional insights based on insurance status, income, rural/urban and gender. There were modest findings in relation to the impact of legislative changes on contact coverage.

### Utilization of health services

Since the introduction of health insurance, administrative statistics report an overall increasing trend in the utilization of health services, from an average of 5.5 visits per person per year in 2004 to 6.5 in 2010, with continuing inequity between rayons and municipalities (NCHM, 2012) (Table 16).

**Table 16. Number of health service visits per person per year, 2004–2010**

	2004	2005	2006	2007	2008	2009	2010
Municipal	6.1	6.6	6.6	6.6	6.8	6.9	6.7
Rayon	4.0	4.5	4.5	4.7	4.7	4.8	4.9
Total	5.5	6.0	6.0	6.2	6.3	6.3	6.5

*Source: NCHM, 2012.*

This trend has been growing, especially in the insured population (4.3 in 2004 to 7.0 in 2010), although the rayon/large urban (municipal) divide is less pronounced (6.4 and 7.1) in the insured population (Table 17). It is noteworthy that the geographical distribution of the number of visits per year is not in direct relationship with the number of medical workers. For example, Hincesti rayon is generally understaffed with medical personnel but has the highest number of visits by the insured population (9.59) (NCHM, 2012). The geographical distribution showed that the rayons lagging behind the national average in the number of visits per person per year in 2010 were Dubasari (3.25) and Leova (3.51). Ungheni had the highest number (6.5) of visits per person per year (NCHM, 2012).



**Table 17. Number of health service visits per insured person per year, 2004–2010**

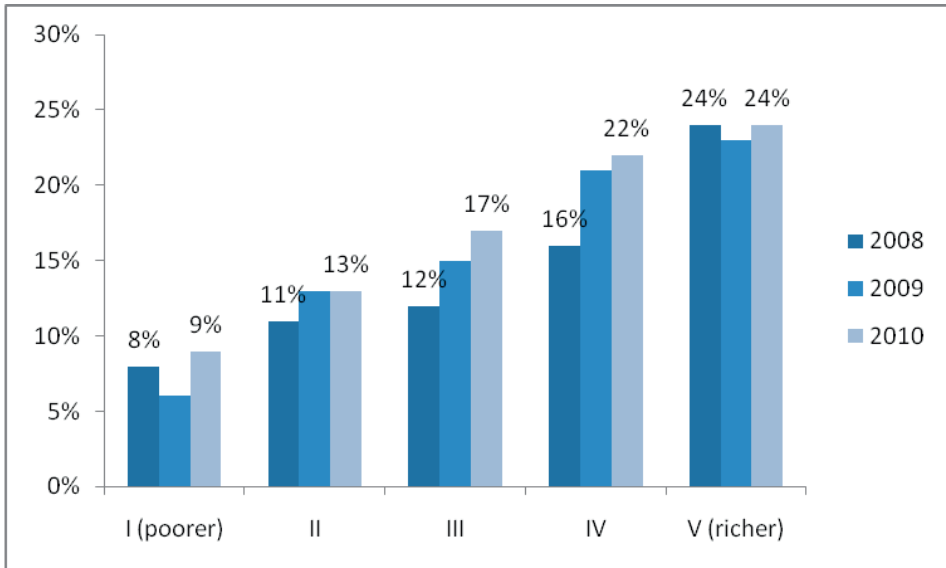
	2004	2005	2006	2007	2008	2009	2010
Municipal	5.1	6.3	6.3	5.9	6.2	6.7	7.1
Rayon	3.6	4.6	4.6	4.9	5.2	5.5	6.4
<b>Total</b>	<b>4.3</b>	<b>5.4</b>	<b>5.4</b>	<b>5.5</b>	<b>5.8</b>	<b>6.2</b>	<b>7.0</b>

Source: NCHM, 2012.

Administrative statistics also provide data on the utilization of laboratory examinations – the total number doubled in the period 2004–2010 (23.8 million in 2004 to 43.1 million in 2010). A relative increase in X-rays is reported too (1.9 per 100 outpatient visits in 2004 to 3.4 in 2010), as well as a double increase in ultrasound examinations (14.6 thousand per 100 000 in 2004 to 28.9 thousand in 2010) (NCHM, 2012).

Household surveys provide additional information regarding overall utilization rates of health services. There is a clear trend of higher utilization by higher quintiles, insured population, women and urban population. A somewhat lower proportion of the population reported seeking health services in the four weeks prior to the 2010 survey (23.3% in 2008, 19.3% in 2010). Public sector services (91.1%) are used much more than private sector (9.1%). Higher rates of health services utilization are documented for women (23% women versus 15.4% men), the urban population (22.9% urban versus 16.8% rural) and the insured population (23.0% insured versus 9.0% uninsured). The survey also reported twice as many respondents in the highest quintile as in the lowest seeking health care in the past four weeks (24% quintile V, 9% quintile I). This is indicative of continuing inequitable access to health services (NBS, 2011) (Fig. 2).

**Fig. 2. Share of population seeking health care in the past four weeks, by income quintiles (%), 2008–2010**



Source: NBS, 2011.

Classification by type of doctor accessed shows that every second person accessed a primary health-care doctor and every third person accessed a specialist. By insurance status, it appears that higher proportions of insured people accessed a primary health-care doctor (55.3% compared to 30.7% of uninsured). The uninsured population tends to bypass primary health care and goes directly to a specialist – 31.4% of insured and 42.8% of uninsured respondents saw a specialist in 2010 (NBS, 2011). Important inequities are observed by socioeconomic status – the lowest quintile accesses primary health care in much higher proportions than specialized care (66.5% versus 22.8%). The reverse is true for the highest quintile (37.0% primary health care and 40.3% specialized care). Dentist care, now mostly private and based on OOP payments, is also a good measure of inequitable access of dental care since it is likely that the poor population is deterred from using these services (NBS, 2011) (Table 18).

**Table 18. Access to health care in the past four weeks, by type of doctor and quintiles (%), 2010**

	I	II	III	IV	V
Accessed medical services in past four weeks:	11.2	16	20.6	23.4	25.5
consulted primary health care physician	66.5	60.5	59.1	50.5	37.0
consulted specialist	22.8	28	27.8	36.9	40.3
consulted dentist	8.1	6.5	5.1	3.0	14.3
hospitalized	12.7	4.2	6.6	8.9	6.0

*Source: NCHM, 2012.*

By level of care, the FMC is the most used level of care for the urban population (75.5%) and the rural population shows a higher tendency to go directly to the pharmacy (5.6% versus 3.5%). The rural population has more home visits by a primary health-care doctor (9.9% rural versus 6.5% urban) and more hospitalization (8.5% rural versus 6.1% urban) than the urban population (NBS, 2011) (Table 19).

**Table 19. Comparison of access to levels of care in the past four weeks, by residence and gender (%), 2008 and 2010**

	Urban	Rural	Men	Women	Total
Home care	6.5	9.9	7.4	8.7	8.2
FDO	6.4	36.4	20.6	22.4	21.7
FMC/health centre	75.5	41.1	59.3	57.1	57.9
Hospital	6.1	8.5	8.7	6.5	7.3
Pharmacy	5.6	3.5	3.7	5.0	4.5
Other	N/A	0.6	0.3	0.3	0.3

*Source: NBS, 2011. Note: N/A = not available.*

### Coverage with primary health-care services

Despite decreasing numbers of primary health-care doctors, national statistics report a slow increase in the relative number of visits per inhabitant from an average of 2.4 visits in 2004 to 2.9 in 2010, with continuing inequity between rayons and municipalities (NCHM, 2012) (Table 20). This is an indication of the increasing burden on the depleting primary health-care workforce.

**Table 20. Number of visits to primary health-care physician per person per year, 2003–2010**

	2004	2005	2006	2007	2008	2009	2010
Municipal	2.8	2.9	3.1	3.0	3.1	3.2	3.2
Rayon	2.3	2.7	2.6	2.6	2.6	2.7	2.8
<b>Total</b>	<b>2.4</b>	<b>2.8</b>	<b>2.7</b>	<b>2.8</b>	<b>2.8</b>	<b>2.9</b>	<b>2.9</b>

*Source: NCHM, 2012.*

Classified by geographical distribution, the highest numbers of visits to primary health-care doctors were registered in Ungheni (3.94) and Hincesti (3.43) and the lowest in Leova (1.65) (NCHM, 2012). One interesting finding is that the number of visits is not in direct relationship to the number of primary health-care doctors in the rayon. Although better staffed with primary health-care doctors, the northern rayons have lower numbers of visits than some understaffed rayons. This shows an inequitable workload for primary health care depending on the geographical location.

The distribution of total visits and visits of the insured population (routine statistics provide no data on uninsured) were examined to see if there had been any effect from the legislative modifications granting universal access to a basic package of primary health care. In relative terms, the number of visits at primary health-care level has increased, especially based on the number of visits of the insured population (Table 21). In absolute numbers, the total number of visits has remained stable at about 10 million visits, of which 5.4% in 2009 and 7.1% in 2010 were made by the uninsured population.

**Table 21. Number of visits to primary health-care physician per insured person per year, 2003–2010**

	2004	2005	2006	2007	2008	2009	2010
Municipal	3.3	3.7	N/A	3.6	3.8	4.1	4.2
Rayon	2.5	3.2	N/A	3.3	3.4	3.6	4.1
Total insured	<b>2.7</b>	<b>3.3</b>	N/A	<b>3.4</b>	<b>3.5</b>	<b>3.8</b>	<b>4.2</b>
Total	2.4	2.8	2.7	2.8	2.8	2.9	2.9

*Source: NCHM, 2012. Note: N/A = not available.*

Another data source looked at visits to a family doctor based on NHIC statistics. This provided a quite different picture – an average number of 3.09 visits per resident

inhabitant; 3.74 visits per insured and 0.86 visits per uninsured in 2010; and a decreasing absolute number of visits to primary health care doctors (Shishkin & Jowett, 2012). Given large discrepancies between the two data sources, there is a need to validate both monitoring systems before making valid conclusions.

Utilization rates of primary health-care services are in direct relationship with socioeconomic status. The household survey in 2010 showed that 13.1% of respondents in the lowest quintile, but 21.3% in the highest, went to see a doctor when they had cough and cold symptoms (NBS, 2011). A similar analysis of equity of access to primary health care by socioeconomic status of families of children aged 0–5 years is based on the *Demographic and Health Survey 2005*. This showed that access to medical care in the case of cough and/or fever is higher among children from richer families (PAS Center, 2010).

### Emergency care and referrals from primary health care to hospital care

Administrative statistics and other data sources provide insufficient information to allow measurement of contact coverage with emergency care. One activity indicator is the number of emergency requests – this has been on a constant increase, from 168.8 emergency visits per 1000 inhabitants in 2003 to 282.7 in 2010 (Table 22). A peak level of 301.9 emergency visits per 1000 inhabitants was registered in 2009, possibly due to increased activity related to the swine flu epidemic but other explanations could be explored. Much higher numbers of emergency calls were registered in municipalities than in rayons (NCHM, 2012).

**Table 22. Number of emergency requests per 1000 inhabitants, 2003–2010**

	2003	2004	2005	2006	2007	2008	2009	2010
Municipal	248.7	265.1	299.2	302.3	317.8	347.4	385.0	338.2
Rayon	139.5	196.7	237.5	249.1	265.8	256.5	267.7	260.1
<b>Total</b>	<b>168.8</b>	<b>215.8</b>	<b>254.6</b>	<b>266.3</b>	<b>281.4</b>	<b>282.7</b>	<b>301.9</b>	<b>282.7</b>

*Source:* NCHM, 2012.

One measure of the quality of emergency care and the referral system between primary health-care level and hospital care is the percentage of persons who have been hospitalized within 24 hours of disease onset. As seen in Table 23, this shows a positive trend, from 28.0% in 2004 to 37.2% in 2010, with higher proportions in municipalities than in rayons (NCHM, 2012).

**Table 23. Patients transported to hospital within 24 hours of disease onset (%), 2003–2010**

	2003	2004	2005	2006	2007	2008	2009	2010
Municipal	34.1	25.1	40.9	40.9	43.2	38.3	45.9	46.8
Rayons	28.8	29.4	27.2	27.5	29.6	30.0	33.0	35.7
Total	30.4	28.0	31.9	35.6	35.0	35.1	36.7	37.2

*Source: NCHM, 2012.*

Referral practices for hospitalization seem to be improving. A 2007 audit of 521 patient charts from 9 district hospitals showed that 69.5% were hospitalized as emergencies, 22.8% were referred by family physicians and 5.0% were admitted based on outpatient specialist referrals (Ciocanu, 2007). By contrast, a more recent survey conducted in the general population hospitalized in the past 12 months showed that, at district hospital level, 36.2% were referred by a primary health-care physician, 22.4% were referred by an outpatient specialist and 28.1% were transported by ambulance; 12.9% self-referred. People from rural areas showed the highest proportion of hospitalization based on self-referral (20.2%) compared to large urban (13.3%) and small urban (12.9%) (PAS Center, 2011).

### Coverage with hospital services

The hospitalization rate fell sharply from 23.5 inpatient care admissions per 100 in 1990 to just 12.5 in 2001. Thereafter, the hospitalization rate increased before falling once again following the introduction of social health insurance (Shishkin, Kacevicius & Ciocanu, 2006). Since then, hospital admission rates have increased slightly despite a continued reduction in the number of hospital beds (Table 24). The total hospital admission rate has increased from 15.9% in 2004 to 17.0% in 2010, showing a relative decrease in large urban areas but a relative increase at rayon level (NCHM, 2012).

**Table 24. Hospital admission rates per 100 inhabitants, 2003–2010**

	2003	2004	2005	2006	2007	2008	2009	2010
Large urban	15.2	15.0	N/A	12.5	12.9	13.3	13.4	13.4
Rayon	10.4	10.1	N/A	10.2	10.5	11.0	11.3	11.3
Total	15.9	15.2	N/A	15.7	16.1	16.9	17.1	17.0

*Source: NCHM, 2012. Note: N/A = not available.*

By geographical distribution, in 2010 the hospitalization rate was highest in UTA Gagauzia (17.1%) and lowest in Ialoveni (5.2%) and Straseni (8.2%), probably because of proximity to Chisinau and admission to republican rather than rayon-level hospitals (NCHM, 2012). The hospital admission rate has been increasing much more steeply among the insured population, a sign of adverse selection in cases of expected hospitalization. Thus, the total hospital admission rate among insured patients increased from 16.6% in 2004 to 24.4% in 2010. Another observed trend is the near disappearance of the discrepancy between rayons and Chisinau and Balti in 2010 (16.9% municipal, 17.2% rayon) (NCHM, 2012) (Table 25).

**Table 25. Hospital admission rates in insured population, per 100 inhabitants, 2003–2010**

	2004	2005	2006	2007	2008	2009	2010
Municipal	16.1	14.1	14.2	13.7	14.8	15.5	16.9
Rayon	11.2	12.5	12.5	13.1	14.1	14.9	17.2
<b>Total</b>	<b>16.6</b>	<b>18.5</b>	<b>18.6</b>	<b>19.0</b>	<b>20.4</b>	<b>21.4</b>	<b>24.4</b>

*Source: NCHM, 2012.*

Following reductions in the number of hospitals and bed capacity, the hospital utilization level (as measured by bed occupancy levels in acute care hospitals) was 62.9% in 2004. As reported in the administrative statistics, the total bed occupancy rate reached 80% in 2010, with higher levels in municipalities (84.4%) and republican hospitals (81.6%) and lower levels in rayon hospitals (75.9%) (NCHM, 2011) (Table 26).

**Table 26. Bed occupancy rates, 2009–2010**

	2009	2010
Municipal	83.6	84.4
Rayon	75.6	75.9
Republican	81.1	81.6
<b>Total</b>	<b>79.2</b>	<b>79.7</b>

*Source: NCHM, 2011.*

In the period 2008–2010, the average length of stay in municipal (8.8 days) and rayon hospitals (7.7 days) remained at about the same levels but shows decreasing levels in republican hospitals (15.0 days in 2003 to 12.9 in 2010) (NCHM, 2012) (Table 27).

**Table 27. Average length of hospital stay (days), 2003–2010**

	2003	2004	2005	2006	2007	2008	2009	2010
Municipal	9.0	8.0	8.9	9.0	8.8	8.8	8.7	8.8
Rayon	9.0	7.0	7.7	7.6	7.6	7.6	7.7	7.7
Republican	15.0	14.0	13.8	13.8	13.4	13.2	13.0	12.9
<b>Total</b>	<b>11.0</b>	<b>9.0</b>	<b>9.8</b>	<b>9.8</b>	<b>9.7</b>	<b>9.6</b>	<b>9.5</b>	<b>9.5</b>

*Source: NCHM, 2012.*

Routine statistics provide insufficient information about the quality of hospital care and there are few data to measure performance of hospital care. One indicator for measuring hospital performance is the number of surgical operations performed. These have increased from 3895 surgeries per 100 000 inhabitants in 2004 to 4210 in 2010, indicative of increased productivity for the same number of beds in this period (NCHM, 2012) (Table 28).

**Table 28. Numbers of surgical operations per 100 000 inhabitants, 2003–2010**

	2004	2005	2006	2007	2008	2009	2010
Large urban	5 173	3 221	3 500	3 457	3 763	3 691	3 825
Rayon	1 888	1 996	2 060	2 079	2 043	2 050	2 120
Total	3 895	3 745	3 869	3 919	4 077	4 088	4 210

*Source: NCHM, 2012.*

Somewhat lower than that reported by administrative statistics, the hospital admission rate based on household survey data was 10.8% in 2010, showing a higher hospitalization rate among the urban population (12.1%) compared to the rural population (9.8%); more women (13.2%) than men (8.2%); and more insured (12.5%) than uninsured (5.9%). Average length of stay is also dependent on insurance status –9.7 days for insured people and 7.1 for uninsured (NBS, 2011). The highest share of patients was hospitalized in rayon-level hospitals (46.8%), every fourth (26.6%) was hospitalized in a republican-level hospital and 19.7% of patients were hospitalized in municipal hospitals (PAS Center, 2011).



## Effective coverage

Routine statistics were examined to find any data measuring effective coverage with specific quality of services and compliance to treatment. Only a few areas were identified. At primary health-care level these were coverage with specific follow-up and preventive services (e.g. antenatal screening, vaccination rates, screening for noncommunicable diseases). At hospital level these were unnecessary hospitalization rates; content and quality of hospital care; and clinical effectiveness for two conditions as captured by national indicators. Insufficient data were found on patient adherence and satisfaction; ability to buy all prescribed drugs; and ability to carry through with recommended referral. No information was found regarding effective coverage in relation to the impact of the legislative changes on effective coverage.

### Primary health care

Data on screening for noncommunicable diseases and effective coverage with preventive services show conflicting information. On one hand, the administrative statistics do not show a positive trend in the proportion of prophylactic visits in the past five years (NCHM, 2012) (Table 29). On the other hand, the percentage of preventive examinations conducted to screen for noncommunicable lifestyle diseases (e.g. cholesterol, glycaemia and hypertension checks) increased significantly between 2009 and 2010. Based on presented data, in 2010 some 85.4% of the at-risk population received blood pressure screening; 82.4% were screened for breast cancer; 62.4% had a Pap smear test, 61.1% were screened for malignant tumours and 58.4% had a glycaemia check and other screening. Significant proportions of preventive examinations were also reported for the uninsured population (Annex 1). These data need further exploration.

**Table 29. Visits to a doctor for preventive purposes (%), 2004–2010**

	2004	2005	2006	2007	2008	2009	2010
Municipal	34.5	33.6	31.1	30.6	31.4	28.0	29.9
Rayon	40.5	32.4	30.2	29.1	30.1	29.2	31.0
<b>Total</b>	<b>36.4</b>	<b>31.1</b>	<b>29.0</b>	<b>28.2</b>	<b>29.1</b>	<b>27.5</b>	<b>29.1</b>

*Source: NCHM, 2012.*

One performance indicator used at primary health-care level in 2006–2009 was the percentage of women making their first antenatal visit before 12 weeks of pregnancy.

This indicator shows an unexpected trend. In the period 2004–2010, a relatively constant proportion of women (around 75%) made their first antenatal visit before 12 weeks, peaking at 81.7% in 2006 and 77.6% in 2007 (NCHM, 2012) (Table 30). One plausible explanation for this spike could be the introduction of a set of six quality indicators linked to NHIC monetary incentives for primary health-care doctors achieving these indicators in 2006. In 2008 some arrears were accumulated in paying for incentives. In 2009 the NHIC cancelled the incentive-based system and the value of this indicator returned to the earlier level – 76% in 2010.

**Table 30. Pregnant women making first antenatal visit before 12 weeks (%), 2003–2010**

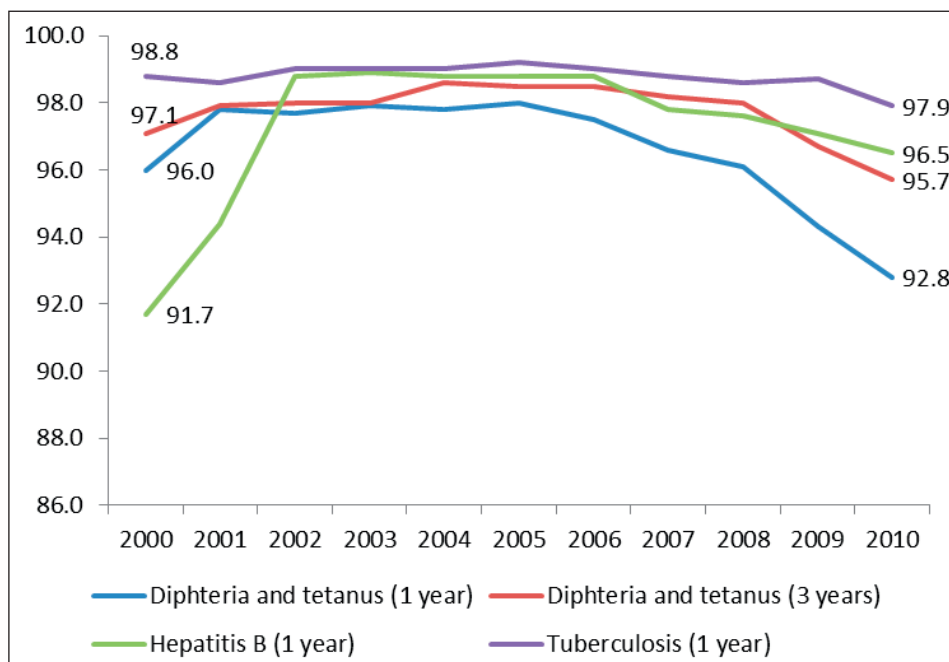
	2003	2004	2005	2006	2007	2008	2009	2010
Municipal	80.4	79.8	77.1	82.0	77.2	76.6	77.4	79.4
Rayon	72.1	72.8	77.1	81.6	77.8	74.0	73.9	74.2
<b>Total</b>	<b>74.4</b>	<b>74.8</b>	<b>77.0</b>	<b>81.7</b>	<b>77.6</b>	<b>74.9</b>	<b>75.0</b>	<b>76.0</b>

*Source: NCHM, 2012.*

The Integrated Management of Childhood Illnesses (IMCI) evaluation has shown some good results from primary health care efforts with children’s caregivers – some 95% of mothers have breastfed their children from birth and for an average of 11 months; and the vast majority (95.3%) have provided their children with vitamin D for an average of 15 months. This signifies excellent patient compliance with preventive measures. However, screening for anaemia and the clinical management of anaemia has not been as successful (PAS Center, 2011b). The percentage of neonates breastfed at six months was 87.7% in 2010; the CIS average was 55.8% (no average data are available for EU region) (WHO Regional Office for Europe, 2012).

Vaccination rates are another measure of effective coverage in primary health care. Historically, the Republic of Moldova has been effective in ensuring high immunization rates among children, with very high proportions of children under two years immunized against measles (Government of Republic of Moldova, 2010). However, this has been decreasing in the past five years due to greater public resistance to immunization (NCHM, 2012) (Fig. 3). Immunization coverage has been confirmed by independent evaluation in the household surveys (UNICEF, 2001). The rate is much lower on the left bank of the Nistru – only 71.3% (UNICEF, 2011).

**Fig. 3. Immunization coverage of children, 2000–2010**



Source: PAS Center, 2011a.

Equity analysis shows a negative correlation between a mother's level of education and the rate of immunization. Children from urban areas and those from the north and Chisinau municipality have lower rates of immunization than children from the south and centre of the country (PAS Center, 2010). Roma children also show lower coverage by immunization programme – 3% of non-Roma but 11% of Roma children under 14 years are not vaccinated at all. Reasons mentioned by Roma respondents include lack of insurance policies and of information, “did not know it was necessary to be vaccinated” (UNDP, 2007 cited in UNICEF, 2011).

Immunization rates for annual immunizations in the adult population have also been impressive. For example, in 2010 24% of the total population was immunized for pandemic flu AH1N1 (Ministry of Health of Republic of Moldova, 2011b).

In areas that require coordination between primary health care and specialized care and hospital care, (e.g. TB management) achievement of the necessary outcomes is less successful. The TB success rate among new smear-positive cases has been decreasing from 62.0% in the 2007 cohort to 54.2% in 2009. Several factors play a role

here. One is the increasing amount of multidrug resistant TB (MDR-TB) among new cases (from 19.4% in 2006 to 25.8% in 2010) and an alarming 65.4% in retreatment cases in 2010. As the success rate in new cases includes MDR-TB, it is naturally on the decrease. If MDR-TB cases are excluded from the 2009 cohort, the success rate is 63.6%; if measured for all TB cases (including smear-negative and extra-pulmonary forms) the overall success rate is 74.8% (National Institute of Phthisiopneumology, 2011).

Other areas of specialized care in infectious diseases show much better adherence rates. For instance, antiretroviral therapy (ART) for patients with HIV is provided by only two specialized clinics on an outpatient basis. In 2010, adherence totaled 88% at 12 months since initiation of therapy (National Center for AIDS Prevention and Control, 2011).

### **Hospital care**

Few measures of the clinical effectiveness of hospital care are available in the routine statistics. Two measures of outcomes reflecting the quality of hospital care were selected from national statistics. The first, post-surgical mortality, is on a slight increasing trend from 1.1% in 2004 to 1.36% in 2010. The second, the number of uterine ruptures per 1000 births, remained constant at 0.1 in the period 2004–2010 (NCHM, 2012).

The level of unnecessary hospitalization was assessed by a patient chart audit in 2006. Only 79.1% had clinical indication for hospitalization and about 29.0% were in good health status at hospital admission. The same study noted that the prescribed treatment was in compliance with national guidelines in only 72.7% of cases treated in rayon hospitals (Ciocanu, 2007).

NHBS data show that a total of 74% of hospitalized persons were satisfied with their physician's explanation of their prescribed treatment, with lower levels of satisfaction among older respondents, and about explanations obtained in rayon hospitals (NBS, 2011). Another study conducted in 2011 investigated in depth the content and quality of hospital care in the perception of the general population hospitalized in the past 12 months. The findings showed poor patient education and information – only 34.7% of respondents could explain exactly the diagnostic for which they were hospitalized, and 28.4% of them could not tell what type of surgery had been performed. For treatment outcomes at hospital discharge, the health condition has completely/significantly improved for only 49.8% of respondents – for 52.8% of those who stayed in republican hospitals, 49.4% in municipal hospitals and 48.9% in rayon hospitals (PAS Center, 2011a).

# Health outcomes as measures of performance across Tanahashi framework domains

Clinical outcomes for selected noncommunicable diseases and some mortality indicators were considered as measures of overall coverage of the health system and of intersectoral collaboration.

## Cardiovascular disease

The incidence of cardiovascular disease increased from 2003 (14.3 per 100 000) until 2006 (21.3) and then began to decrease (15.4 in 2010). Mortality from cardiovascular disease declined gradually between 2003 and 2008 and increased slightly in 2009–2010, but is still well below the levels of 2003–2005 (NBS, 2012) (Table 30). This may be indicative of better management of cardiovascular disease in the health sector but there is not sufficient detail regarding the percentages of medically managed hypertension.

**Table 31. Trends in cardiovascular disease incidence, prevalence and mortality, per 100 000, 2003–2009**

	2003	2004	2005	2006	2007	2008	2009	2010
Incidence	14.3	18.4	24.3	21.3	19.7	16.9	16.8	15.4
Prevalence	64.8	78.0	92.3	98.8	110.2	116.2	123.4	125.0
Mortality	763.1	734.1	700.1	671.4	676.0	657.0	663.2	688.1

*Source: NBS, 2012.*

## Cerebrovascular disease (CVD)

Trend data on the incidence of CVD are not available but data for 2009 and 2010 show a slight increase in CVD incidence from 30.8 per 10 000 in 2009 to 31.0 in 2010 (NCHM, 2012). An increase in the hospital discharge rate of CVD is observed (418 per 100 000 in 2003 to 612 in 2010). The standard death rate (SDR) from CVD has shown a marked reduction in the past decade (from 64.7 in 2003 to 50.4 in 2010) but is still above the NIS average and more than five times higher than the EU average (Table 32) (WHO Regional Office for Europe, 2012). Most drugs for CVD and cardiovascular disease are

NHIC compensated medicines and therefore have increased accessibility. While it is plausible that this has an impact on CVD outcomes, further investigation is required.

**Table 32. Hospital discharge and SDR from CVD, per 100 000, 2003–2010**

	2003	2004	2005	2006	2007	2008	2009	2010
Hospital discharge	418.3	429.4	475.3	517.9	540.5	543.1	607.8	612.2
<b>SDR:</b>								
Republic of Moldova	64.7	65.2	66.2	60.3	55.4	51.7	51.4	50.4
NIS	62.0	58.9	58.8	53.7	49.9	48.4	45.7	N/A
EU	11.9	11.4	10.8	10.4	9.8	9.5	9.1	8.8

Source: WHO Regional Office for Europe, 2012.

## Diabetes

The prevalence of diabetes is increasing (1.0% in 2003 to 1.7% in 2010), while the SDR in people with diabetes in the 0–64 age group is decreasing (7.1 per 100 000 in 2004 to 5.0 per 100 000 in 2010) much more steeply than in CIS and EU countries (Table 33). Clinical outcomes provide another indication of better management of diabetes. For example, there were 108 cases of diabetic coma in 2002, 42 in 2006 and 22 in 2009. Leg amputations have also decreased (Government of Republic of Moldova, 2011). There is insufficient evidence to analyse these outcomes through Tanahashi domains.

**Table 33. Prevalence (%) and SDR of diabetes, 0–64 years (per 100 000), 2003–2010**

	2003	2004	2005	2006	2007	2008	2009	2010
Diabetes prevalence	1.0	1.1	1.2	1.3	1.4	1.5	1.5	1.7
<b>SDR:</b>								
Republic of Moldova	7.1	5.6	6.4	5.8	5.7	5.2	4.8	5.0
NIS	5.9	5.8	5.7	5.6	5.4	5.2	5.1	N/A
EU	3.0	2.9	2.9	2.8	2.8	2.7	2.7	2.6

Source: Government of Republic of Moldova, 2011.

## Cancer

Registered cancer incidence has risen sharply over the decade (177 in 2003 to 220 in 2010). However, in comparison to other European benchmark countries, the Republic

of Moldova has the eleventh lowest incidence of cancer. In comparison to western European countries, the age-standardized incidence rate for men (331/100 000) and women (238/100 000) is about one third lower than in the EU-25 in 2006 (453/100 000 for men, 325.5/100 000 for women). This difference may be attributable to lifestyle differences and, probably, to lower levels of access to diagnostic testing and reporting. Breast cancer is the most prevalent form of cancer in the country, followed closely by lung and non-melanoma skin cancers. The high prevalence of lung cancer is not surprising given the still relatively high levels of smoking in the Republic of Moldova – in 2007, 27% of adults and up to 50% of men were considered to be smokers (WHO Regional Office for Europe, 2012; Sanigest, 2010).

In parallel to the increasing incidence rates, there has been a steady increase in cancer-related mortality each year. Cancer-related diseases are now the second leading cause of death in the Republic of Moldova, behind cardiovascular disease. Using the SDR from cancer under 65 years of age for both sexes, overall mortality levels appear to be relatively high in comparison to other European countries. The Republic of Moldova's five-year relative survival rates for breast cancer (41%), cervical cancer (26%), uterine cancer (50%) and prostate cancer (27%) are well below, and often less than half, those of EU countries (European averages are 79%, 63%, 76% and 76%, respectively) (Sanigest, 2010). According to national statistics, in 2009 about 38% of breast cancer was detected in stages 3 and 4, showing a decrease from 42.5% in 2005 (National Institute of Oncology, 2011).

Although there are no studies to link survival rates to availability of services, accessibility (due to cost, affordability) or acceptability, the Ministry of Health has identified some system bottlenecks in the rationale for designing a national cancer programme. However, approval has been postponed since 2009 and this has not been authorized for release as a national programme. Some barriers related to the availability of preventive services – that is, no public education campaigns to increase awareness about prevention and early detection of cancers; no targeted screening programmes for breast cancer; inadequate supply of screening tools at primary health care level; lack of mammography and colposcopy equipment. Others concerned effective coverage, such as quality of care and insufficient numbers of evidence-based clinical protocols, monitoring of quality of care and access to standard treatments (Ministry of Health of Republic of Moldova, 2009c).

## **Under-5 mortality rate (U5MR) and infant mortality rate (IMR)**

The under-five mortality rate (U5MR) has seen a significant reduction from 23.2 per 1000 live births in 2000 to 13.6 in 2010. The infant mortality rate (IMR) has also seen a gradual and stable reduction from 18.3 in 2000 to 11.7 in 2010. Even adoption of the WHO definition of live birth in 2008 did not translate into a significant increase in the following year. Using 2000 as a 100% baseline, the categories showing the largest percentage reductions in 2010 were the U5MRs due to acute respiratory infections and other respiratory system disorders (by 75% in 2009; in 2010, by 50% for acute respiratory infections and 62% for other respiratory disorders) and acute diarrhoeal diseases (by 60%). This changes the structure of mortality from preventable causes of death to a pattern seen in EU countries.

The total IMR rate registered in 2010 showed a 50% reduction since 2000; a significant 55.6% reduction in the rates of respiratory system disorders was registered in 2010; and a 50% reduction in at-home deaths was registered in 2009. The latter may also be attributed to the IMCI strategy (PAS Center & UNICEF Moldova, 2011). Such marked progress in this area could be due in part to important reforms that extend health services' accessibility. Coverage for all children under five is extended not only to all levels of case, but also to a fully compensated benefit package of pharmaceuticals, and to specialized outpatient and inpatient care. In parallel, an important focus on sustained patient education efforts through both primary health-care providers and public information campaigns have contributed to increasing acceptability of child-oriented preventive health services, and better adherence to prescribed treatments (Stefanet, 2010). A sustained educational effort to introduce standard clinical management protocols through clinical training and strict monitoring frameworks has contributed to improving availability and quality of care and improved effective coverage.

At the same time, the proportions of at-home deaths within the total IMR and U5MR have registered a decrease since 2004. Both at-home IMR and U5MR registered steady decreases until 2009 – from 19.7% in 2000 to 14.9% in 2009 for IMR, from 25.0% to 20.1% for U5MR – but important increases in 2010 (PAS Center & UNICEF Moldova, 2011). A death inquiry review of at-home and within 24 hours of hospitalization under-5 and infant deaths has shown that most cases occurred as a result of trauma or poisoning (81%), among rural residents (74.1%), and were associated with socioeconomic status, unemployment and child neglect. Half of the children had shown visible symptoms of disease in the 24 hours prior to death, but parents did not seek health care for reasons



such as insufficient knowledge, no phone connection, large distance to a health facility and fear of hospitalization. The study also concluded that poverty and lack of social assistance and involvement of local public authorities determine this level of mortality (Ministry of Health of Republic of Moldova, Ministry of Labour, Social Protection and Family & Lumos Foundation, 2011). These findings underline the importance of financially and geographically accessible health services as precursors for effective coverage. Also, they highlight the importance of acceptable health education services that are appropriate for people with low education levels, in rural areas, and who may have limited access to certain types of media.

### Maternal mortality rate (MMR)

The maternal mortality rate (MMR) is another measure related not only to different access domains but also to a wider interplay of socioeconomic factors and health-seeking behaviours, intersectoral collaboration and equity in access to health. MMRs were on a gradual decrease until 2007 but increased in 2008 and 2010 (NCHM, 2012) (Table 34).

**Table 34. MMR per 100 000 live births, 1997 and 2003–2010**

	1997	2003	2004	2005	2006	2007	2008	2009	2010
MMR	48.3	21.9	23.5	18.6	16	15.8	38.4	17.2	44.5
<i>Source: NCHM, 2012.</i>									

In order to monitor the quality of health care and its impact on maternal mortality, a confidential enquiry into maternal deaths began in 2006. The review of MMR cases registered in 2006–2009 identified 41.4% of cases for which death was unavoidable because of late presentation to maternity units. This showed deficiencies in referral from primary health care level to inpatient level, as 38% of deceased cases were not in antenatal follow-up and presented directly to the maternity unit. Being a migrant was considered to be a specific vulnerability factor in this situation as 27.8% of the deceased cases were out of the country during their pregnancy (Hodorogea, 2010). Additional vulnerabilities could also contribute to a lack of antenatal care – for example, socioeconomic status, drug use or other factors invoked in qualitative studies. These have not been analysed in depth by the source. Other sources, such as qualitative studies with HIV-positive pregnant women, show decreased acceptability of health services among some women. Experience of stigma and health workers’ discriminatory attitudes during a first pregnancy and labour can cause some women

living with HIV to avoid contact with health services in subsequent pregnancies (Bivol, Scutelnicuic & Parkhomenko, 2010).

Even where lack of antenatal care might have increased the risks of death as a result of labour, the inquiry found that obstetrical care was evaluated as substandard in 17 of 22 cases (Hodorogea, 2010). In addition, they evidence that establishing and meeting quality standards plays a strong role in ensuring effective coverage at maternity level, as does close following of protocols to manage women who have not received antenatal care.

### At-home mortality in adult population

At-home mortality is an indirect measure of mortality related to access to health care. Administrative statistics show a decreasing trend in the number of those who die at home, from 959 per 100 000 inhabitants in 2003 to 882 in 2009 and 919 in 2010 (Table 35) (NCHM, 2012).

**Table 35. At-home mortality rates, main causes of death per 100 000 general population, 2003–2010**

	2003	2004	2005	2006	2007	2008	2009	2010
Municipalities	553	530	554	528	528	515	501	514
Rayons	1 100	1 039	1 100	1 059	1 042	1 011	1 017	1 063
Total	959	908	960	923	909	882	882	919

*Source: NCHM, 2012.*

At the same time, in relative terms, there has been an increase in the proportion of deaths occurring in hospital but a reduction in the proportion of at-home deaths. This is indicative of increasing numbers presenting to health care (NCHM, 2012) (Table 36).

**Table 36. Deaths in hospital and at home (%), 2003–2010**

	2003	2004	2005	2006	2007	2008	2009	2010
Hospital	14.6	16.1	16.7	17.6	18.2	18.5	19.4	18.9
Home	80.4	78.5	77.2	76.7	75.5	75.0	74.7	75.0

*Source: NCHM, 2012.*

A retrospective study comprising a death review inquiry conducted in 2009 on a sample of 1940 at-home deaths was identified (Golovin, 2010). This examined

the factors associated with at-home mortality of the general population and is particularly useful in analysing at-home mortality through Tanahashi dimensions. The most frequent causes of mortality were found to be cerebrovascular accidents (38.3%), liver cirrhosis (33.1%) and acute myocardial infarction (11.4%). Social vulnerabilities were identified, as most at-home deaths occurred among retired and disabled people (67.8%) and unqualified workers (26.4%). Almost half (46.2%) of the cases had a history of heavy drinking, the highest proportion found among those who died of pneumonia, TB and liver cirrhosis. In the accessibility dimension, proportions similar to those of the general population had health insurance at the time of death (83.1% urban, 76.3% rural) and some 45% had had access to compensated pharmaceuticals. Contact coverage was low – 47.8% of cases were determined to have had low access to health care; some 17% did not see a physician in the preceding 12 months. Emergency care was provided within acceptable waiting times in 41.7% of cases and there were deficiencies in effective coverage – a primary health-care doctor had provided patient monitoring for only 50.9% of cases. Full compliance with national protocols to establish a diagnosis was registered in only 32.1% at primary health-care level, 28.8% at specialized outpatient level and 39.1% at hospital level. Treatment was non-compliant with clinical protocols in 17.1% of cases treated in municipal primary-health care; 20.1% in rural primary-health care; 14.7% in hospital care at republican or municipal level; and 29.4% in hospital care at rayon level. At the same time, while quality of care seemed to have had deficiencies, the study concluded that only 6.6% of deaths were avoidable and death could have been prevented in 13.1% of cases if the quality of provided care had corresponded to the established requirements. The highest rates of avoidable deaths were in cases of pneumonia (50.3%) and TB (36.5%), a clear sign of ineffective coverage.

# 6. QUALITATIVE COMPONENT

This section presents the findings of key informant interviews. Findings from the provider side are presented first, followed by those from the FGs with users of health services. Each section is structured according to the five dimensions of the Tanahashi framework.

## *Key informant interview findings*

### **Availability coverage**

Key informants confirmed the existence of an extensive infrastructure of health services in the country. In recent years about 39 new FDOs have been built or refurbished and there are plans to renovate an additional 35 offices, with support from the World Bank. Through the NHIC, the Ministry of Health has also invested in supplying the primary health-care network with 100 new vehicles.

The interviews have confirmed that the major barrier to the availability of health services is the deficit in primary health-care physicians and nurses, especially in rural areas in the south. To compensate for increasing shortages, rayon FMCs arrange once or twice weekly visits to villages without their own permanent doctors. Some FGs organize mixed primary health-care teams including specialists, i.e. cardiologists or ophthalmologists visit villages to examine groups based on lists developed by the nurse.

*In our rayon about 8–9 villages do not have a physician, the nurse provides all the clinical management, the rayon family doctors go there once or twice a week. It*

*works well for planned visits, but in case of emergency the ambulance and the nurse are the only available options. The waiting time is 5–7 days, but not 2–3 months like in other countries, lines are longer for hospitalization. Manager, rayon-level specialized outpatient service*

*We lack many specialists in the hospital and they are overloaded because they serve at the outpatient specialized level too. Manager, rayon-level hospital*

The government efforts to attract new doctors to underprivileged rural areas through monetary incentives seem not to address the underlying strong reluctance to relocate to these areas. It seems that new models to stimulate interest are required.

*[About attracting primary health-care graduates to rural areas] Initially the benefits were 30 000 lei and included additional benefits to cover electricity and heating. Some doctors stayed for three years, others have returned the money and left because it is quite hard after nine years of studies in medicine to go to a place without roads and transportation. Mid-level manager, Ministry of Health*

The understaffing and low salaries have repercussions on the performance and motivation of existing staff too. One shortcoming is that salaries are not linked to the actual workload and the size of the catchment population. The normative for the catchment population is 1500 people per physician but in rural areas this often covers more than 3000 people. At the same time, Chisinau has much higher numbers of visits per person and so 1500 people per doctor seems too high. Hence, the manager of a municipal institution feels this norm should be decreased to 1200–1300 people.

*Physicians and nurses are leaving, but the workload is increasing, other people do not come, but the salaries are the same. Manager, rural health centre*

*Physicians consider their salary of 2000 lei symbolic (equivalent to US\$ 180 per month) and they will not make extra effort for this salary. Manager, rayon-level specialized outpatient service*

As for equipment and medicines, some providers saw a positive dynamic compared to the situation before the introduction of health insurance.

*There are now medicines for the PHC sector, there are consumables for lab tests. Before, we had issues with medicines and emergency services because they would*

*not take the call unless the patient was able to reimburse the cost of gasoline.*  
Mid-level manager, Ministry of Health

## Accessibility coverage

According to the opinions of key informants, the introduction of health insurance has been the best facilitating factor in access to health services. In general, decision-makers, managers and service providers alike had positive attitudes towards the introduction of the social health insurance scheme. There was consensus that this major reform has improved access to health services for a large part of the population that was formerly excluded because of costs. Key informants felt that health insurance in the Republic of Moldova has been well-designed to meet the basic needs of the population, and is more realistic and cost effective than those of neighbouring countries. At the same time, the population has acknowledged changes in the accessibility of care as some OOP payments that were common five years ago are no longer practised – for example, ambulance response in case of an emergency call was determined by the patient's capacity to reimburse fuel costs.

*We have the best system in the CIS countries, although we are the poorest, with the money we have we work wonders.* High-level manager, Ministry of Health

*Compared to other countries we have put the emphasis on a realistic package of services – a smaller part is compensated, but we provide the services we said we would.* Mid-level manager, Ministry of Health

As one key informant opined, the major benefits of the compulsory insurance scheme are social solidarity and the fact that wealthier parts of the population subsidize access for those who are poor. Simultaneously, this same principle of social solidarity frustrates the wealthier Moldovan middle class who feel that, in absolute terms, they contribute much more to the health insurance premium but still receive the same basic package of poor quality services as those who do not contribute at all.

National-level key informants and those from health facilities in Chisinau have been reticent to acknowledge that anticipated costs can still prevent people from seeking care. They said that myths rather than the actual practices of paying deter people from health care. Only managers of rayon-level facilities acknowledged that some people did not access care because they had no money for transportation to the health

facility and for other inherent costs, such as absence from work and anticipated OOP payments for doctors' consultations or other services.

In the opinions of national-level decision-makers, the current legislation for health insurance does not leave anyone without cover and, in theory, health insurance should be available to everyone through one mechanism or another. In addition, they hold that the current legislative framework brings social justice to those who should be insured by the state and those who should self-insure. The recent legislative amendments have extended state provision of health insurance to socially vulnerable categories<sup>6</sup> and poor people who are registered as unemployed. In addition, farming land owners have been granted significant reductions in their annual premiums – now paying only 25% of cost.

The managers of health institutions identified specific population categories still having difficulties with insurance coverage and thus access:

- people without a permanent residence in the catchment area (i.e. temporary residents) and who should be provided with universal access, such as pregnant women and their children who are not on the doctor's list, yet de facto live there without proof of residence;
- homeless people who are not on the lists because of a similar lack of ID and proof of residence, in reality all expenses related to emergency care provided (particularly in the cold season) are incurred by the emergency services;
- children born abroad who lack the proper documentation issued in the Republic of Moldova;
- conscripts older than 18 years.

A new practice, extending coverage to some disadvantaged uninsured populations such as homeless people, has been piloted in UTA Gagauzia and in Nisporeni rayon. The local public authorities issued a limited number of health insurance premiums intended to cover hospitalization costs for homeless people.

Key informants consider that those left without health insurance are people working in the informal sector and not the most in need. Providers felt that those who own

<sup>6</sup> Categories include: (a) children and young people whose health, development and physical, mental or moral integrity can be jeopardized by the environment they live in; (b) families that do not properly perform their obligations for children's care, maintenance and education; (c) families with no or low income; (d) people affected by family-based violence; (e) people without families, who cannot look after themselves or need care and supervision or are unable to cope with sociomedical needs; (f) families with three or more children; (g) single-parent families with children; (h) aged people; people with disabilities; (h) other categories of people and families in difficulty (Parliament of Republic of Moldova, 2010b).

land, those who do not register as unemployed, migrants or those working in the informal sector are not necessarily poor and so should be able to buy health insurance. Service providers consider that a certain part of the population still does not buy health insurance for reasons related to personal factors and attitudes towards their own health rather than the actual cost of the premium. This finding is in line with desk review findings and the following section which further suggest that whilst price was indicated as a major factor, the drivers of this reticence seem to be more complicated. Some managers admitted that possession of health insurance does not translate into receipt of the benefits to which one is entitled and extra costs are usually incurred.

*People do not buy health insurance in the hope that they will not need it. And they also know that if you have health insurance that does not mean you can solve all your health issues with health insurance only. Manager, rayon hospital*

Interestingly, providers felt that the current legislation brings some opposite inequity – for those who contribute versus those who do not. One key informant mentioned that some categories that receive state-guaranteed health benefits (i.e. police, state security personnel) should actually be contributing like the rest of the population. Another key informant felt that the current health insurance legislation gives most advantage to the rural population because they pay less for the same package of health insurance and that, in general, the uninsured population has too many benefits.

*The uninsured population had too many benefits in 2011, we hope that they are reduced in 2012, because this leads to inequity for those who buy insurance. Representative, NHIC*

Some informants acknowledged lower access to specialized outpatient and hospital care. One manager gave a personal example of how the assessment of the patient's ability to pay informally works in practice.

*As for referrals for specialized outpatients from villages, we are trying to use an appointments system for specialized services, it does not always work, but people do not wait more than 5–7 days. It is more complicated with referrals for hospital admissions. Manager, rayon-level specialized outpatient service*

*It happens to me often that the person says she just came from Italy, she has a hand full of rings and I need to provide services free of charge. People should understand they need to pay for their health. Manager, rural health centre*



## Acceptability coverage

In the acceptability dimension, key informants identified few facilitating factors and many barriers to accessing care. As a facilitating factor for increasing access, service providers mentioned the responsible attitudes of Moldovan doctors towards mother and child health. Primary health-care doctors have quite patriarchal attitudes and practice intense patronage of pregnant women and children under 5 years old that includes close monitoring and a high number of home visits regardless of insurance status and vulnerability.

For acceptability barriers, one theme emerging from in-depth interviews is that the overall acceptability of current health services is limited by people's previous experiences of health service provision under the Semashko-based model of extensive infrastructure, direct access to specialist and tertiary care and free care at the point of service. Also, a wider difference in the paradigm of access to public services and the societal value of health care.

*If we go back 25 years, the former health system influenced the mentality – people were entitled to go to see a doctor whenever and wherever they wanted, there were too many physicians, and people did not make any appointments and went to see any specialist. They were used to being entitled to everything for free because they were working class, kolkhozniks, while the middle class was there to serve them. Manager, urban health authority*

In general, key informants issued many moral judgments about those who do not seek health care, describing them as “lazy”, having “low sanitary culture and mentality”, being from “lower levels of society” and having low levels of education. The phenomenon of intolerant attitudes and social blame for vulnerability and delay in seeking care shows that health providers and decision-makers lack basic understanding of determinants of poverty and social exclusion. Service providers are judgmental regarding who should and who should not receive health coverage. One informant even suggested that patient rights should be limited and obligations extended.

*They have money for cigarettes, for parties, but not for health. Manager, rayon-level FMC*

*You have to have a very good reason to receive the social benefit package after six months when you, a young healthy man, sit home because you do not like the salary that you receive.* Manager, urban health authority

*Those who do not go to see a doctor, it is their problem. [...] I personally am against the fact that homeless people receive medical services for free.* Representative, NHIC

*The state cannot come home and provide health insurance to everyone.* Mid-level manager, Ministry of Health

*Roma do not seek care, migrate, do not follow advice, do not listen.* Manager, rural health centre

Overall, service providers place the blame for low access to health care on the *mentality* of people. Providers consider that good health's culturally low value in the personal system of values is the major deterrent in seeking timely health care and therefore presenting late for consultation. This holds for a large part of the population, especially those in the rural sector. Providers opine that people affected by poverty and "with low social level" do not understand the consequences that delaying health care will have for their own health and for the future economic situation of their families. Another cultural barrier mentioned by providers was that people tend to present only when they have symptoms and are still not used to the concept of preventive visits, despite the emphasis on prophylaxis within the Semashko health-system model. Yet, some providers admitted that low acceptability of health services is also influenced by the population's negative attitudes towards the common phenomenon of ex ante payments expected by health providers.

*We have both wealthy and poor people that do not come, it is their attitudes towards their own health.* Manager of large urban PHC

*People come to the doctor when they are brought and it is like calling the firefighters when the house is on fire.* Social assistant, rayon level

*Physicians should receive decent salaries to avoid the humiliation of informal payments. There is a stereotype in the society that physicians are the most corrupt, and it is painful because we are not the most corrupt. Because of this perception people present late, as in the oncology institute, where most people come with cancers in stage 3 and 4.* Manager, rayon-level specialized outpatient service

The range of socially excluded categories included most of the categories listed in the social welfare law, and some specific categories such as TB and HIV patients, homeless people, Roma, and migrants with severe diseases (e.g. TB and cancer) who interrupt treatment and leave the country. The consensus among key informants was that the health sector alone cannot address these socioeconomic determinants of exclusion and there is a need for intersectoral collaboration.

Managers and providers did not mention lack of confidentiality, lack of age-specific services or cultural acceptability as influences on the acceptability of services.

## Contact coverage

Contact coverage is probably one of the dimensions addressed best by key informants. This covers waiting time and appointment systems and referrals between different levels of care.

The consensus is that contact with primary care has improved greatly following the introduction of health insurance. Moreover, this has also changed the ratio between clinic hours and home visits. Before, family doctors spent more than half their time on home visits; now they spend most of their time on clinic hours, thereby almost doubling the number of patients they can see in one day. In addition, coverage with laboratory examinations has increased significantly. Key informants perceive waiting times in the Republic of Moldova to be much better than in other countries, with no or short waiting lists.

*Access is even better than in other countries, patients are seen today or within 2–3 days, not delayed for weeks. Manager, rayon-level FMC*

Providers perceive the major barrier in contact coverage to be the lack of patient discipline in scheduling and keeping appointments with both primary health-care physicians and outpatient specialized services. The managers of primary health facilities in large and small cities and in rural areas are mostly preoccupied with educating their patients to schedule appointments in advance either by phone or directly at the clinic, and discouraging ad hoc visits for non-urgent cases. Those who do not keep appointments cause unnecessary queues and waiting times. There was much discussion among managers concerning penalties for those who fail to attend

appointments, including maintaining a list of repeat offenders and refusing them the right to make future appointments by phone.

*Patients book appointments with the same specialist several times and in the end they do not come. About 15–20% do not come to appointments. Manager, rayon-level FMC*

*We want to have services like in Europe, but to act as we want, like in Moldova. Representative, NHIC*

Another barrier is physicians' administrative load. Many have higher numbers of patients than the prescribed norm and are overloaded with medical documentation that they must complete by hand as, traditionally, there are no secretarial personnel to undertake this responsibility in health facilities. In Chisinau, handwritten documentation is duplicated through data entry in an electronic system and hence family doctors there have little time for patients, acting simply as referral points for specialist visits that patients do not necessarily need.

Referrals to outpatient specialized care and to hospital are another problematic subject for providers. The previous health system granted the Moldovan population extensive access to specialized care and so a rationing reform that imposes barriers to the utilization of specialized and hospital health care has been met with resistance. Patients often perceive the gatekeeping function of the family doctor to be an imposed bureaucratic barrier, since an important part of the population believes that primary health care does not meet their needs and is of low quality. Therefore, the phenomenon of bypassing primary health-care level and gaining direct access to specialized care is ubiquitous in both urban and rural areas.

*In 2006 access to health services improved, as we got to the renowned three-square diagram – 1000 people come to see their family doctor, 100 are referred to specialists, 10 are hospitalized. In 2008 people have seen the effect of health insurance. Manager, large urban PHC*

*In theory the patient has the right to receive care, but in practice he needs five stamps, this is bureaucracy. Manager, rural PHC*

*The incompetence of some doctors makes people go to higher levels, not everyone has the financial means to do this. Manager social assistance, rayon centre*

Managers at all levels of primary health-care and specialized outpatient facilities have described in detail issues related to referrals to specialized health care – people of all backgrounds insist on access to unnecessary specialist services. At specialized level, failure to schedule appointments is a common issue too. A manager at rayon level reported that about half of the patients arrive without an appointment, and hence without a referral from the family doctor.

*Although they see that we receive those with an appointment first, they still wait and do the same next time. Although we are in the seventh year since the introduction of health insurance, patients are still not used to the idea that the family doctor is the first point of contact. Often the patients take their file and come to the rayon and pay 10–15 lei for a specialist consultation.* Manager, rayon-level specialized outpatient service

*People still wake up in the morning and decide to go directly to the specialist. Why not schedule an appointment with the family doctor and then he can decide if he needs a specialist or not? Why is it normal to schedule an appointment for the hairdresser and a manicure, but not with the physician?* Manager, urban health authority

Since insured people need to be referred by primary health-care physicians, in this case possession of health insurance is actually a barrier to accessing outpatient specialized care and, in reality, priority is given to those willing to pay out of pocket.

*Those who are insured have priority, this is what we are encouraged to do by the NHIC, but in reality those who are willing to pay are privileged, they do not stay in lines. Those who have insurance have lower willingness to pay extra. If a client comes with cash, he is received with open arms compared to those with health insurance.* Manager, rayon-level specialized outpatient service

Patients use the same practices of bypassing primary health level when they feel they need hospitalization. Family doctors are not always available, and may not concur with a patient's perception of the need for hospital care, so patients use emergency services rather than referrals in order to get to the hospital. Tertiary care is perceived to be of better quality and better-off patients persistently request or pay extra for their family doctor to refer them to Chisinau or Balti.

*To avoid waiting for hospitalization, patients prefer to call the ambulance, to avoid all the referrals and then we have the situation that about 50% of hospitalizations are based on emergency and not planned or through referral*

*from a family doctor. In these cases the ambulance prefers to over-diagnose and hospitalize overnight, to avoid repetitive calls. Manager, rayon-level specialized outpatient service*

*Health insurance is only formal; if you do not have money you do not get treated. Myself, I give money because I know I will not receive good treatment if I do not pay for it. I go directly to Chisinau because I need quality medical services. If I do not give money, I stay and wait in line, this way I choose which professor or surgeon I will go to. Social assistant, rayon level*

## Effective coverage

The key informants addressed the dimension of effective coverage to a limited extent and often as recommendations for the future rather than in relation to current practices. Several primary health-care managers in both large urban and rural areas mentioned the current emphasis on preventive work (i.e. setting and achieving targets for the number of people covered by specific screening programmes); the usefulness of performance indicators that allow a focus on the quality of health services and on improving services for the 20% in the excluded population; and implementing institutional policies to follow strictly those protocols with the highest impact on health status (e.g. cardiovascular disease, diabetes, acute diseases). One manager mentioned the good practice of quality indicators related to incentives that were piloted 2007–2009. This helped the institution to achieve screening for hypertension, follow-up and monitoring of blood pressure on a monthly basis in 15–16% of the adult population.

Primary health-care managers consider that quality of care cannot be assessed according to national protocols because they are unrealistic and do not prioritize key examinations and treatment based on the ability to pay and clinical effectiveness. National clinical protocols cannot be used as a basis for reimbursement by the health insurance either.

*Our protocols are not different to the Canadian ones, they are not realistic. What we should do is prioritize and write what is covered by the state and what should be paid by the patients if one wants those additional services. Manager, large urban PHC*

A common barrier results from people refusing long-term medications after a condition has been diagnosed. This can be due to several reasons. Only a few managers admitted that health insurance covers only part of the cost of treatment and so this is an important burden in cases of long-term need. For example, patients are required to pay 80% of the cost of medication for heart disease.

*I have people that should come and yet they do not. [Showing a patient's file] This lady has severe hypertension, I have told her many times to come to get treatment but she has not. Her husband has glaucoma, he could become blind. I told him he needs to see an ophthalmologist urgently and he has not. I have their phone numbers, I call them, yet they do not come. They do not see health as important in their life. They have health insurance as retired people, they do not have financial barriers. I asked them to sign that they refuse health care. And I have a pile of cases like this here and I call them once in a while. Manager, large urban PHC*

Also, managers mentioned unnecessary hospitalization instead of good outpatient follow-up.

*An old lady who has hypertension does not need to stay in hospital. The urban hospital X has two departments of cardiology, but cardiology is meant for those with acute conditions. A person with hypertension that sometimes is raised does not need to stay in hospital; she needs outpatient treatment and follow-up. Manager, urban health authority*

A frequently mentioned barrier to effective coverage at rayon and rural level is the high migration level that raises issues concerning the follow-up of pregnant women, children and TB patients.

## Opinions about recent legislative amendments extending coverage to the uninsured population

Overall, health providers were well aware of Law No. 128 (Parliament of Republic of Moldova, 2010a) extending primary health care and emergency care to the whole population. They were also aware of further amendments introduced in 2011 to limit the benefit of primary health care to physician consultations only; restrict the right to receive compensated medicines (since summer 2011) and continue the supply of compensated medicines to diabetic and psychiatric patients only, regardless of health insurance status. A key informant perceived this amendment as an experiment to stimulate the value of health insurance. In his opinion, people had started getting “free rides”, which deterred self-insurance. This is the reason why the NHIC introduced differentiation between packages and reduced the package of compensated medications.

*The cost of a physician’s consultation is only 20 lei, while medicines cost 2000–3000 lei, so it needs to cover the treatment as well. Social assistant, rayon centre*

*Until end of June there were some compensated medicines, now we are left with some medicines for psychiatric and neurological patients, and diabetes. Now we cannot provide hypertensive drugs if the patients do not hold health insurance. Manager, rural health centre*

At the national outcome level, leaders felt that it was too soon to consider the effect of this amendment and that statistics do not yet show changes. At the same time, the predominant opinion was that universal access decreased the quality of care – more quantity means less quality. Also, the introduction of universal primary health-care coverage increased expenditures significantly as a result of the compensated medication benefits in the 2010 amendments. However, this changed with the aforementioned restrictions introduced during 2011. Primary health-care managers have noted a slight increase in the number of visits and some institutions have seen a 15% increase in the total number of visits. Managers felt that the number of laboratory examinations and their staff workload had significantly increased. Some institutions in Chisinau have introduced waiting lists. Those with operational appointment systems and waiting lists have not seen such marked effects.



One quite interesting finding is the uneven economic effect on FHC expenditures resulting from the extension of universal primary health care. This depends on the level. The budgets of family centres in Chisinau seem to have been negatively affected – one institution determined a 15% budget decrease due to a low proportion of uninsured population and the application of a different formula for funding the insured and uninsured populations through capitation. A rayon-level FMC has seen significant increases in laboratory expenditures and the number of visits. This required money set aside for refurbishment and new equipment to be reallocated to compensate for the unanticipated expenditures and left no money to compensate personnel for the additional workload. However, a rural health centre seems to have benefited from the amendment – receiving a budget 1.85 times higher and thus able to increase staff salaries and buy new equipment. This is not a clear finding and needs further exploration to determine why some primary health-care facilities have gained and others have lost from this reform.

Probably linked to a decrease in the institutional budget, there were clear differences in key informants' attitudes towards the amendment – those from Chisinau were negative; those from rayon and rural levels were positive. National-level and large-urban managers argued that it has reduced the value of health insurance and decreased the motivation to continue self-insuring. In 2010 and 2011 this led to a decrease in the number of people who self-insured. In addition, the amendment reduced the package available for everyone and made it inequitable for those with health insurance. Managers felt that the uninsured and insured populations should be provided with different packages.

*It was an incorrect decision to provide primary health care to everyone regardless of health insurance status. I do not think there is any other country that provides such a large benefit package to the population that does not contribute at all. I think people benefiting from social welfare should not benefit from the same package as the insured population; they should receive a more restricted package.*  
Manager, large urban PHC

*There has to be a difference between insured and uninsured, a different benefit package, like in the Baltic countries and European countries, you cannot put those who pay and those who do not on the same scale.* Manager, rayon-level FMC

Conversely, the rayon and rural primary health-care managers perceived the amendment to be a good policy that extended access to people in need. People were



informed about the changes through family doctors and the population had adapted rapidly to easier contact with health care. Physicians now provide care to everyone without differentiating between insured and uninsured people.

The amendment has had little effect on emergency services. Previously, life-threatening emergencies were covered regardless of insurance status but ambulances would go to any call because it was impossible to assess the seriousness of a situation over the phone.

### **Extension of health insurance benefit for those receiving social assistance**

Health providers were less familiar with the amendment to Law No. 133 – extending the right to health insurance to those in receipt of social assistance – as social assistants are responsible for assigning state-provided health insurance based on income level (Parliament of Republic of Moldova, 2008). Some health providers confused this amendment with a 2000 law concerning social support to the population that entitled people to compensation for pharmaceuticals from republican and local funds for social support of the population (Parliament of Republic of Moldova, 2000). Most key informants felt that this provision worked poorly in practice because of insufficient coordination between social and health services, little awareness among the people themselves and because this benefit extends for only a short time (up to six months in any one year) and is limited only to those who are actively seeking work and have not refused employment. The most important shortcoming in the current formulation is that people eligible for social welfare based on income assessment are excluded if they own *any* land, whatever the surface area. This has resulted in a very limited eligible population – benefiting only two to three persons a month, according to NHIC records.

*In case of land owners, the mechanism is imperfect: people have to self-insure regardless of land area and the ability to pay. One has a lot of land and is productive, another has only land around home, but they are in equal positions. And vice versa, if people qualify in two different categories (one is a patent holder or a lawyer and owns even a small piece of land), they choose to pay the lowest premium, obviously, as land owners. Manager, urban health authority*

Even when this provision should cover all household members, this does not work in practice as the NHIC information system uses personal identification, requiring each household member to apply separately for health insurance benefit.

Social assistants and managers of social assistance facilities at rayon and rural levels were able to provide more details regarding the implementation of Law No. 133, as they need to supply information and provide this entitlement to their clients. Only three of the five social assistants participating in the study had detailed knowledge of how this amendment works in practice; they felt that the mechanism is quite restrictive and contradictory. The social assistance application form requires people to indicate whether they need health insurance but many are not familiar with how this benefit is implemented in practice. Applicants need to be registered with a local employment agency and cannot refuse employment offered. Anyone who owns land, regardless of surface area or purpose, is excluded from this benefit. Filing for social assistance is valid for only six months in any one year, and the benefit of health insurance extends only for the same period.

*A woman that benefits from social welfare came today, her husband is in the intensive care, they do not have enough to make ends meet, they have a very small piece of land that he inherited from his father and his health is too poor to work it. Since the husband is the official owner, he is not entitled to health insurance, but only her, so now she has to pay for both health insurance and hospital days. Only the first day was free of charge based on new legislation. And we have about three similar cases per week. Manager, rayon hospital*

Several assistants said that the regional NHIC representatives decide whether a person is eligible for health coverage benefit and many are screened out because they own land, hold a patent or are not actively looking for a job. Although all household members earning less than the minimum income are eligible, in reality only one person from the household applies and receives health insurance for up to six months in any one year.

Social assistants from rayon-level social assistance centres consider that the amendment has had a positive impact as it has actually helped people to access health services or health insurance that they could not afford, enabling them to spend social welfare money on other family needs. Social assistants perceived that it had the least impact on owners of land. They considered this to be quite unjust in cases where the land brings no income but is a disadvantage for the whole household. In their opinion,

people who work hard but have low incomes have fewer benefits and need to buy their own health insurance; those that do not work (therefore perceived as lazy) and are on social welfare receive free health care. Generally, few have benefited from this amendment. At rural level, social assistants had little information and thought that they should have been better informed by physicians and the NHIC.

## ***Focus group findings***

### **Availability coverage**

According to FG participants, shortages of physicians in rural areas; shortages in diagnostic and equipment capacity; and large variations in the quality of laboratory work adversely affect availability coverage, especially in rural areas.

#### **Human resources**

Depending on their residence and geographical location, participants had different experiences and differing opinions on the availability of physicians and nurses. Large-urban and small-urban residents took the availability of health services for granted and did not focus much on shortages. However, the FG participants from rural areas had mixed views and many raised concerns.

A number of rural FG participants mentioned not having a family doctor in their village. In the FGD with respondents from deprived villages one participant reported that they had no primary health-care nurse either. A rayon FMC assigns physicians responsible for specific villages, or a health centre in a neighbouring village is responsible for several villages. One participant mentioned a ration of one physician to six villages. The assigned family doctor visits once or twice weekly and is available by phone; the local primary health-care nurse manages patients and makes appointments for the scheduled visits. FG participants feel that these few days of primary health-care availability in the village do not cover their health needs and feel compelled either to phone their assigned doctor or to go independently to the rayon FMC.

*Three new physicians came to work in our village, none of them stayed for long. Now one physician works for four villages, when she is on annual leave it is a*

*disaster. My mother has had hypertension for years. I am her first doctor, because when you call the doctor she never comes. So I come and give an injection every time she has an acute episode of hypertension. Female, 46 years, teacher, rural, FG3*

*Every time I get to X rayon hospital, all the physicians sit in an office and drink coffee and tea during working hours and, if you enter, they tell you to wait because they are busy. And also, they may have experience but they should have retired a long time ago. Male, 32 years, rural, seasonal worker, FG4*

These personal accounts of episodes of accessing health care showed people to be quite disadvantaged, not only because of geographical and financial differences in access but also in the attitudes of health staff when they call for help. Often, they are put in a position of accepting a favour rather than using a public service. Respondents from rural areas without a PHC call the ambulance service much more frequently for acute cases but prefer to delay seeking care for other health problems until they have money. A participant mentioned that the family doctor would not answer calls from telephone numbers in the neighbouring village.

Some rural participants mentioned quite good availability of primary health care and visiting specialist care, even a respondent from a village categorized as underprivileged.

*We have our family doctor. He supervises all the newborns. The gynaecologist gives consultations in our village. We had a dentist but he moved. Generally we receive first aid whenever needed. We have no problems with the ambulance service, either. Female, 42 years, unemployed, FG9*

## **Infrastructure**

\FGDs have shown a large variability in perceptions about infrastructure and the technical capacities of equipment in health facilities. In some locations, respondents mentioned investment in renovating the infrastructure of both primary health care and hospital facilities during the past five years. This was supported by local public authorities or foreign investment and was appreciated by FGD respondents.

*Now we have a modern facility. Everything is brand new. It is not the mayor's office who applied for support; it is thanks to the medical staff. The renovation was financed by foreign investors. Female, 42 years, unemployed, FG9*

*Now there have been repairs at our surgical department in Riscani and it looks nice, now they also have good equipment. Female, 33 years, housewife, FG7*

FG participants also felt that diagnostic, laboratory and equipment capacities have not seen the same level of upgrade. People in all FGs perceived these to be quite limited in many villages, average at rayon centre level and best in Chisinau. People perceive large differences in the quality of laboratory work and X-ray results, so those who can afford it prefer to travel to Chisinau to repeat tests or access those that are not available in their localities.

*We do not have any equipment in the village; they can only measure blood pressure and temperature. Some said that the rayon level is also poorly supplied, so people go to Chisinau. Female, 33 years, local public authority, FG9*

*The health institutions have been renovated, new furniture is bought, but the services are the same. Female, 27 years, Chisinau, informal worker, FG5*

## Accessibility coverage

Most discussions in all FGs revolved around financial barriers and access to health care. FG participants reported that the ability to pay out of pocket and informally facilitates access to any level of care, as does possession of health insurance. Pervasive informal payments act as facilitation fees at primary health-care level but adversely affect accessibility coverage at hospital level. In addition, the value of the health insurance is significantly decreased by the additional significant direct formal and informal costs incurred.

### Opinions about health insurance

Regardless of their insurance status, FG participants had more negative than positive attitudes towards the current health insurance system. The biggest benefits were perceived to be the right to hospitalization, not having to pay for a hospital bed and costs lower than those in the early 2000s. Thus, health insurance is perceived to offer some relief from catastrophic costs. Respondents also mentioned increased access to the list of compensated medicines, especially for children under 5 years old and for patients with diabetes and hypertension.

*My father has diabetes and his insurance covers his medications, but up to now they were procured from centralized sources and, for example, there were only 25 ampoules of insulin for the rayon and that was not enough for all the patients. Now they are available and free of charge, he visits his doctor very often and daily receives the required medications. My mother has hypertension. She goes to the family doctor and receives the compensated medications. Female, 34 years, unemployed, rural, FG6*

At the same time, possession of health insurance does not guarantee that all issues are addressed. People consider that they still pay significant OOP payments in addition to health insurance at all levels and that health insurance does not cover the full costs of accessed health care. People who have health insurance see some benefit but those who need to self-insure (e.g. agricultural workers, informal workers, migrants) feel that they have to pay for health care and therefore health insurance is not useful, even at only 25% of its price. People who self-insure tend to buy cover only when they feel they will need it so there is significant adverse selection and, even in these conditions, they are not happy with the coverage. They consider health insurance a waste of money if they have not used any health services within the year covered. Some participants did not understand the solidarity principle either –they would like an insurance system that allows them to accumulate their money in a private fund for their own care rather than subsidizing the have-nots. Better-off insured patients also are dissatisfied with health insurance benefits, several participants would prefer a differentiated health insurance package for those willing to contribute more, covering an expanded package offering better quality and no OOP payments.

*Health insurance covers only the expenses for the bed, all the rest should be paid for. They have some aspirin or other cheap medicines, but sometimes they lack the cheapest vitamins, as for the rest you usually have to pay 500–600 lei. Male, 28 years, rural, land owner, FG6*

*I did not have health insurance until this year, so I bought it for the first time and I won't do it again. I bought it because it was cheap, so I wanted to see how it works. My back hurt, so I went to the pharmacy and those medicines that are really cheap, like vitamins that cost 10 lei, are compensated and they gave me a reduction of 70 bani, but those medicines that cost 100 lei and more you have to go to Orhei [rayon centre] to buy and are not compensated. Male, 54 years, rural, agricultural worker, FG3*

Those who have health insurance consider that they receive a lower standard of health care, are poorly received by physicians, face longer queues and follow a very bureaucratic patient flow with many restrictions and few benefits compared to those who pay out of pocket. Some patients choose to avoid health insurance, preferring to pay extra for better treatment. At hospital level, those who are hospitalized without insurance are perceived to receive better care although participants admitted that those with health insurance have lower expenses.

*It happened often that I said that I did not have health insurance and I can pay. The physician is happy and I am happy and I did not stay in line. Male, 21 years, rayon centre, driver, FG3*

*If you go to the doctor and show your health insurance, you are considered weird, as if you fell from the moon. Health insurance is shameful. Female, 40 years, rural, agricultural worker, FG3*

*Having health insurance does not mean you have priority. If it were so, and if people with the policy were paid attention to, everyone would buy the policy. They would know that if they had the policy they would be treated differently, now there is not much difference. Female, 28 years, rural, beneficiary of social assistance, FG7*

*We are disappointed, yes, we have friends working for state companies who have health insurance and pay just like others when they go to the doctor because they are not satisfied with the quality of the service. Female, 38 years, patent holder, FG6*

*I have no health insurance and I do not need it. Wherever you go, it's not helping you, it takes seven days, and nobody comes to see you. It is like a lottery, no point in it, I made some mathematical calculations and I realized there is no point in paying for it. Male, 19 years, rayon centre, blacksmith, Roma, FG8*

The poorest participants, recipients of social assistance, agreed that without health insurance they are barred from hospital care.

*Five years ago I went to see a doctor in a clinic who told me I have a 5cm intestinal polyp that needs surgery. Of course, the surgery is for a charge, if I do not work, I have no health insurance and no one would take me to surgery. This surgeon did*



*not ask for money, I did not give any, so he gave me advice with natural remedies and I follow them, but I suffer, it continues to bleed when I get a cold. How can I go to a hospital if I have neither money nor health insurance? Female, 56 years, unemployed, FG7*

## **OOP payments**

OOP payments are by far the most emotional and important topic for users of health services, as they are made at all levels. Those most discussed were for physician fees, pharmaceutical expenditures and laboratory tests. They were no accounts of family doctors requesting informal payments for their services. At primary health-care level, OOP payments are not perceived as a prerequisite for access to a family doctor but rather as a “facilitation fee” to avoid queues and bypass the appointment system, or to obtain a referral to a higher level of care. These amounts are relatively small, ranging from 10 lei to 100 lei. OOP payments are higher for referrals for unnecessary hospital admissions at both rayon and republican level.

*This started in the 1990s when people gave a hen, a duck and later 10 lei, now 100 and 200 lei, that's it. Male, 28 years, 4 children, unemployed, FG7*

Outpatient specialized care is accessible via a primary health-care referral. OOP payments are a prerequisite for patients who visit rayon or large-urban clinics without such a referral; an informal payment allows access to any specialist. Informal payments for specialist consultations are somewhat higher, with no difference between the cost of a specialist at rayon level or in the capital city. However, some people felt that specialists were less expensive in Chisinau. People who resort to informal networks for referrals pay lower physician fees – “special price for friends”. Some participants drew comparisons with the Russian Federation, where they receive the same specialist services for less money. Patients who bypass the established rules are willing to make OOP payments on their own initiative. At the same time, OOP payments are requested in many situations and, if a patient does not make a payment for the first visit, the specialist will refuse a second appointment.

Hospital level shows the highest OOP payments which often, but not always, determine the amount of medical attention. Regardless of socioeconomic and health insurance status, participants in all FGs mentioned that they perceived variations in medical attention after hospital admission according to whether or not they had made OOP payments. The amount varies according to the type of service needed. The

most expensive are highly specialized surgeries (neurosurgery for stroke, oncology) –people had been asked for several thousand lei for surgical services and perceived these to be catastrophic costs. Deliveries usually incur a standard OOP payment that determines not necessarily the quality of care but the physician’s attitude during delivery, and provides an assurance that “everything will be done well”. For hospitals at rayon, large-urban and national levels, participants gave examples of OOP payments being negotiated in advance for planned surgeries. Once again, comparisons were drawn with similar services provided at much lower prices while working in the Russian Federation, even without health insurance. Health insurance usually covers the hospital bed and some other costs, but the treatment and informal cost of surgical services is quite high, deterring many poor people from using hospital services. Even those with health insurance and all the necessary referrals get into debt. Some participants acknowledged that not all physicians request or expect money and some even refuse the offers.

[Account of a husband of a woman who fell from the loft stairs and seriously injured her spine]

*They took her to the rayon hospital and they didn’t know what to do and she was given some injections. One of the doctors referred us to the XX hospital in Chisinau, we found the transportation and paid 500 lei, because the rayon hospital car was available only twice a week. My wife was not insured and the doctor told us to buy the health insurance otherwise the costs would be too high. We bought the health insurance premium with a reduced price of around 1000 lei as a special price for farmers. The only savings that we made with the health insurance was the cost of the bed in the hospital that was offered free of charge and we had to pay for all the rest out of pocket (the treatment should have been covered by health insurance).*

*The third day she underwent a surgical intervention, but there was a really interesting thing: unless you put some cash in their pockets, they don’t even look at you, they just keep you in the room continuously and they don’t even come close to you and don’t even check on you. I asked everybody in the room how much they paid for surgery and everybody paid as much as they could, we were lucky that the brothers of my wife are working abroad, they have sent us money. The operation cost us €300. I noticed an immediate change in their behaviour after we paid, they looked after her, came regularly to check on her. She stayed for a week in the resuscitation department and the workers from there also were expecting to be paid. I paid 200 lei per person to the workers from that department. Total around 5000 and something lei. We are the ones who make them act like*

*this. They start by saying that there is a schedule and you have to wait for your turn, but when you pay things move very fast. When I go to children's hospital with my child I pay for all the services, but I can also leave some money on the table. If you go downstairs to the payment office, when you come back the doctor is already busy and you have to wait, it is easier to pay him/her directly. For the birth of my two children, I gave money, nobody forced me, and I gave 5000–6000 lei with all my heart. Male, 42 years, 4 children, rural, land owner, FG6*

*When I was hospitalized, there were some people coming from the city who were telling us that we shouldn't even have thought to pay since we had health insurance, there was a sort of campaign, everybody was signing an informed consent [therefore aware that they should not pay out of pocket for anything] but I was paying anyway to assure myself that everything would be fine, I was very worried and I just wanted to know that everything would be OK. Female, 31 years, rayon centre, housewife, FG6*

OOP payments differ according to the ability to pay and participants mentioned that better-off patients establish precedents for exorbitant expectations of poorer people. However, the poorest people mentioned that they can access a physician's services for free. Unavoidable OOP payments are charges for laboratory work and, most importantly, pharmaceutical expenditures.

At primary health-care level, OOP expenditures for the costs of elective laboratory and imaging tests and, most importantly, the cost of pharmaceuticals are much higher than those for physician fees. For laboratory tests, nurses receive an extra 10–12 lei for blood collection. While this is not high, many people are unnerved as the charge is required in addition to the official fee for a diagnostic test. Pharmaceutical OOP expenditures are significant – people feel that the cheapest medicines are compensated but the most expensive are not, and physicians do not prescribe treatment based on the ability to pay. The consequences of the burden of large OOP expenditures for pharmaceuticals are discussed in the section on effective coverage.

Expected and incurred OOP expenditures lead to financial barriers to accessing health care – people resort to self-treatment, access health care intermittently, delay seeking timely care and delay and/or avoid planned surgeries. Participants mentioned that family doctor and emergency services may be accessed without payment, but not hospital services. Hospital services are still expensive and can push rural patients into debt that drives them to seek help from their extended families, especially relatives

working abroad. Poor patients are sometimes obliged to sell their belongings. For example, one of the beneficiaries of social assistance had to sell a cow in order to provide his child with the necessary surgical intervention.

*Quality medical services are very expensive, we cannot afford to undergo all required examinations and finish a recommended treatment, and we do not have the means for that. Female, 28 years, rural, housewife, FG7*

In another adaptation to the current model of service delivery, even poor and uninsured patients try to avoid what they perceive to be redundant levels of care, where OOP payments are expected but the service providers are unable to solve the problem. For example, such patients avoid primary health care and specialized outpatient care at rayon level and try to get to Chisinau to access specialist consultation, all the necessary laboratory and diagnostic tests and the recommended treatment.

*I do not trust the paediatrician here. Once my child was coughing heavily and I went to the rayon and she gave me treatment that did not work, a week later it was the same person, and I paid her and still no use. I took my child and I came directly to Chisinau to XX hospital, got the doctor outside for a two/three words talk and they cured my child in three days, huge difference. At XX Hospital I already know the doctors, I give 50 or 100 lei, but I have confidence in them. Male, 35 years, rural, freelance, Roma, FG8*

Those with very limited ability to pay resort to self-treatment and natural remedies, even when medical attention is required. This often happens when patients have had previous experience of traumatic delays when seeking medical attention in acute circumstances. Some resort to loans to pay for unavoidable health care and pay them back over time.

*I treat mostly by myself at home, I have four children and I have to stay at home with them as, first of all, I don't have anybody to stay with my children. But it happened once that I had to take out my tooth and they said, "no dear, the insurance policy doesn't cover stomatology" and I had to take the tooth out on debt. I went to the dentist and asked to take the tooth out on debt, and then I came to him and said, "Mr. X, here is the money I owed you". It happened in the rayon centre, my tooth ached and he agreed to take it out without payment, that man helped me but I owed him money and as I am conscientious person I repaid that debt when I was able to. Female, 33 years, single mother, 4 children, FG7*

*I don't know for sure, but having five children and a very difficult situation I know that there are certain persons who have the right to get some medicines free of charge. Anyway I didn't benefit from anything like that, I didn't get anything free of charge, I was given only on debt, i.e. when you have money, you will return and when I didn't work and didn't have money to pay back I was derided.* Female, 54 years, rural, 5 children, housewife

## Acceptability coverage

According to FG participants, delays in seeking health care adversely affect acceptability coverage. These may be due to competing needs for livelihood, providers' expectation of OOP payments, and poor provider-patient interactions. Sex, age and poverty have also been noted as limiting factors.

FGDs confirmed that people with mild symptoms sometimes delay seeking health care until they are at a very late or advanced stage of disease. Many rural participants identified opportunity costs linked to their main source of livelihood – farming (i.e. demands of seasonal work and the need to postpone health care until the cold season). Others mentioned that it is a characteristic of rural agricultural workers that they do not seek care until late.

*It often happened that I treated myself with herbs. I had a stomach wound for 15 years and I was treated with herbs. I had no time to spend in the hospital, a lot of work in the fields. To leave the sowing in springtime and stay at the hospital? Sometimes there is only one day delay and the crop is not the same.* Male, 49 years, rural, agricultural worker, FG6

*I have backache, but I don't go, no money, when it becomes complicated I call the emergency. But if we think of Russians, they immediately go to the hospital if something is wrong, people from the countryside do not react immediately.* Female, 31 years, rayon centre, housewife, 3 children, FG6

*I stayed for 10 days in the hospital, I felt like I was in jail.* Female, 39 years, rural, agricultural worker, FG9

In line with general evidence, more men than women do not like doctors and health facilities and try to avoid contact for minor problems. They do not like encounters with doctors, do not trust them and so delay care and use emergency services.

*When I feel sick I do some sport, drink tea-like infusions, I have never taken pills. I am not as afraid of being beaten as I am afraid of injections. Male, 50 years, rural, informal construction worker, FG5*

Some participants mentioned that older people are more likely to be refused health care, because of their poor prognoses.

*My father is 78 years old and before Easter he was feeling sick. We called the family doctor to his place and the ambulance came, but they refused to take him to the hospital because they saw he was old. So we took him by ourselves to the rayon hospital and waited for six hours for someone to see him. But they refused because we did not have a referral. So we took him to Chisinau, where he was hospitalized for a week then we took him home. Female, 51 years, rural, employed, FG9*

The attitudes of doctors who are dependent on informal payments also create a bad reputation for health services. At the same time, young specialists are thought to treat people (especially vulnerable populations) better, attempting to understand a person's situation and not apportioning blame.

Rural participants also indicated that overall physician–patient interactions are much better in large cities (Chisinau, Balti, Bender). Doctors with patronizing or simply unpleasant attitudes are a barrier for many rural people and they feel the attitudes of health staff at rayon level are much worse than in Chisinau, so they prefer to bypass them. However, some of the most vulnerable participants noted positive accounts of health staff showing empathy. Some participants also empathized with the demands on health staff and showed understanding of their workload, competing pressures and low salaries.

*When I was discharged from the maternity hospital my husband could not come to take me home and could you imagine the chief of the department, a nurse and hospital cleaner paid for the taxi which took me home? Female, 33 years, 4 children, beneficiary of social assistance, FG7*

*There are responsible doctors ... even our doctor is a very good one ... but not everyone is like her, because some are working for money, others out of pleasure. There is one more thing: there are many patients and districts. I have an acquaintance who works as a nurse, she is young and works for pennies, and she*

*has a lot of work. She is called at any time day or night and it is normal that she is moody. But when patients pay they become very demanding and she has to deal with that.* Female, 20 years, rural, informal private teacher, FG5

Another barrier to the acceptability of health services is the perceived lower quality of care at primary health-care level and in rayon facilities. Many participants felt that most competent and experienced physicians work in Chisinau. A lack of trust in some physicians drives patients to seek a second or third opinion; often, they are told that the prescribed treatment is not correct. People also seek second or third opinions for test results and diagnoses, repeating tests at a higher level of care and usually getting different results. One example was an extreme case in which a sick child and his/her medical records were taken from a rayon-level hospital for a second opinion in Chisinau, returning the same day without notifying any of the local health staff.

*People should go to the diagnostic centre [national level] instead of going to the hospital [laboratory] because the doctors are more competent there, this means that it doesn't depend on the equipment but on the person who reads the results. It happened to me, I had the hormone test at the Oncology Institute and at the Republican Hospital, the results were different in each case, I paid 300 lei, they did not give me the money back even though they made a mistake. The doctor said to make the tests again because these kinds of results are impossible in general, they cannot be possible in medicine and for any person.* Female, 27 years, large urban, English teacher, FG5

Some participants found hospital conditions unacceptable and, even when hospitalization was indicated, preferred to receive treatment on an outpatient basis in order to reduce the risk of nosocomial infections and avoid poor-quality hospital food.

Societal stigma for beneficiaries of unemployment benefits and those filing for social assistance was registered among FG participants. These were shown in personal experiences as well as community and social assistants' attitudes towards those receiving social assistance.

*I started receiving social assistance when this service was first implemented, I received it for half a year, it was two years ago, after half a year I had to re-register my documents, I went to the mayor's office and they had to visit me at home, they asked me where my husband was working and I told them that he was going to Odessa for work and they said "your husband is working in Odessa, he brings you*

*money and you want social assistance, aren't you ashamed to go begging?" and they said the same to one of my neighbours whose husband works in Moscow. I didn't prepare my documents and where else can I go? Female, 26 years, rural, housewife and informal worker, FG5*

*There are people who do not work, they had land and sold it and registered with the unemployment agency. Let's all sell our land and receive benefits. Male, 54 years, rural, agricultural worker, FG3*

## Contact coverage

According to FG participants, access to family medicine and to emergency services has improved in the past five years. They consider that contact coverage is adversely affected by limited competencies at primary health-care level, the gatekeeping function of family doctors, and restricted access to specialist care and hospital services.

Access has improved over time and respondents feel that it is quite easy to get to their family doctor, but there is a perception that limitations in their competence and function mean that doctors have a reduced ability to cover many health needs. Care and attention depends on the personality of the physician. The uninsured group mentioned good access and one participant mentioned that the family doctor will make home visits even during the night.

Many FG participants mentioned that their family doctor practice had become quite strict about appointment systems and referrals for specialized care and that some PHCs do not take ad hoc visits. However, they noted that the appointment system does not work well in practice – they have to wait extra hours to see a physician, even when they have an appointment and even in emergencies.

An example from a village without a resident doctor shows the positive practice of a nurse organizing the local primary care practice.

*Our nurse is good. She calls and tells us when we need to have regular medical check-ups for our children. She tells us when the family doctor comes to our village. She tells us not to eat before a urine test. There are 500 inhabitants in our village and she takes care of everything. She makes the list of visits: 15–20*



*persons per day. The doctor visits our village once every two weeks, but everyone in need manages to see the doctor on that day. If you tell her that you cannot come she would make you an appointment for another day. But people do not miss appointments. It is not convenient to go to the neighbouring village for lab tests. You have to pay 5 lei in one direction and 10 lei in both directions. And you waste a lot of time. It is more convenient to come at 10 a.m. when the doctor comes. Until 11 a.m. all the tests are taken.* Female, 39 years, deprived village, agricultural worker, FG9

FGDs registered quite high numbers of respondents who have used emergency services in recent years, especially in rural areas. Many noted that the ambulance usually takes every call but practices vary – in some villages the primary health-care physician is required to confirm the need for an ambulance. The ambulance service in rayons has become quite accessible and is the primary point of contact for many uninsured groups such as beneficiaries of social assistance, informal and agricultural workers. These groups had few complaints about the emergency service. Several accounts mentioned OOP payments of 50–100 lei to reimburse fuel costs but it was noted that the ambulance service has improved in the past five years, is free of charge and arrives more quickly.

*When the ambulance came to take me to the maternity hospital in Causeni, I paid 100 lei, as though I was calling a taxi.* Female, 26 years, rural, informal worker and housewife, FG5

However, there were cases of ambulance staff refusing to attend; of patients brought by ambulance being forced to return home because emergency hospitals repeatedly refused to accept them; and of patients taking public transport and self-referring to tertiary care. Some respondents were displeased with the quality of work in cases of emergency surgery.

FG participants perceive referrals between levels to be a problematic area – PHCs restrict access to the specialized level but, when they are absent in the rural area, it is also difficult to access higher levels of care. In such cases, those who get to rayon level face longer queues and sometimes spend several days travelling to appointments and visits and to obtain all the necessary tests and laboratory work required before they can see a physician. Having expended so much effort to obtain care that is not available in their own village, people become discouraged and either resort to self-treatment; delay or refuse care altogether; or use contacts to ensure that appointments are scheduled conveniently. Better-off patients prefer to go directly to Chisinau. Sometimes, patients

who have not built personal relationships with their doctor use informal networks to obtain a recommendation for specific primary health-care doctors or specialists; resort more frequently to informal financial incentives; and generally pay higher amounts for their consultations.

Another inconvenience reported by participants is that many laboratories collect samples before 10.00, requiring many out-of-town patients to undergo the stress of travelling the day before and queuing separately to submit all specimens and avoid the need for several trips. Overall, it is felt that services are not well-organized; are quite inconvenient for patients; can be duplicable and are not cost effective. This drives people to pay in order to avoid restrictive policies and bureaucracy.

*The first time I faced a problem was when I underwent a general medical check-up, I was sent from one room to another, I needed some health certificates for my job. I underwent fluorography and tomography tests three times in one week, what else I can say?* Male, 41 years, large urban, informal home improvements, FG5

At the same time, patients in rayons feel that physicians follow some internal policies that discourage referrals to Chisinau and encourage referrals to rayon level, in order to retain NHIC funding. Those who can afford it self-refer to Chisinau because they perceive the quality of care to be bad at rayon level.

*I did not succeed in seeing a doctor. When I went to the rayon hospital they told me to wait a week for a consultation. I have a brother here in Chisinau, he told me: "come to Chisinau, we'll go to a private medical institution and you'll pay for the consultation".* Female, 54 years, public employee, deprived village, FG9

## Effective coverage

FG participants perceive that effective coverage is adversely affected by lack of trust in physicians; fear of misdiagnosis; a range of barriers to access to medicines (including cost, prescription validity times, perceived corrupt practices); financial implications, including opportunity costs (e.g. lost working time). A preference for home remedies and 'alternative' medicine amongst some of the population has also influenced effective coverage. As highlighted in the previous section, reported financial and geographical barriers to referrals also impact effective coverage.

The frequent lack of trust in physicians' advice and the perception that medical practice is of low quality are mentioned in previous sections. These certainly influence the level of effective coverage. One FG participant mentioned that he is only 20–30% confident in his physician's advice and prescribed treatment. The tendency to shop for medical advice means that patients receive quite different prescription lists and medications. This increases their scepticism about the effect of many conventional treatment regimens and affects adherence to the prescription. Mothers have complained about over-prescription of antibiotics for their children. Sometimes, patients who feel that a treatment is not working request a referral to national level.

*When I stayed in hospital with my child they permanently changed the medicines, like doing experiments, let's try this drug, let's try this drug, another drug, let's try plasma. I noticed that the temperature was the same, it did not drop but was rising higher. Male, 28 years, rural, unemployed, 4 children, FG7*

*In 2006 I had a health problem with my nervous system. I had problems with my back and nobody could provide me with the correct diagnosis. I was changing doctors and I had to pay all of them and that lasted for a month. I was carrying a bag of medicines and from then on I refused to visit doctors. The time has passed and the nervous system has got calmer. I lost my trust in doctors and I don't want to have any business with them anymore. If I have a health problem I call a known doctor or pay cash. Male, 35 years, rural, land owner, FG6*

Participant's biggest fear is unnecessary surgery. Several mentioned incorrect diagnosis of appendicitis and avoidable surgery for appendicitis.

*Around two years ago my son had pains in his stomach, we went to the rayon hospital and we were told that it was appendicitis. He had the surgery in the end, but he didn't feel good and we took him to the Mother and Child Hospital. The doctors told us that he did not need the surgery and it was not appendicitis. There was nothing serious wrong with him, but they cut him. Male, 37 years, rural, land owner, FG6*

The first important theme emerging from the FGs is lack of adherence to treatment with medicines prescribed at primary health-care and outpatient levels. Pharmaceuticals are quite expensive and people have insufficient funds to buy a whole list of prescribed medicines. In such cases, several strategies are employed to cut costs. One strategy is to delay full treatment until all the money is available; another is to buy the listed

drugs selectively, using varying and quite different criteria. Some people try to buy only the compensated medicines, others do the opposite by excluding the cheapest and buying the most expensive, as they consider them to be the most efficient. One participant mentioned that she buys only the antibiotic for her child's acute respiratory infection; another said that she does not buy the antibiotic because it is toxic and unnecessary. Other patients shorten the treatment time (e.g. from two weeks to only one).

*I did not buy all the medicines prescribed, I have a friend who works at the pharmacy and she made changes: instead of this one medicine take this one, and so on. Not cheaper, but more effective. You have to simplify the list of medicines, because they prescribe too much. Male, 32 years, rural, seasonal worker, FG4*

Users of health services perceive compensation of medicines to be an imperfect mechanism. In general, respondents felt that the system works well for hypertension and diabetes in retired people who cannot afford to buy their own pharmaceuticals. The requirement to reapply monthly for these prescriptions disciplines patients and enables monitoring of their conditions. However, respondents noted that medicines have become more expensive in recent years and compensation has reduced. Another shortcoming is the time limit on compensated prescriptions. These are valid for only two weeks and so may expire before a patient has the means to pay. In such cases, the patient must return to the PHC for the fairly long process required to obtain another prescription. There is a widespread perception that the NHIC funds the cheapest medicines and those that are most expensive are not included in the compensation mechanism. This is a valid point as the NHIC's current compensation system covers more of the cheapest drugs and expensive drugs have a low compensation rate. Yet, physicians tend to prescribe more expensive drugs and so people do not benefit from the compensation.

*My mother has diabetes and hypertension. She receives three medicines for hypertension for free and something for diabetes for free as well. Female, 36 years, small urban, Roma, FG8*

*My mother is hypertensive, when she has money she receives the treatment but she cannot afford that all the time. At the moment she doesn't have money and she doesn't take the treatment, she has two of the prescribed drugs but that is not enough. She buys medicines when she runs out of them. They are prescribed*

*for free but when you buy them you need to pay a part of the cost. Actually, they should be free because on the network they are registered as free but when you go to the drugstore they say it is not for free and they can provide it for half the price. I personally go to the family doctor and she checks her listing of free or discounted drugs and she prescribes and underlines which are free and which are not, but they are not fully compensated. Male, 41 years, large city, informal worker, FG5*

The population perceives a collusion between pharmaceutical interests and physicians' prescription practices. Several FGs mentioned that many physicians send patients to buy medicines in certain pharmacies and of specific brands that pay a fee for sales. The collusion is based on physicians issuing recipes with their names; in small cities pharmacies will refuse to sell some medicines if they do not recognize the physician's stamp. According to participants, physicians receive monetary incentives to provide certain more expensive (rather than the cheapest) brands. There was also some suspicion of illegal importation and selling of pharmaceuticals.

*There are medicines against flu that are domestically produced, prepared in Chisinau by Farmaco which cost 1 leu and something, but they recommend you buy the German ones which are 9–10 lei. They recommend the most expensive drugs, because they get some benefits. But I go to the drugstore with my husband and look for the active component of the drug and we can see that the same medicine can be bought with 20 lei while they prescribe its version of 80 lei. Female, 56 years, urban, unemployed, FG5*

*I would take what my family doctor prescribes, because those from the rayon level... The pharmacy at the corner of the hospital belongs to the head of the outpatient specialized service. They write recipes that need to be filled at that specific pharmacy, so that he has profit. Female, 39 years, 5 children, land owner, FG9*

A second problem regarding adherence to treatment is specific to rural people who claim that they cannot follow treatments because of lack of time. This is indicative of competing priorities for maintaining a basic livelihood.

*Sure, my arms and legs ache and I bought a lot of medicines but I didn't use them. I have no time. In the morning I go to work, then in the fields to cultivate the land, when I am back home in the evening I don't think of medicines. Male, 37 years, rural, self-employed, FG6*

*I had a broken leg. My leg was in a cast. When I was in pain, I put it in a cast, when it didn't hurt I took the cast away. The doctors advised to keep the leg in the cast for a month. But I took it off, because I had a lot of work to do. Female, 39 years, rural, 5 children, land owner, FG9*

The third type of barriers for adherence to treatment are related to personal convictions against taking chemicals and there is a flourishing culture of alternative remedies, natural herbs and homeopathic medicines. Some (especially urban) parents are proud to have refused vaccinations for their children but those in the country tend to follow physicians' advice on vaccination.

*F6 – If I go to the doctor and he prescribes me antibiotics, I don't give it to my children I select only those expectorants prepared based on natural extracts and exclude all the rest. I don't trust even vaccines. I vaccinated my children only at birth. I officially refused it.*

*F1 – I also refused the vaccination, since my child was 2 years old. I have consulted many doctors on this and, of course, they recommend vaccination but they don't give it to their children.*

*F5 – I vaccinated my children. By the time the information gets into the countryside, it is outdated in the city. Three mothers of young children, informal workers, FG5*

There were many discussions about renouncing evidence-based treatment in favour of tea, herbal remedies, immunity boosters, home remedies and vitamins. These are not necessarily less expensive than pharmaceuticals and some herbal teas have become more and more expensive as demand has grown. Some patients claim that evidence-based medicines do not effectively address the causes of ill-health and have side effects with important consequences for the kidneys and the liver. Often, this is summed up in the phrase "my body rejects it", a notion supported by a large proportion of physicians too.

*They gave me aspirin, but that's poison, it is an acid. But for 10 years the family doctor has been saying, take aspirin; take aspirin with a lot of water. I told her that I felt bad, because it was not suitable for me, because I had reactions to that. The only thing they did was to refer me to a rheumatologist, neurologist, I was X-rayed. Female, 56 years, large urban, housewife, FG5*

*My neighbour had diabetes. She bought a pack of herbs for 175 lei. When she came home we read the information: turnip cabbage leaves, pod leaves,*

*mulberry leaves, raspberry leaves, strawberry leaves. While reading it, we burst into laughter. You know, my neighbour doesn't buy it any more. It is too expensive to pay 175 lei each month. Instead, for two years, she has collected all these leaves and dries them. Then she adds 1 teaspoonful of herbs per 1 litre of boiled water and she also adds sugar. She prepares her cure herself. Female, 54 years, rural, agricultural worker, FG4*

*I take natural remedies, natural vitamins, I was recommended to take them by some acquaintances who have medicines prepared from herbs. But it is very expensive. When I first took the treatment for half a year it cost me 5000 lei, but now I pay 1000 lei per two months since the situation is not that severe anymore. Female, 20 years, house cleaner, suburb, FG5*

## **Effects of recent amendments to increase coverage by health services**

Many, but not all, FG participants were aware of the changes entitling everyone to primary health care regardless of insurance status and that a certain benefit package covers everyone, including those who are not insured and poor people. Some FG participants were aware that changes to exclude compensation medicines for the uninsured were introduced in 2011 and that uninsured poor people can access emergency care for free. Some mentioned that the poorest uninsured people can access some church-related private clinics.

*In our village there is a poor man who works by day. One day I saw him by the outpatient department and I asked him if he needed any help. He said that he had received what he needed, the doctor prescribed him something. He didn't pay anything. So, it means that they help the poor. Male, 56 years, rural, agricultural worker, FG9*

At the same time, many participants in all FGDs cited several reasons why these changes had not made a big difference. Particularly those from uninsured FGs reported that physicians were still expecting at least some informal payment for their services. Other participants mentioned that free-of-charge access to physician consultations did not solve much of the problem, as none of the medicines is fully compensated and

prescribed treatments are still expensive for the uninsured population. Respondents agreed that either health insurance or money is required in order to access more than primary health care.

The reduced price and extended time of farmers' health insurance premiums was widely known among agricultural workers and rural inhabitants generally, regardless of FG. Yet, many uninsured agricultural workers did not know anyone in their community who bought health insurance. As mentioned in the previous section, the purchase of health insurance was not attractive to many as they have direct or anecdotal experience of paying significant OOP amounts in addition to the health insurance premium. Participants' economic assessments had led them to decide that health insurance made sense only in cases of hospitalization, otherwise it was cheaper to pay the physician directly and obtain better quality of care. However, some of the self-insured agricultural workers intended to continue buying health insurance as it guaranteed access.

*I am going to continue to buy health insurance, because without health insurance you have more problems, and if you do not have health insurance you can be sent home. Male, 54 years, rural, agricultural worker, FG3*

The extension of access to health insurance for those benefiting from social assistance was the amendment least known to FG participants. Some knew that those registering with an unemployment agency were eligible for this benefit but not everyone received it. In the FG including those receiving social assistance, not all participants had health insurance and one had had to buy health insurance before hospitalization. An unemployment agency had told one respondent that they had run out of health insurance premiums. In general, the FG findings suggest that social assistants are not proactive in promoting their clients' interests and, for many of those eligible, the FG facilitator was the first person to have told them about their entitlement to health insurance.

*No-one explains anything to us, even regarding documents for social assistance (application for social assistance) – he comes, reads it through and always says that it is not worth writing it as it will not be accepted. My wife has health insurance for life, because she has four children. Male, 28 years, rural, 4 children, unemployed, FG7 [participant's emphasis]*

*...and I have five children and I never heard about it... Female, 54 years, rural, housewife, 5 children, FG7*



Those who had received free health insurance knew that it is available only for six months and OOP payments are still required to access health services. The ambulance service is the exception and is quite accessible and some patients are charged less because they explain to physicians that they cannot afford treatment. Table 37 summarizes the qualitative research findings on the supply and demand sides of health services.

**Table 37. Comparison of supply and demand/need side findings**

Coverage	Supply side (key informants)	Demand side (population)
<b>Availability</b>	<ul style="list-style-type: none"> <li>• Extensive infrastructure with investments in renovations and vehicles</li> <li>• Shortage of primary health-care physicians and nurses and geographical inequities</li> <li>• Overworked and ageing health staff</li> </ul>	<ul style="list-style-type: none"> <li>• Good infrastructure and renovation of health premises and vehicles</li> <li>• Outdated and insufficient diagnostic capacity in rural areas and rayon centres</li> <li>• Shortage of primary health-care physicians and nurses, but compensatory mechanisms of visiting doctors are in place</li> <li>• Quality and competencies of health staff not improving over time</li> </ul>
<b>Accessibility</b>	<ul style="list-style-type: none"> <li>• Health insurance has improved access for a large part of the population, is well-designed, realistic and has decreased OOP payments</li> <li>• Current legislation does not leave anyone without cover</li> <li>• Those not most in need are left outside state health insurance and the system is inequitable for those who pay more for health insurance but receive the same services as those who do not</li> </ul>	<ul style="list-style-type: none"> <li>• Health insurance has decreased costs of hospitalization and primary health care</li> <li>• Health insurance does not guarantee access and does not cover all costs</li> <li>• All population categories perceive input-output ratio to be quite low, discouraging people from buying health insurance</li> <li>• Health insurance does not cover the cost of medications (except those for diabetes, hypertension) and, usually, the cheapest medicines are compensated</li> <li>• Health insurance is a barrier rather than a facilitator for quality care and good experience with a doctor</li> <li>• OOP payments remain pervasive at all levels of care – facilitators of better and more rapid referrals at primary health-care level but prerequisites for hospital care, still sometimes leading to catastrophic costs</li> </ul>

<b>Acceptability</b>	<ul style="list-style-type: none"> <li>Population's unreasonable expectation of "free and quality health care for all" inherited from USSR</li> <li>Health has low priority</li> <li>Perception of corruption and OOP payments</li> <li>Stigmatization of poor people</li> </ul>	<ul style="list-style-type: none"> <li>Delays in seeking care due to competing priorities, especially in the rural population</li> <li>More men than women dislike doctors</li> <li>Rural people do not like rayon-level doctors because of their bad attitudes towards them</li> <li>Stigmatization and social exclusion of poorest people</li> </ul>
<b>Contact</b>	<ul style="list-style-type: none"> <li>Increased number of visits and shorter waiting times for primary health care, longer waiting times in rural areas without a physician</li> <li>Low patient discipline in making and keeping appointments</li> <li>Bypassing the current referral system through primary health care, leading to overuse of specialist services and of ambulance to gain hospital admission</li> </ul>	<ul style="list-style-type: none"> <li>Easier access to primary health care but perceived low quality of care</li> <li>Stricter appointment system but waiting times still significant</li> <li>Restricted referrals and substitutive use of ambulance services</li> <li>Organization of service delivery still bureaucratic and for the convenience of the provider rather than the client, OOP payments are necessary to secure shortcuts</li> </ul>
<b>Effective coverage</b>	<ul style="list-style-type: none"> <li>Monetary incentives linked to performance indicators improved clinical outcomes but were abolished in 2009</li> <li>Clinical protocols are not useful because they do not prioritize benefit packages</li> <li>Too few compensated pharmaceuticals</li> </ul>	<ul style="list-style-type: none"> <li>Distrust of physicians' prescription practices</li> <li>High cost of pharmaceuticals leads to treatment interruption, delays or selective administration</li> <li>Compensated medicines are the cheapest, where compensation does not make sense</li> <li>Booming pharma business and collusion between pharma interests and physicians' prescription practices</li> <li>Personal dislike of evidence-based pharmaceuticals and return to alternative and natural remedies, refusal of vaccinations and antibiotics</li> </ul>
<b>Amendment for universal coverage with primary health care</b>	<ul style="list-style-type: none"> <li>Entitlement to primary health care and emergency care leads to increased use, increased costs of laboratory work, strained budgets and overburdened staff</li> <li>Free primary health care discourages self-insuring practices, and is inequitable for those who pay for it</li> </ul>	<ul style="list-style-type: none"> <li>Aware of the change</li> <li>Limited effect because it covers only physician cost, which is quite small, but the largest expense of pharmaceuticals is left out</li> <li>Physicians still expect some informal payment, so not entirely free</li> </ul>
<b>Amendment for health insurance benefits for those benefiting from social assistance</b>	<ul style="list-style-type: none"> <li>Less familiar with exact provisions and mechanism</li> <li>Little impact, because of restrictive provisions and screening out of land owners regardless of poverty level</li> </ul>	<ul style="list-style-type: none"> <li>Some of those eligible were unaware of their right to health insurance</li> <li>Less familiar with exact provisions and mechanism</li> <li>Even those aware of this right thought it had limited availability</li> <li>Covers only six months per year in cases of continuous unemployment</li> </ul>

## 7. BIBLIOGRAPHY

Atun R et al. (2008). Moldova: health system review. *Health Systems in Transition*. 10(5):1–138.

Balabanova D et al. (2004). Health service utilization in the former Soviet Union: evidence from eight countries. *Health Services Research*, 39(6 Pt 2):1927–1950.

Balabanova D et al. (2012). Health care reform in the former Soviet Union: beyond the transition. *Health Services Research*, 47(2)840–864.

Berdaga V, Stefanet S, Bivol O (2001). *Access of the population of the Republic of Moldova to health services*. Chisinau, Gunivas.

Bivol S, Scutelnicuic O, Parkhomenko J (2010). *Evaluation of services of prevention of HIV mother to child transmission in the Republic of Moldova*. Chisinau. Unpublished report.

Bivol S, Scutelnicuic O, Vladicescu N (2010). *Women's vulnerability to HIV and AIDS in the Republic of Moldova* Chisinau, Elan Poligraf SRL.

Cace S et al. (2007). *Roma in the Republic of Moldova*. Chisinau, UNDP Moldova (<http://www.undp.md/publications/roma%20report/Roma%20in%20the%20Republic%20of%20Moldova.pdf>, accessed October 2012).

Ciocanu M (2007). Expertiza calitatii serviciilor spitalicesti prestate persoanelor asigurate [Quality assessment of hospital services provided to insured persons]. *Sănătate Publică, Economie si Management în Medicină [Public Health, Economics and Management in Medicine]*, 5(20):56–60.

Commission of the European Communities (2009). *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Solidarity in health: reducing health inequalities in the EU*. Brussels ([http://ec.europa.eu/health/ph\\_determinants/socio\\_economics/documents/com2009\\_en.pdf](http://ec.europa.eu/health/ph_determinants/socio_economics/documents/com2009_en.pdf), accessed June 2012).

COWI, Danish Institute for Human Rights (2011). *Study on homophobia, transphobia*

and discrimination on grounds of sexual orientation and gender identity. *Sociological report: Moldova*. Kongens Lyngby, Consultancy within Engineering, Environmental Science and Economics & The Danish Institute for Human Rights ([www.coe.int/t/Commissioner/Source/LGBT/MoldovaSociological\\_E.pdf](http://www.coe.int/t/Commissioner/Source/LGBT/MoldovaSociological_E.pdf), accessed February 2012).

EBRD (2007). *Life in transition. A survey of people's experiences and attitudes*. London, European Bank for Reconstruction and Development (<http://www.ebrd.com/downloads/research/economics/lits.pdf>, accessed February 2012).

Etco C, Buta G (2009). Estimarea multifactoriala a stisfactiei pacientilor in raport cu calitatea serviciilor medicale [Multifactorial estimation of patients' satisfaction with the quality of health services]. *Sanatate Publica, Economie si Management in Medicina [Public Health, Economics and Management in Medicine]*, 4(31):30–34.

Galan A (2011). *Expertiza Strategiei "Dezvoltarea Resurselor Umane pentru Sanatate" si a Planului de Actiune in Republica Moldova. Raport Final [Assessment of the strategy paper "Development of Human Resources for Health" and of the Action Plan in the Republic of Moldova]*. Unpublished report.

Galbur O (2010a). *Raport asupra Evaluarii resurselor umane existente, analiza tendintelor in ultima decada [Report on the evaluation of existing human resources, analysis of trends in the last decade]*. Unpublished report.

Galbur O (2010b). *Raport asupra Evaluarii atractivitatii profesiei medicale in ultima decada [Report on the evaluation of the medical profession's attractiveness in the last decade]*. Unpublished report.

Galbur O (2010c). *Raport asupra Motivelor de a evita angajarea in sistemul de ingrijiri de sanatate [Report on the reasons for avoiding employment in the health-care system]*. Unpublished report.

Golovin B (2010). Evaluarea serviciilor de asistență medicală persoanelor decedate în condiții extraspitalicești [Evaluation of the health-care services provided to deceased people in extra hospital conditions]. *Sanatate Publica, Economie si Management in Medicina [Public Health, Economics and Management in Medicine]*, 30(1):4–8.

Government of Republic of Moldova (2007a), Ministry of Health. *Healthcare system development strategy for the period 2008–2017*. Chisinau ([http://www.ms.gov.md/\\_files/1281-Strategia\\_2008\\_2017\\_eng.pdf](http://www.ms.gov.md/_files/1281-Strategia_2008_2017_eng.pdf), accessed April 2012).

Government of Republic of Moldova (2007b). Hotarirea guvernului nr. 1345 din 30.11.2007 cu privire la acordarea facilitatilor tinerilor specialist cu studii medicale si

farmaceutice [Governmental Decision no. 1345 from 30.11.2007 regarding provision of incentives to young specialists with medical and pharmaceutical studies]. *Monitorul Oficial [Official Monitor]*, Nr.188–191, art no.1386.

Government of Republic of Moldova (2010). *Moldova's report on IADGs implementation. National voluntary presentation for the annual ministerial review of the ECOSOC*. Chisinau ([rapc.gov.md/file/ECOSOC%20Report%200104.doc](http://rapc.gov.md/file/ECOSOC%20Report%200104.doc), accessed November 2012).

Government of Republic of Moldova (2011). Decizia guvernamentala nr. 549 din 21.07.2011 privind aprobarea programului national de prevenire si control al diabetului 2011–2015 [Governmental Decision no. 549 from 21.07.2011 on the approval of the national programme of diabetes prevention and control for the years 2011–2015]. *Monitorul Oficial [Official Monitor]*, Nr. 122–127, art no. 621.

Hodorogea S (2010). *Implementation of confidential enquiry into maternal deaths in Republic of Moldova*. Presentation at Vth Congress on Obstetrics and Gynaecology with International Participation, 7–8 October 2010, Chisinau,

Institute for Public Policy, Magenta Consulting (2011). Citizen report card Republic of Moldova. ([http://www.ipp.md/public/files/publication/Raport\\_CRC\\_2010-06-23\\_Detaliat\\_Eng.pdf](http://www.ipp.md/public/files/publication/Raport_CRC_2010-06-23_Detaliat_Eng.pdf), accessed November 2012).

IOM (2010). *Moldovan migrants' health: impact of the socio-economic welfare*. Chisinau, International Organization for Migration ([http://www.iom.md/attachments/110\\_md\\_migr\\_health\\_impact\\_welfare\\_eng.pdf](http://www.iom.md/attachments/110_md_migr_health_impact_welfare_eng.pdf), accessed April 2012).

Jowett M, Shishkin S (2010). *Extending population coverage in the national health insurance scheme in the Republic of Moldova*. Copenhagen, WHO Regional Office for Europe ((Health Financing Policy Paper 2010/1) ([http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0005/79295/E93573.pdf](http://www.euro.who.int/__data/assets/pdf_file/0005/79295/E93573.pdf), accessed October 2012).

Malcoci L (2011a). *Perceptions of the population of the Republic of Moldova on discrimination: sociological study*. Chisinau, Cartier.

Malcoci L (2011b). Percepțiile populației și persoanelor HIV+ din Republica Moldova despre fenomenul discriminării [General population's and HIV+ people's perceptions of the phenomenon of discrimination in the Republic of Moldova]. Presentation at National HIV/AIDS Conference, 5–7 December 2011, Chisinau.

Ministry of Economy and Trade of the Republic of Moldova (2004). *Poverty and policy impact report*. Chisinau.

Ministry of Health of Republic of Moldova (2009a). *Raport anual de activitate 2008 [Annual activity report 2008]*. Chisinau.

Ministry of Health of Republic of Moldova (2009b). *Strategia de Dezvoltarea a Asistentei*

*Medicale Primare 2010–2013 [Strategy for the development of primary health care 2010–2013].* Chisinau.

Ministry of Health of Republic of Moldova (2009c). *Proiectul Programului Național de Control a Cancerului în Republica Moldova Pentru anii 2012–2016 [Draft national programme on cancer control in the Republic of Moldova for the years 2012–2016].* Chisinau, Unpublished draft.

Ministry of Health of Republic of Moldova (2010). *Raport anual de activitate 2009 [Annual activity report 2009].* Chisinau.

Ministry of Health of Republic of Moldova (2011a). *Accelerarea reformelor: abordarea necesitatilor din domeniul sanatatii prin politici investitionale. Foaia de parcurs pentru Moldova [Roadmap 2012–2014 Accelerating reforms: addressing the needs of the health area through investment policies].* Chisinau ([http://ms.gov.md/\\_files/9361-FoaiParcurs\\_15.09.2011.pdf](http://ms.gov.md/_files/9361-FoaiParcurs_15.09.2011.pdf), accessed July 2012).

Ministry of Health of Republic of Moldova (2011b). *Raport anual de activitate 2010 [Annual activity report 2010].* Chisinau.

Ministry of Health of Republic of Moldova (2012). *Sedinta privind activitatea farmaceutica din Republica Moldova [Meeting dedicated to pharmaceutical activity in the Republic of Moldova].* Chisinau.

Ministry of Health of Republic of Moldova, Ministry of Labour, Social Protection & Family, Lumos Foundation (2011). *Evaluarea cauzelor mortalitatii infantile si a copiilor cu virsta de pina la 5 ani la domiciliu si in primele 24 ore [Evaluation of causes of infant mortality and under 5 mortality at home and in first 24 hours].* Chisinau, Casa Imago SRL.

Ministry of Health of Republic of Moldova, NCHM (2007). *Evaluarea Infrastructurii si Resurselor Umane a sistemului de Asistență Medicală Primară în Republica Moldova. Raport Final [Evaluation of infrastructure and human resources in the primary health-care system of the Republic of Moldova. Final report].* Chisinau, Ministry of Health of Republic of Moldova & National Center for Health Management.

National Center for AIDS Prevention and Control (2011). Administrative reports. Chisinau. Unpublished data.

National Institute of Oncology (2011). Administrative reports. Chisinau. Unpublished data.

National Institute of Phtysiopneumology (2011). Administrative reports. Chisinau. Unpublished data.

NBS (2009a). *Results of the study of population health status and access to health services in the Republic of Moldova*. Chisinau, National Bureau of Statistics ([http://www.statistica.md/public/files/ComPresa/sociala/nota\\_sanatatea\\_pop\\_2009.pdf](http://www.statistica.md/public/files/ComPresa/sociala/nota_sanatatea_pop_2009.pdf), accessed December 2011).

NBS (2009b). Deprivation database, 2009 [offline database]. Chisinau, National Bureau of Statistics.

NBS (2011). *Population's access to health services: results of a household survey, August–October 2010*. Chisinau, National Bureau of Statistics ([http://www.statistica.md/public/files/publicatii\\_electronice/acces\\_servicii\\_sanatate/Accesul\\_servicii\\_sanatate\\_2011.pdf](http://www.statistica.md/public/files/publicatii_electronice/acces_servicii_sanatate/Accesul_servicii_sanatate_2011.pdf), accessed December 2011).

NBS (2012). National statistics [online database]. Chisinau, National Bureau of Statistics (<http://statbank.statistica.md/pxweb/Database/EN/databasetree.asp>, accessed November 2012).

NCHM (2011). *Statistical medical annual report 2010*. Chisinau, National Center for Health Management (<http://www.cnms.md/sites/default/files/S%C4%83n%C4%83tatea%20public%C4%83%20%C3%AEn%20Moldova%202010.pdf>, accessed October 2012).

NCHM (2012). Database SD 2 [online database]. Chisinau, National Center for Health Management ([www.cnms.md/areas/statistics/indik](http://www.cnms.md/areas/statistics/indik), accessed February 2012).

Negruta A (2012). Health payments and catastrophic expenditures: evidence based on household budget survey of the Republic of Moldova. Draft unpublished report.

NHIC (2008). *Raport privind activitatea financiara a Companiei Națională de Asigurări in Medicină si utilizarea mijloacelor din fondurile asigurarii obligatorii de asistenta medicala in anul 2007 [Report on financial activity of the National Health Insurance Company and the use of means from the mandatory health insurance funds in 2007]*. Chisinau, Compania Națională de Asigourări in Medicină [National Health Insurance Company].

NHIC (2009). *Raport privind utilizarea mijloacelor din fondurile asigurarii obligatorii de asistenta medicala in anul 2008 [Report on the use of means from the mandatory health insurance funds in 2008]*. Chisinau, Compania Națională de Asigourări in Medicină [National Health Insurance Company].

NHIC (2010). *Raport privind executarea (utilizarea) fondurilor asigurarii obligatorii de asistenta medicala pentru anul 2009 [Report on the use of mandatory health insurance funds in 2009]*. Chisinau, Compania Națională de Asigourări in Medicină [National Health Insurance Company] ([http://www.cnam.md/editorDir/file/Rapoarte\\_activitate/raport\\_2009\\_rom\\_.pdf](http://www.cnam.md/editorDir/file/Rapoarte_activitate/raport_2009_rom_.pdf), accessed November 2012).

NHIC (2011). *Raport privind executarea (utilizarea) fondurilor asigurarii obligatorii de*

*asistenta medicala pentru anul 2010 [Report on the use of mandatory health insurance funds in 2010].* Chisinau, Compania Națională de Asigurări în Medicină [National Health Insurance Company] ([http://www.cnam.md/editorDir/file/Rapoarte\\_activitate/raport\\_executarea\\_faoam\\_2010\\_rom.pdf](http://www.cnam.md/editorDir/file/Rapoarte_activitate/raport_executarea_faoam_2010_rom.pdf), accessed November 2012).

Nemerenco A, Tintiuc D (2008). Evaluarea serviciilor de asistenta medicala primara [Evaluation of primary health-care services]. *Sanatate Publica, Economie si Management in Medicina [Public Health, Economics and Management in Medicine]*, 2(24):4–8.

Parliament of Republic of Moldova (1998). Lege nr. 1585 din 27.02.1998 cu privire la asigurarea obligatorie cu privire la asigurarea obligatorie de asistență medicală 30.04.1998. [Parliament of the Republic of Moldova. Law no. 1585 from 27.02.1998 regarding mandatory health insurance]. *Monitorul Oficial [Official Monitor]*, No. 38–39, art no. 280.

Parliament of Republic of Moldova (2000). Legea nr. 87 din 18.02.2000 Fondului Republican si a fondurilor locale de sustinere sociala a populatiei [Law no. 87 from 18.02.2000 on the Republican Fund and local funds for the social support of the population]. *Monitorul Oficial [Official Monitor]*, No. 65–67, art no. 460.

Parliament of Republic of Moldova (2008). Legea nr. 133 din 13.06.2008 cu privire la ajutorul social [Law nr. 133 from 13.06.2008 on social aid]. *Monitorul Oficial [Official Monitor]*, No. 179, art no. 625.

Parliament of Republic of Moldova (2009). Legea nr. 108 din 17.12.2009 pentru modificarea și completarea unor acte legislative, articolul XIX [Law no. 108 from 17.12.2009 for modifying and amending some legislative acts, article XIX] *Monitorul Oficial [Official Monitor]*, No. 193–196, art no. 609.

Parliament of Republic of Moldova (2010a). Lege nr. 128 din 23.12.2009 a fondurilor asigurarilor obligatorii de asistenta medicala pentru anul 2010 [Law no. 128 from 23.12.2009 on the mandatory health insurance funds for the year 2010]. *Monitorul Oficial [Official Monitor]*, No. 193–196, art no. 615.

Parliament of Republic of Moldova (2010b). Legea nr. 547 din 23.12.2003 a asistentei sociale, modificata prin Legile 122 din 18.06.2010 si 167 din 09.07.2010 [Law no. 547 from 23.12.2003 on social assistance, modified through Laws 122 from 18.06.2010 and 167 from 09.07.2010]. *Monitorul Oficial [Official Monitor]*, No. 42–44, art no. 249.

Parliament of Republic of Moldova (2010c). Lege Nr. 186 din 15.07.2010 pentru modificarea și completarea unor acte legislative [Law no. 186 from 15.07.2010 on modification and completion of some legal acts]. *Monitorul Oficial [Official Monitor]*, No. 138–140, art no. 492.



Parliament of Republic of Moldova (2011). Legea fondurilor asigurării obligatorii de asistență medicală pe anul 2011 nr. 55 din 31 martie 2011 [Law on mandatory health insurance funds for the year 2011 no. 55 from 31 March 2011]. *Monitorul Oficial [Official Monitor]*, No. 63–64, art no.155.

PAS Center (2010). *Equity analysis of mother and child health*. Chisinau, Center for Health Policies and Studies ([http://www.unicef.org/moldova/ro/MCF\\_Analysis.pdf](http://www.unicef.org/moldova/ro/MCF_Analysis.pdf), accessed November 2012).

PAS Center (2011a). Accesul și calitatea serviciilor spitalicești în percepția populației Republicii Moldova Rezultatele sondajului național 2011 [Access and quality of hospital services in perception of the population of Republic of Moldova. Results of the national survey 2011]. Chisinau, Center for Health Policies and Studies.

PAS Center, UNICEF Moldova (2011b). *Evaluation of integrated management of childhood illnesses initiative in the Republic of Moldova, years 2000–2010*. Chisinau, Center for Health Policies and Studies.

Pisla M et al. (2010). *Evaluation of hospital safety in the Republic of Moldova. Summary report*. Chisinau, Republican Center for Disaster Medicine ([http://www.ms.gov.md/\\_files/8467-Evaluation%2520of%2520Hospital%2520Safety%2520in%2520the%2520Republic%2520of%2520Moldova.pdf](http://www.ms.gov.md/_files/8467-Evaluation%2520of%2520Hospital%2520Safety%2520in%2520the%2520Republic%2520of%2520Moldova.pdf), accessed October 2012).

Popay J et al. (2008). *Understanding and tackling social exclusion. Final report to the WHO Commission on Social Determinants of Health from the Social Exclusion Knowledge Network*. Geneva, WHO ([http://www.who.int/social\\_determinants/knowledge\\_networks/final\\_reports/sekn\\_final%20report\\_042008.pdf](http://www.who.int/social_determinants/knowledge_networks/final_reports/sekn_final%20report_042008.pdf), accessed November 2012).

Quinn S (2006). *Accessing health: the context and the challenges for LGBT people in central and eastern Europe*. Brussels, ILGA-Europe:12.

Richardson E (2008). Moldova: using social health insurance to reduce out-of-pocket payments and improve equity. *Eurohealth*, 14(3):34–35.

Richardson E et al. (2011). Health insurance coverage and health care access in Moldova. *Health Policy and Planning*, 27(3):204–212.

Sanigest (2010). *Feasibility study for the Oncologic Institute in Chisinau. Final report*. Chisinau ([http://www.ms.gov.md/\\_files/8318-Feasibility%2520study%2520Oncological%2520Institute.pdf](http://www.ms.gov.md/_files/8318-Feasibility%2520study%2520Oncological%2520Institute.pdf), accessed June 2012).

Sautenkova N et al. (2012). *Availability and affordability of medicines and assessment of quality systems for prescription of medicines in the Republic of Moldova*. Copenhagen, WHO Regional Office for Europe ([http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0006/176388/E96712.pdf](http://www.euro.who.int/__data/assets/pdf_file/0006/176388/E96712.pdf), accessed October 2012).

Scutelnicu O, Bivol S, Osoianu L (2008). *Baseline situation analysis of children and families affected by HIV and people living with HIV in the Republic of Moldova*. Final draft. Chisinau ([www.aids.md/aids/index.php?cmd=item&id=1012](http://www.aids.md/aids/index.php?cmd=item&id=1012), accessed October 2012).

SEKN (2008). *Understanding and tackling social exclusion. Final report to the WHO Commission on Social Determinants of Health from the Social Exclusion Knowledge Network*. Geneva, World Health Organization, Social Exclusion Knowledge Network ([http://www.who.int/social\\_determinants/knowledge\\_networks/final\\_reports/sek\\_n\\_final%20report\\_042008.pdf](http://www.who.int/social_determinants/knowledge_networks/final_reports/sek_n_final%20report_042008.pdf), accessed August 2010).

Shishkin S, Jowett M (2012). *A review of health financing reforms in the Republic of Moldova*. Copenhagen, WHO Regional Office for Europe (Health financing policy paper 2012(1)).

Shishkin S, Kacevicius G (2007). Health finance reform in Moldova: a step backwards, two steps forward. iHEA 2007 6th World Congress: Explorations in Health Economics Paper. Moscow (<http://ssrn.com/abstract=992315>, accessed October 2012).

Shishkin S, Kacevicius G, Ciocanu M (2006). *Evaluation of health financing reform in the Republic of Moldova*. Copenhagen, WHO Regional Office for Europe.

Shishkin S, Kacevicius G, Ciocanu M (2008). *Evaluation of Moldova's 2004 health financing reform*. Copenhagen, WHO Regional Office for Europe ([http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0008/78974/HealthFin\\_Moldova.pdf](http://www.euro.who.int/__data/assets/pdf_file/0008/78974/HealthFin_Moldova.pdf), accessed October 2012).

Stefanet S (2010). *Results from the implementation of strengthening perinatal care system in the Republic of Moldova*. Unpublished report.

Suhrcke M et al. (2008). *Socioeconomic differences in health, health behaviour and access to health care in Armenia, Belarus, Georgia, Kazakhstan, Kyrgyzstan, the Republic of Moldova, the Russian Federation and Ukraine*. Geneva, WHO ([http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0011/98444/E91873.pdf](http://www.euro.who.int/__data/assets/pdf_file/0011/98444/E91873.pdf), accessed February 2012).

Tanahashi T (1978). Health service coverage and its evaluation. *Bulletin of the World Health Organization*, 56(2): 295–303.

Testemitanu A, Pasecicinic I, Gutul V (1987). Пути сближения уровней амбулаторно-поликлинической помощи городскому и сельскому населению, Кишинев [*The ways of approximation of outpatient care levels for the urban and rural population*], Chisinau, Stiinta.

Tintiuc D, Vicol C (2008). Evaluation of patients' hospital admission process in rural regions. *Sanatate Publica, Economie, Management in Medicina* [*Public Health, Economics and Management in Medicine*], 3(25):9–11.

UNDP Regional Bureau for Europe, CIS (2011). *Beyond transition: towards inclusive societies*. Bratislava, UNDP Regional Bureau for Europe and the Commonwealth of Independent States (Regional Human Development Report)(<http://europeandcis.undp.org/home/show/BCD10F8F-F203-1EE9-BB28DEE6D70B52E1>, accessed January 2012).

UNICEF (1997). *Accessibility of health services and evaluation of expenditures on health in the Republic of Moldova*. Chisinau, UNICEF Moldova Country Office.

UNICEF (2001). *Multiple indicator cluster survey*. Chisinau, UNICEF Moldova Country Office.

UNICEF (2011). *Situation analysis of vulnerable, excluded and discriminated children in Moldova*. Chisinau, UNICEF Moldova ([http://www.unicef.org/moldova/Raport\\_ENG.pdf](http://www.unicef.org/moldova/Raport_ENG.pdf), accessed November 2012).

Ursu P (2010). Distribution of the out-of-pocket payments for health and catastrophic health expenditures. Chisinau, 2010. *Sanatate Publica, Economie, Management in Medicina [Public Health, Economics and Management in Medicine]*, 1(27):11.

Vaculovschi D et al. (2011). *Republic of Moldova from social exclusion towards inclusive human development: National Human Development Report*. Chisinau, "Nova-Imprim" SRL ([http://www.undp.md/presscentre/2011/NHDR2010\\_2011/NHDRreport\\_2010\\_ENG\\_26-04-11\\_web.pdf](http://www.undp.md/presscentre/2011/NHDR2010_2011/NHDRreport_2010_ENG_26-04-11_web.pdf), accessed October 2012).

WHO (2010). *Equity, social determinants and public health programmes*. Geneva, World Health Organization

([http://whqlibdoc.who.int/publications/2010/9789241563970\\_eng.pdf](http://whqlibdoc.who.int/publications/2010/9789241563970_eng.pdf), accessed July 2012).

WHO Regional Office for Europe (2012). European Health For All database [online/offline database]. Copenhagen, (<http://www.euro.who.int/hfadbd>, accessed September 2011).

World Bank (2000). *World Bank project appraisal document*. Chisinau, Ministry of Health of the Republic of Moldova.

World Bank (2005). *Review of experience of family medicine in Europe and central Asia: Moldova case study*. Washington ([http://siteresources.worldbank.org/INTMOLDOVA/Resources/Fam\\_Med\\_ECA\\_MD\\_eng.pdf](http://siteresources.worldbank.org/INTMOLDOVA/Resources/Fam_Med_ECA_MD_eng.pdf), accessed July 2012).

Zarbailov N, Barbă O, Golovin B (2009). Assessment of human resources in primary health care system. *Sanatate Publica, Economie, Management in Medicina [Public Health, Economy and Management in Medicine]*, 1(28):4–10.

# ANNEX 1.

**Annual examinations of people on PHC lists at risk for diseases: those examined as a percentage of those needing to be examined**

<b>Malignant tumours</b>	<b>2009</b>	<b>2010</b>
Total	<b>56.0</b>	<b>61.1</b>
Insured	62.5	66.4
Uninsured	38.4	47.3
<b>Breast examination</b>		
Total	<b>77.8</b>	<b>82.4</b>
Insured	83.7	87.6
Uninsured	62.6	69.9
<b>Pap smear</b>		
Total	<b>56.2</b>	<b>62.4</b>
Insured	62.9	68.9
Uninsured	39.6	47.7
<b>Rectal examination</b>		
Total	<b>19.4</b>	<b>21.0</b>
Insured	21.9	23.5
Uninsured	12.5	14.3
<b>Sexually transmitted infection</b>		
Total	<b>52.5</b>	<b>59.2</b>
Insured	60.7	65.7
Uninsured	33.0	39.7

<b>Obstetric/gynaecological examination</b>		
Total	<b>47.5</b>	<b>56.7</b>
Insured	54.6	64.6
Uninsured	29.6	37.0
<b>Blood pressure</b>		
Total	<b>81.3</b>	<b>85.4</b>
Insured	88.0	90.1
Uninsured	65.2	74.2
<b>Electrocardiografia</b>		
Total	<b>49.1</b>	<b>49.4</b>
Insured	59.5	57.2
Uninsured	19.4	28.2
<b>Cholesterol</b>		
Total	<b>41.7</b>	<b>47.5</b>
Insured	51.2	55.7
Uninsured	15.8	25.7
<b>Glycaemia</b>		
Total	<b>49.6</b>	<b>58.4</b>
Insured	59.6	68.4
Uninsured	21.4	31.3
<b>Chronic hepatitis</b>		
Total	<b>30.0</b>	<b>34.0</b>
Insured	38.4	41.5
Uninsured	11.3	16.0
<b>Liver tests</b>		
Total	<b>41.4</b>	<b>48.5</b>
Insured	52.9	59.7
Uninsured	14.0	20.6
<b>Chronic hepatitis B</b>		
Total	<b>15.3</b>	<b>17.3</b>
Insured	19.7	20.1
Uninsured	6.3	10.5
<b>Glaucoma</b>		
Total	<b>40.0</b>	<b>44.9</b>
Insured	46.5	51.9
Uninsured	21.0	25.9





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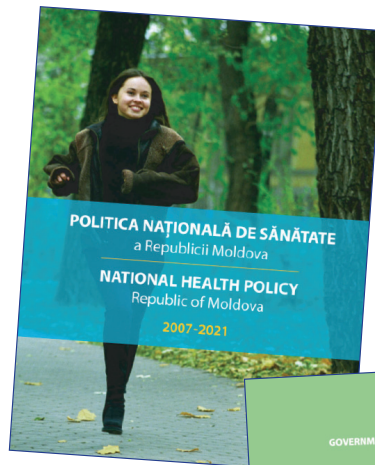
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