

Assessment of sexual, reproductive, maternal, newborn, child and adolescent health in the context of universal health coverage in the Republic of Moldova



Assessment of sexual, reproductive, maternal, newborn, child and adolescent health in the context of universal health coverage in the Republic of Moldova

Abstract

Achieving universal health coverage (UHC) – meaning that everyone, everywhere can access essential high-quality health services without facing financial hardship – is a key target of the Sustainable Development Goals. Sexual, reproductive, maternal, newborn child and adolescent health (SRMNCAH) is at the core of the UHC agenda and is among the 16 essential health services that WHO uses as indicators of the level and equity of coverage in countries. In this context, WHO undertook an assessment of SRMNCAH in the Republic of Moldova. This report examines which SRMNCAH services are included in policies concerning UHC in the specific country context; assesses the extent to which the services are available to the people for whom they are intended, and at what cost; identifies potential health system barriers to the provision of SRMNCAH services, using a tracer methodology and equity lens; and identifies priority areas for action. A set of policy recommendations provides the basis for policy changes and implementation arrangements for better SRMNCAH services and outcomes in the context of UHC.

Keywords

SEXUAL AND REPRODUCTIVE HEALTH
MATERNAL, CHILD AND ADOLESCENT HEALTH
UNIVERSAL HEALTH COVERAGE
HEALTH CARE SYSTEM
QUALITY OF HEALTH CARE
DETERMINANTS OF HEALTH
REPUBLIC OF MOLDOVA

ISBN 978 92 890 5473 7

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

Publications
WHO Regional Office for Europe
UN City, Marmorvej 51
DK-2100 Copenhagen Ø, Denmark

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

© World Health Organization 2020

Some rights reserved. This work is available under the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 IGO licence (CC BY-NC-SA 3.0 IGO); <https://creativecommons.org/licenses/by-nc-sa/3.0/igo>.

Under the terms of this licence, you may copy, redistribute and adapt the work for non-commercial purposes, provided the work is appropriately cited, as indicated below. In any use of this work, there should be no suggestion that WHO endorses any specific organization, products or services. The use of the WHO logo is not permitted. If you adapt the work, then you must license your work under the same or equivalent Creative Commons licence. If you create a translation of this work, you should add the following disclaimer along with the suggested citation: "This translation was not created by the World Health Organization (WHO). WHO is not responsible for the content or accuracy of this translation. The original English edition shall be the binding and authentic edition".

Any mediation relating to disputes arising under the licence shall be conducted in accordance with the mediation rules of the World Intellectual Property Organization.

Suggested citation. Assessment of sexual, reproductive, maternal, newborn, child and adolescent health in the context of universal health coverage in the Republic of Moldova. Copenhagen: WHO Regional Office for Europe; 2019. License: CC BY-NC-SA 3.0 IGO.

Cataloguing-in-Publication (CIP) data. CIP data are available at <http://apps.who.int/iris>.

Sales, rights and licensing. To purchase WHO publications, see <http://apps.who.int/bookorders>. To submit requests for commercial use and queries on rights and licensing, see <http://www.who.int/about/licensing>.

Third-party materials. If you wish to reuse material from this work that is attributed to a third party, such as tables, figures or images, it is your responsibility to determine whether permission is needed for that reuse and to obtain permission from the copyright holder. The risk of claims resulting from infringement of any third-party-owned component in the work rests solely with the user.

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

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

All reasonable precautions have been taken by WHO to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall WHO be liable for damages arising from its use.

Contents

| | |
|--|-----------|
| Acknowledgements | iv |
| Abbreviations | v |
| Executive summary | vi |
| Introduction | 1 |
| Methodology | 2 |
| Tracer interventions | 2 |
| Limitations | 3 |
| Country context | 3 |
| Health system governance for SRMNCAH | 5 |
| Health system financing for UHC of SRMNCAH | 7 |
| The MHI scheme | 8 |
| Essential medicines and health products for SRMNCAH | 14 |
| Strengths | 14 |
| Challenges | 14 |
| Service delivery and safety of SRMNCAH | 16 |
| Health workforce for SRMNCAH | 18 |
| Specific implications for SRMNCAH services | 19 |
| Health statistics and information systems for SRMNCAH | 20 |
| Findings on tracer interventions | 21 |
| Antenatal care | 21 |
| STIs (excluding HIV) | 23 |
| Transport of sick neonates | 25 |
| Case management of common childhood conditions | 26 |
| Adolescent-friendly sexual and reproductive health services | 29 |
| Immunization | 33 |
| Policy recommendations for SRMNCAH | 35 |
| Strengthening governance, health literacy and multisectoral action | 36 |
| Orienting health financing to improve coverage | 37 |
| Reducing OOP payments for essential medicines and health products | 37 |
| Developing a more effective service delivery model, improving coordination between providers and strengthening evidence-based practice | 38 |
| Strengthening human resources for SRMNCAH service provision | 38 |
| Using health information and performance monitoring systems to improve outcomes and accountability | 39 |

Acknowledgements

The authors express their sincere gratitude to the government officials of the Republic of Moldova. This assessment and report would not have been possible without the open-hearted support and welcome of all the interviewees, who took the time to participate and shared their views, ideas, concerns and visions with the authors.

The country assessment was produced by Dr Mikael Ostergren, Dr Susanne Carai and Dr Ketevan Chkhatrashvili under the overall guidance of Dr Bente Mikkelsen, Director, and Dr Nino Berdzuli and Dr Martin Weber, programme managers, of the Division of Noncommunicable Diseases and Promoting Health through the Life-course, WHO Regional Office for Europe. Ms Asa Nihlen and Ms Isabel Yordi Aguirre of the Division of Policy and Governance for Health and Well-being, WHO Regional Office for Europe, and Dr Veloshnee Govender of the Department of Reproductive Health and Research, WHO headquarters, provided useful contributions to the gender, equity and rights aspects of the assessment. Dr Melitta Jakab of the WHO Barcelona Office for Health System Strengthening provided input to the health systems aspects of the assessment methodology.

Thanks are also extended to Mrs Lydia Wanstall for copy-editing and to Mr Lars Møller for typesetting and laying out the report.

Preparation of this report was coordinated by the WHO Regional Office for Europe and the WHO Country Office in the Republic of Moldova. The assessment and report were realized with financial support from the Federal Ministry of Health of Germany.

The authors' views expressed in this report do not necessarily reflect the views of the World Health Organization or the Ministry of Health, Labour and Social Protection of the Republic of Moldova.

Abbreviations

| | |
|---------|---|
| CIS | Commonwealth of Independent States |
| CNAM | Compania Națională de Asigurări în Medicină (the national health insurance company) |
| DRG | disease-related group |
| GDP | gross domestic product |
| HIS | health information system |
| HPV | human papillomavirus |
| IUD | intrauterine device |
| IVF | in vitro fertilization |
| MHI | mandatory health insurance [scheme] |
| MMR | measles, mumps and rubella [vaccine] |
| OOP | out-of-pocket [payment] |
| PPP | purchasing power parity |
| SRMNCAH | sexual, reproductive, maternal, newborn, child and adolescent health |
| STI | sexually transmitted infection |
| UHC | universal health coverage |
| UNFPA | United Nations Population Fund |
| UNICEF | United Nations Children's Fund |

Executive summary

An assessment of sexual, reproductive, maternal, newborn, child and adolescent health (SRMNCAH) in the context of universal health coverage (UHC) was conducted in the Republic of Moldova on 24 September–1 October 2018. The assessment included document reviews; interviews with policy-makers, health facility managers, service providers and clients; and visits to health facilities. Six SRMNCAH “tracer” interventions were investigated in greater depth, identifying barriers to access and utilization of services along the essential pillars of UHC.

The assessment found that the Republic of Moldova has demonstrated willingness to move towards UHC by adopting health policies and financing strategies aimed at increasing coverage, reducing inequities and expanding financial protection, and has made progress. The health of women, children and adolescents is given high priority, expressed through the intended full coverage of health services for pregnant women, women in delivery and postpartum and children aged 0–18 years, among others.

Analysis of the tracer interventions revealed that protocols and legislation and the range of services included in the SRMNCAH health packages are good in general and follow WHO standards and guidelines. The most critical challenge is at the level of implementation. Despite well intended policies, not all SRMNCAH services included in the health benefit package are provided free of charge in reality, with adequate quality at the relevant level or reaching the most vulnerable population groups.

Given the overall resource limitations in the Republic of Moldova, finding savings and efficiency gains in service organization, delivery and financing are crucial to ensure greater coverage of SRMNCAH while maintaining the quality of services provided. The assessment identified a number of areas where improvements could be made without necessarily increasing the total budget. A set of policy recommendations intends to provide the basis for policy changes and implementation arrangements for better SRMNCAH services and outcomes in the context of UHC.

Introduction

Universal health coverage (UHC) means that all people and communities can use the promotive, preventive, curative, rehabilitative and palliative health services they need, of sufficient quality to be effective, while also ensuring that the use of these services does not expose the user to financial hardship. This definition of UHC embodies three related objectives:

- equity in access, meaning that everyone who needs health services should get them, not only those who can pay for them;
- health services of good enough quality to improve the health of those receiving services; and
- protection against financial risk, ensuring that the cost of using services does not put people at risk of financial harm.

Achieving UHC is one of the targets the nations of the world set when adopting the Sustainable Development Goals in 2015.

Sexual, reproductive, maternal, newborn, child and adolescent health (SRMNCAH) is at the core of the UHC agenda and is among the 16 essential health services that WHO uses as indicators of the level and equity of coverage in countries. Essential SRMNCAH services used as indicators for UHC are:

- family planning
- antenatal and delivery care
- full child immunization
- health-seeking behaviour for pneumonia.

An assessment of SRMNCAH in the context of UHC in the Republic of Moldova was conducted on 24 September–1 October 2018. Its objectives were to:

- delineate which SRMNCAH services are included in policies concerning UHC in the specific country context;
- assess the extent to which the services are available to the people for whom they are intended, and at what cost;
- identify potential health system barriers to the provision of SRMNCAH services, using a tracer methodology and equity lens;
- highlight good practices and innovations in the health system, with evidence of their impact on SRMNCAH services;
- identify priority areas for action and develop policy recommendations jointly with the country to address health system barriers to the provision of SRMNCAH services.

The assessment was carried out on behalf of the WHO Regional Office for Europe and it is intended that similar assessments will be conducted in other countries in the WHO European Region.

Methodology

A methodological approach was developed prior to the assessment and underwent several revisions during and after the visit, since the Republic of Moldova was the first country where the approach was applied. The steps in the assessment included:

- a preliminary document review, including health policy and strategy documents, sexual and reproductive health and child and adolescent health strategy documents, UHC guiding documents, service package descriptions and similar;
- a country visit, including:
 - interviews with policy-makers from the Ministry of Health, Labour and Social Protection, health facility managers (primary health care and hospital), service providers (doctors, nurses and others) and beneficiaries (patients and clients);
 - visits to health care facilities at primary, secondary and tertiary health care levels;
- a presentation and discussion of findings and recommendations with key stakeholders at the end of the visit.

Semi-structured questionnaires were developed to conduct interviews with key informants, including:

- representatives of the Ministry of Health, Labour and Social Protection;
- health facility managers (primary health care and hospital);
- health workers including nurses, doctors and midwives, where applicable;
- patients and clients, including adolescents;
- partners and stakeholders, including representatives of the United Nations Children’s Fund (UNICEF) and United Nations Population Fund (UNFPA).

Tracer interventions

To assess the extent to which services are available to the people for whom they are intended, and at what cost, six “tracer” interventions were identified and analysed in depth. These were:

- antenatal care
- sexually transmitted infections (STIs) (excluding HIV)
- transport of sick neonates
- case management of common childhood conditions
- adolescent-friendly sexual and reproductive health services
- immunization.

As an analytical framework for the findings and identification of barriers and challenges to access to and utilization of SRMNCAH services, WHO’s six “essentials of UHC” were used (Fig. 1).

Fig. 1. Essentials of UHC



Source: Universal health coverage [website]. Geneva: World Health Organization; 2019 (http://www.who.int/universal_health_coverage/en/, accessed 23 April 2019).

Limitations

The methodology aims to triangulate information through document reviews, visits to health facilities and interviews with policy-makers, health managers, providers and clients. The depth of the assessment depends on the completeness of documents provided by the Ministry of Health, Labour and Social Protection and partners, as well as the extent to which the health facilities visited and key informants interviewed are representative and reflect the national context and situation. The appraisal of tracer interventions and health systems barriers and challenges is based on the judgement of the assessment team, based on the information obtained.

Country context

Table 1 sets out some key indicators on SRMNCAH in the Republic of Moldova.

Table 1. Key SRMNCAH indicators

| Indicator | Value |
|--|-----------|
| Total population (2016) | 3 551 954 |
| Life expectancy at birth male/female (years, 2016) | 68/75 |
| Total expenditure on health per capita (US\$, 2014) | 514 |
| Total expenditure on health as percentage of gross domestic product (2014) | 10.3 |
| Probability of dying under 5 years per 1000 live births (2016) | 16 |
| Neonatal mortality rate per 1000 live births (2015) | 6.3 |
| Maternal mortality rate per 100 000 live births (2015) | 23 |

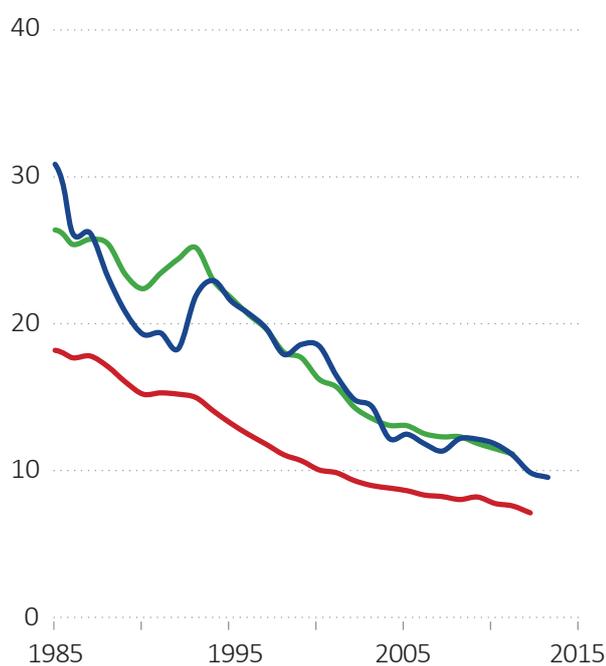
Table 1. (contd)

| Indicator | Value |
|--|-------|
| Adolescent birth rate per 1000 women aged 15–19 years (2014) | 26.7 |
| Health coverage indicators for tracer interventions | |
| Antenatal care coverage, percentage of population (at least four visits) (2012) | 95.4 |
| Percentage of married or in-union women of reproductive age who have their need for family planning satisfied with modern methods (2012) | 60.4 |
| Percentage of children receiving the third dose of diphtheria, pertussis and tetanus-containing vaccine (2017) | 88 |
| Percentage of children aged less than 5 years with pneumonia taken to a health care provider (2012) | 79.2 |

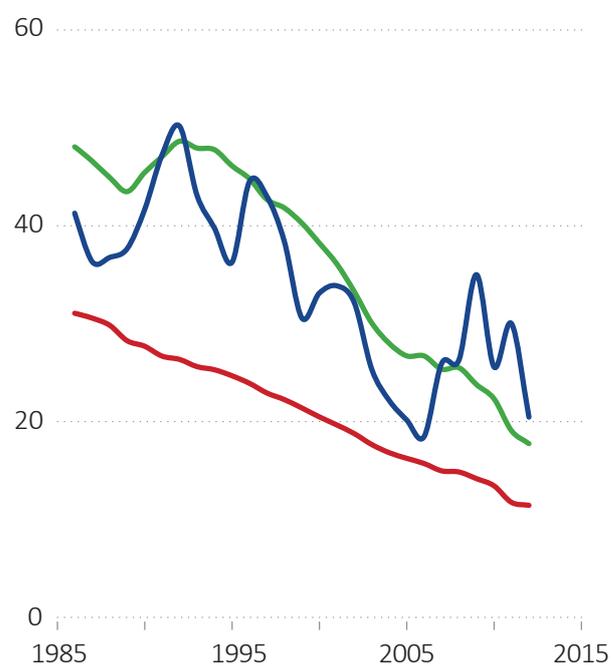
As shown in Fig. 2, the Republic of Moldova has made good overall progress on key indicators such as infant and maternal mortality rates, but they are still well above the average for the WHO European Region and higher than the Commonwealth of Independent States (CIS) average.

Fig. 2. Trends in infant and maternal mortality, 1985–2013

Infant deaths per 1000 live births, Republic of Moldova, WHO European Region and CIS, 1985 to latest available year



Maternal deaths per 100 000 live births, Republic of Moldova, WHO European Region and CIS, 1985–1987



— Republic of Moldova — WHO European Region — CIS

Source: Republic of Moldova: highlights on health and well-being. Copenhagen: WHO Regional Office for Europe; 2016 (<http://www.euro.who.int/en/countries/republic-of-moldova/publications/republic-of-moldova-highlights-on-health-and-well-being-2016>, accessed 23 May 2019).

The Moldovan health system is organized according to the principles of universal access to basic health services, equity and solidarity through a mandatory health insurance (MHI) scheme, which collects premiums both from the government and individuals. The health system includes a mix of public and private medical facilities, as well as public agencies and authorities that finance, regulate and administer health services.

Public health facilities at the primary and secondary health care levels provide services to communities and belong to local authorities. Every district has an emergency care provider (ambulance service) that belongs to the Ministry of Health, Labour and Social Protection. Medical facilities at the tertiary level provide specialized and highly specialized care to the entire population and are mainly located in the capital city, Chişinău. Some services are provided by the private sector, including specialized ambulatory care clinics and diagnostic and laboratory facilities. Pharmacies are also privately owned.

Most health facilities are owned by the state and communities and are autonomous, self-financing, non-profit entities directly contracted by the national health insurance company *Compania Națională de Asigurări în Medicină (CNAM)*.¹ Private providers can also be contracted by CNAM. A significant number of health care facilities belong to other government entities (such as the Ministries of Defence and of Internal Affairs); these can also be directly contracted by CNAM.

Primary health care is based on family medicine and is mainly provided by doctors in family medicine centres and health centres, and by specialists as outpatient care. Since 2008 all primary care providers have been administratively independent (prior to this they were under the remit of the district hospitals).

Health system governance for SRMNCAH

The Republic of Moldova is currently governed by the Democratic Party, which holds a majority. At the time of the assessment no minister of health was in office; during the previous year four health ministers had been appointed and changed post.

The country has been most successful in implementing a service delivery model with a purchaser–provider split: a national health insurance scheme is in place, financed by employer/employee contributions of 4.5% of gross salary each. Additional funds are transferred from the state budget to CNAM for unemployed people, if eligible. In addition, several groups are eligible for insurance through the state budget, including pregnant women, children and adolescents, retired people, disabled people, veterans and other vulnerable groups.

According to CNAM, about 87% of the population is covered by health insurance, while slightly lower numbers are reported through independent surveys conducted by nongovernmental organizations (79–80%).

Access to emergency and primary care is universal, regardless of insurance status, as is access to services of key public health relevance, such as HIV/AIDS, tuberculosis and immunization, which are financed through donor-supported national programmes. The scope of the interventions covered is limited, however: some services that are covered in principle are not consistently available. CNAM produces information leaflets on what is available at a given time, based on different priorities established by a council consisting of the National Public Health Agency, Ministry of Health, Labour and Social Protection and CNAM. For example, vaccinations against influenza, hepatitis A and B and rabies are covered by CNAM in 2018, as they were identified as priorities. Reportedly, no fixed criteria are applied when deciding on priorities and services to be included in the benefit package.

Universal access to primary care for uninsured people includes only the consultation. The drugs prescribed have to be purchased at pharmacies by the patient. Even for insured people co-payments of 30%, 50% or 70% are required, depending on the type of drug. Diabetes, psychotropic and anti-convulsive drugs are excluded from co-payments. Primary care is 85% financed through capitation (the three age categories of 0–5, 5–50 and over 50 years have different allocations) and 15% according to established performance indicators. Monitoring and reporting of performance is done quarterly through family doctors' self-assessment.

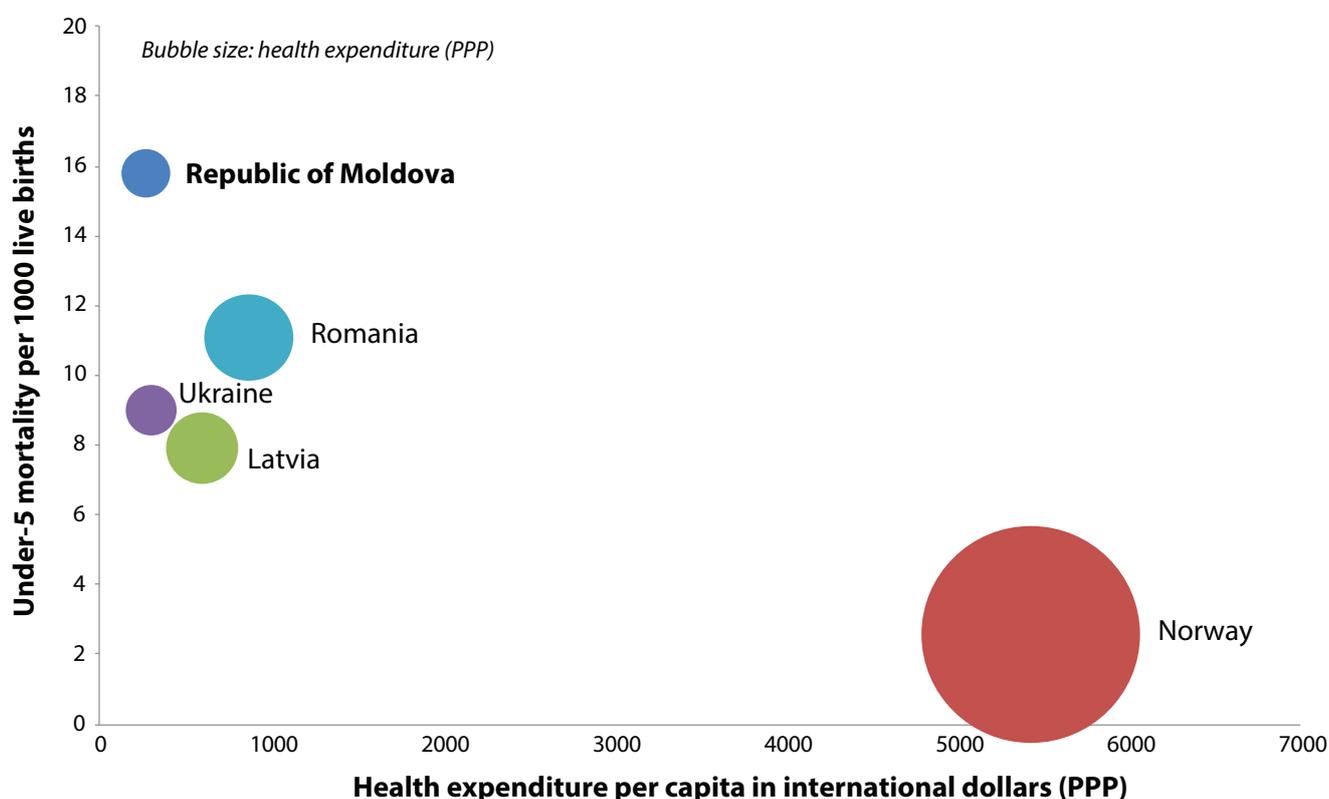
¹ According to the Law on Health Protection of the Republic of Moldova, No. 411 – XIII, 25 March 1995, last updated 27 July 2018.

Medication shortages can appear in hospitals, in which case patients are required to purchase the necessary medication out of pocket at pharmacies. Procurement procedures require three unsuccessful national tenders before the international market can be accessed. Antenatal care drugs, such as iron and folic acid supplements, and drugs recommended by the WHO integrated management of childhood illnesses strategy for children under 5 years of age are covered by health insurance and can be obtained through specific pharmacies. Transport costs to reach these specific pharmacies may, however, exceed the savings: buying the required medication in closer retail pharmacies may be more efficient in some cases.

Only a certain number of procedures and examinations are covered in a given year for insured people; when these have been depleted, patients are required to pay for them out of pocket, despite active insurance status.

Despite the relatively large total health expenditure as a percentage of gross domestic product (GDP), total health expenditure reflecting purchasing power parity (PPP) is very low, and the mortality rate among children aged under 5 years is relatively high compared to other countries with similar total health expenditure per capita (Fig. 3).

Fig. 3. Under-5 mortality and health expenditure in the Republic of Moldova and selected countries in the European Region



Source: The World Bank, Data Catalog, World Development Indicators (https://datacatalog.worldbank.org/search?search_api_views_fulltext_op=AND&query=Health expenditure per capita in Romania, Norway, Republic of Moldova, Ukraine and Latvia&nid=&sort_by=search_api_relevance&sort_order=DESC, accessed 13 August 2019)

UNICEF Data: Monitoring the situation of children and women (<https://data.unicef.org/topic/child-survival/under-five-mortality/> accessed 13 August 2019)

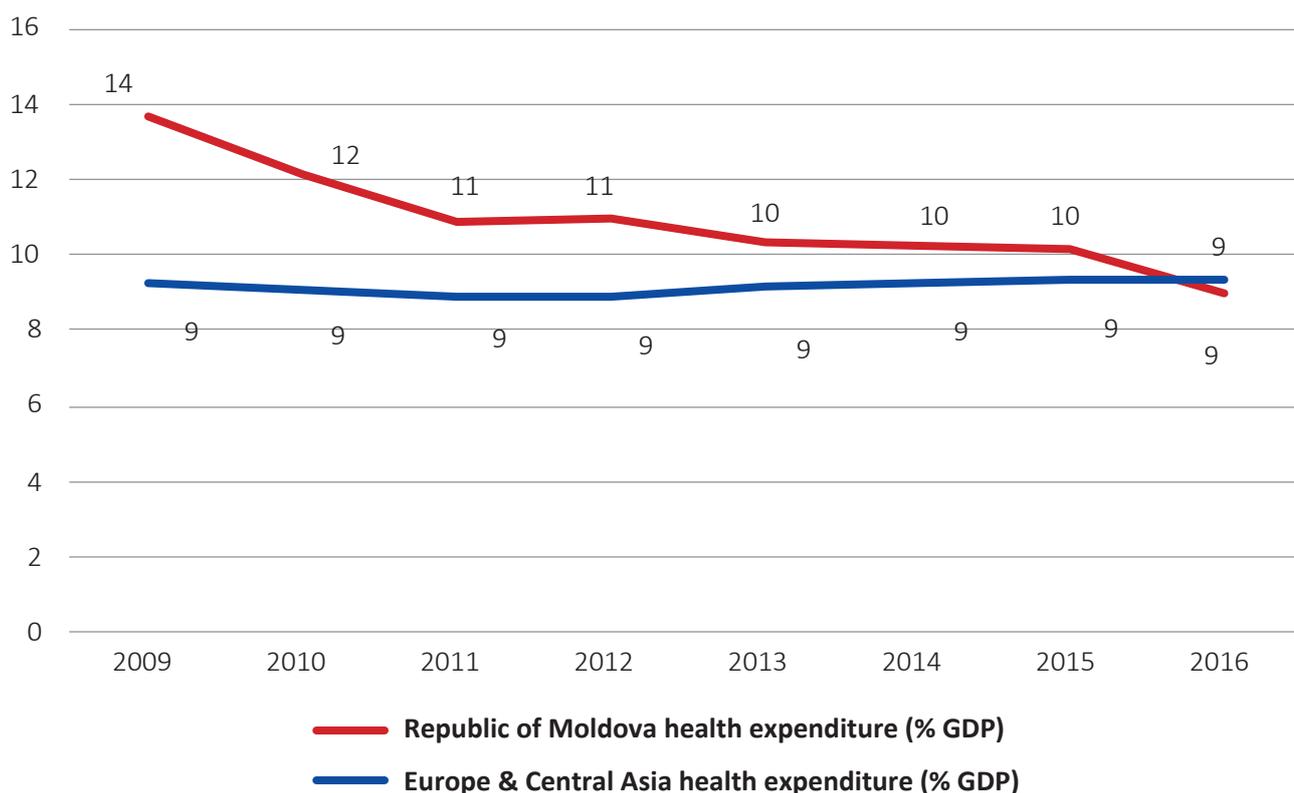
A national programme on sexual and reproductive health and rights for 2018–2022 was recently approved by the government and an entity responsible for monitoring its implementation was put in place. The new strategy places increasing emphasis on equity-enhancing health policies, with a priority of improving sexual and reproductive health of vulnerable populations. For more information on regular monitoring and accountability mechanisms see the section on health statistics and information systems for SRMNCAH.

Health system financing for UHC of SRMNCAH

The introduction of an MHI scheme in 2004 was fundamental to the reorganization of the Moldovan health system and its funding. This was a radical move from the Soviet “Semashko” model and an attempt to protect the population from financial risks associated with health care. So far, however, coverage of the MHI scheme has been a challenge for the government and remains low. The scheme’s introduction required the introduction of a new payroll tax for health and the creation of a single national pool of funds managed by the newly created national health insurance company CNAM.²

The share of the government budget allocated to health is widely used as an indication of the priority given by a government to health relative to other sectors of the economy. The Republic of Moldova, as one of the poorest countries in the WHO European Region, spends the highest share of GDP on health, but in absolute terms per capita health spending is one of the lowest in the Region (Fig. 4, Fig. 5). According to the World Bank, the Republic of Moldova’s economy grew by 4.5% in 2017, mainly led by private consumption fuelled by remittances from abroad, and growth is expected to be robust but below the historical average (4.6%) in the coming years.³ Despite this growth, per capita spending on health has tended to decline and is expected to decrease even further. This raises concerns regarding further development of the MHI scheme and its coverage.

Fig. 4. Health expenditure as a proportion of GDP, Republic of Moldova versus Europe and central Asia average, 2009–2016

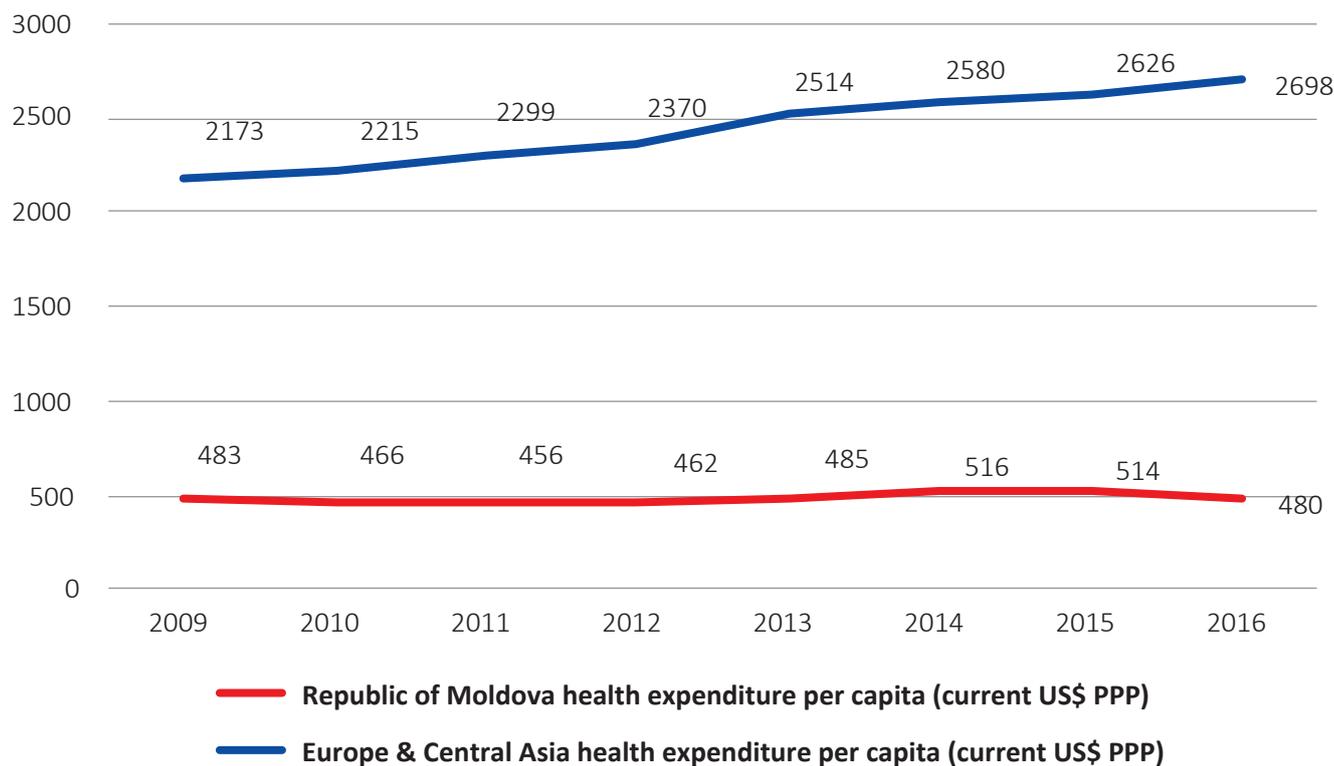


Source: data from World Development Indicators database. New York: World Bank; 2018 (<https://datacatalog.worldbank.org/dataset/world-development-indicators>, accessed 3 May, 2019).

² Shishkin S, Jowett M. A review of health financing reforms in the Republic of Moldova. Copenhagen: WHO Regional Office for Europe; 2012 (Health Financing Policy Paper 2012/1; <http://www.euro.who.int/en/health-topics/Health-systems/health-systems-financing/publications/2012/health-policy-paper-series-no.-4-a-review-of-health-financing-reforms-in-the-republic-of-moldova-2012>, accessed 26 April 2019).

³ Moldova economic update. New York: World Bank; 2018 (<http://www.worldbank.org/en/country/moldova/brief/moldova-economic-update>, accessed 26 April 2019).

Fig. 5. Health expenditure per capita, Republic of Moldova versus Europe and central Asia average, 2009–2016



Source: data from World Development Indicators database. New York: World Bank; 2018 (<https://datacatalog.worldbank.org/dataset/world-development-indicators>, accessed 3 May 2019).

The MHI scheme

Strengths

The Republic of Moldova has struggled with high out-of-pocket (OOP) payments (estimated at 57% in 2015)⁴ and public concern over informal payments. To achieve UHC, the country has taken what WHO calls a “whole-system approach” trying not only to create and expand health insurance enrolment but also to adopt health policies that would increase equity in service use, improve efficiency and expand financial protection for all citizens. An MHI scheme was created in 1998 and became functional in 2004. Administered by CNAM, it provides emergency, primary and hospital care without charge. This includes coverage of drugs in hospital and some compensated drugs in outpatient settings.

Based on the Law on Obligatory Health Insurance No. 1585 of 1998, the CNAM website lists 16 population groups that are fully subsidized by the government,⁵ including:

- pregnant women, women in delivery and postpartum;
- children aged 0–18 years;
- other vulnerable groups such as:
 - students (including those studying abroad);
 - postgraduate and PhD students (including those studying abroad);

⁴ World Development Indicators database. New York: World Bank; 2018 (<https://datacatalog.worldbank.org/dataset/world-development-indicators>, accessed 18 October 2018).

⁵ Руководство пользователя системы обязательного медицинского страхования [Instructions for beneficiaries of the mandatory health insurance programme] (in Russian). Chişinău: National Medical Insurance Company; 2017 (http://www.cnam.md/httpdocs/editorDir/file/Brosuri/2017/nou/Ghidul%20beneficiarului_ru.pdf, accessed 6 June 2019).

- people with disabilities;
- pensioners;
- unemployed people who are registered at regional agencies;
- those caring for disabled people;
- mothers with four and more children;
- poor families who have right to a social assistance package in accordance with social protection law.

According to the Law on Unified Obligatory Health Insurance No. 1387 of 2007, hospital care is free of charge and this includes drugs and all necessary medical commodities.

Uninsured citizens are covered for emergency medical care before hospital admission, primary health care, specialized ambulatory care and hospitalization in the case of socially dangerous diseases on the list developed by the Ministry of Health, Labour and Social Protection. For the majority of conditions, family doctors serve as gatekeepers and referral is required to access specialized and hospital care free of charge.

For some time, the MHI scheme had low coverage, so the government introduced measures to expand it. An amendment to the Law on Mandatory Health Insurance in 2009 ensured that families living below the poverty line, even if formally self-employed, would automatically receive fully subsidized health insurance.⁶ Additional amendments in 2010 provided all citizens, regardless of income level, with access to free primary health care services provided by family doctors and pre-hospital emergency care services.⁷

Another measure taken by the government to increase coverage is financial incentives for self-employed people to buy insurance. Discounts were introduced in 2008, set at 50% of the premium level for those who purchased insurance in the first three months of the year. Amendments made under Law No. 128-XVIII on 23 December 2009 revised the discounts along occupational lines as a proxy for ability to pay, increasing the discount rate to 75% for self-employed agricultural workers, while the remaining categories continued to be eligible for a 50% discount; discounts were no longer offered to notaries and lawyers. All these measures worked: coverage under the MHI scheme increased from 76.7% in 2007⁸ to 79.7% in 2011⁹ and, according to the World Bank, 85% in 2017.

The MHI scheme is funded through various sources, including the state budget, national health programmes and voluntary contributions (Fig. 6).

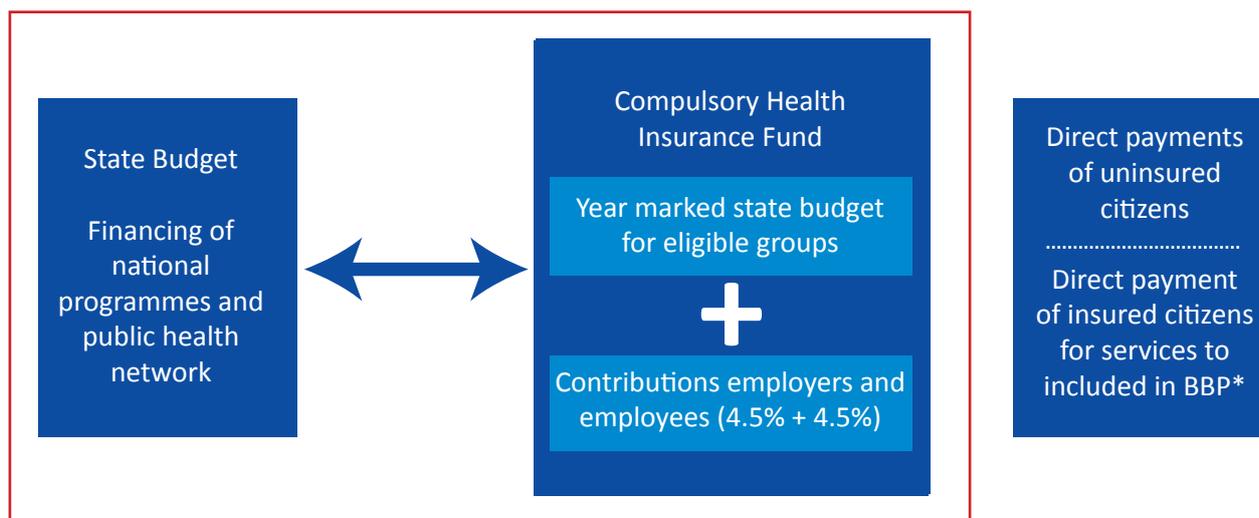
⁶ Turcanu G, Domente S, Buga M, Richardson E. Republic of Moldova: health system review. *Health Systems in Transition*. 2012;14(7):1–151 (<http://www.euro.who.int/en/about-us/partners/observatory/publications/health-system-reviews-hits/full-list-of-country-hits/republic-of-moldova-hit-2012>, accessed 26 April 2019); Barriers and facilitating factors in access to health services in the Republic of Moldova. Copenhagen: WHO Regional Office for Europe; 2012 (Health Policy Paper Series No. 9; <http://www.euro.who.int/en/countries/republic-of-moldova/publications/more-publications/health-policy-paper-series-no.-9-barriers-and-facilitating-factors-in-access-to-health-services-in-the-republic-of-moldova>, accessed 26 April 2019).

⁷ Domente S, Turcanu G, Habicht J, Richardson E. Developments in primary health care in the Republic of Moldova: essential steps to improving access to services. *Eurohealth*. 2013;19(2):28–31; Shishkin S, Jowett M. A review of health financing reforms in the Republic of Moldova. Copenhagen: WHO Regional Office for Europe; 2012 (Health Financing Policy Paper 2012/1; <http://www.euro.who.int/en/health-topics/Health-systems/health-systems-financing/publications/2012/health-policy-paper-series-no.-4-a-review-of-health-financing-reforms-in-the-republic-of-moldova-2012>, accessed 26 April 2019).

⁸ Moldova: reducing poverty and boosting shared prosperity. In: The World Bank [website]. New York: World Bank; 2017 (<http://www.worldbank.org/en/results/2017/04/17/moldova-reducing-poverty-and-boosting-shared-prosperity>, accessed 26 April 2019).

⁹ Vian T, Feeley FG, Domente S, Negruta A, Matei A, Habicht J. Barriers to universal health coverage in Republic of Moldova: a policy analysis of formal and informal out-of-pocket payments. *BMC Health Serv Res*. 2015;15:319. doi:10.1186/s12913-015-0984-z.

Fig. 6. How funds are pooled for the MHI scheme



*BBP – Basic Benefits Package.

Services covered by the MHI scheme are defined by the Law on Unified Obligatory Health Insurance No. 1387 of 2007, according to which the programme covers almost all medical services for those who are insured, including:

- emergency pre-hospitalization care;
- primary health care;
- specialized ambulatory care;
- dentistry;
- hospitalization;
- highly specialized medical care;
- home-based (palliative) care.

Service provision

Primary health care is the first port of call for insured citizens to access the higher levels of the health care system free of charge. Table 2 sets out the SRMNCAH services that should be covered.

Table 2. Benefits for SRMNCAH services provided under the MHI scheme

| Benefits of MHI scheme | Primary health care | Specialized ambulatory care | Hospital care |
|---|---------------------|-----------------------------|---------------|
| Antenatal care in accordance with WHO recommendations | 6 visits | 2 visits | – |
| Micronutrient supplements | Yes | No | No |
| Vaginal delivery/caesarean section | No | No | Yes |
| Postpartum care | Yes | No | Yes |
| Home visits for postpartum/postnatal care | Yes | No | No |

Table 2. (contd)

| Benefits of MHI scheme | Primary health care | Specialized ambulatory care | Hospital care |
|-----------------------------------|--|---|---|
| Family planning | Consultations, pills for socially vulnerable women | Consultations, pills, intrauterine device insertion for socially vulnerable women | – |
| Emergency contraception | Yes | Yes | No |
| Abortion | No | No | Yes (only for medical and social reasons) |
| Syphilis and gonorrhoea diagnosis | Smear collection for testing | Yes | Yes |
| Syphilis and gonorrhoea treatment | No | Yes | Yes |
| HPV immunization | No | No | No |
| Cervical cancer screening | No | Yes | Yes |
| Cervical cancer treatment | No | No | Yes |

Some services are only provided at the hospital level, such as abortion, including medical abortion. It should also be noted that syphilis and gonorrhoea testing and treatment are provided at specialized ambulatory facilities or hospital outpatient wards. If STIs are confirmed, patients do not need to go to the family doctor for access to care but have direct free access to doctors at a higher level of care. Only testing and treatment of syphilis and gonorrhoea are included in the MHI basic benefit package; patients have to pay for testing and treatment for all other STIs. Women victims of violence are in general offered emergency services free of charge, independent of insurance status.

Unfortunately, statistics do not provide disaggregated information regarding the prevalence of breast and cervical cancer in the Republic of Moldova. In general, prevalence of malignant cases is increasing, but cancer screening is covered by the MHI scheme.

From the point of view of reproductive health services, it is very unusual that the country – one of the poorest in the WHO European Region – has included IVF in the CNAM-funded benefits package. This happened in 2017 and 30 cases were covered for a total amount of US\$ 514 540 (according 2017 exchange rates, US\$ 1 = 18.5 Moldovan lei).¹⁰ Three IVF clinics were contracted to provide those services. Interviewees informed the assessment team that 60 cases will be covered in 2018. Importantly, it is not the full IVF procedure that is covered: only the process of transfer of the embryo into the uterus. All the investigations, preparatory stages and any treatment – including relatively expensive drugs – are paid out of pocket by the couple. Thus, IVF is not fully covered as the drugs and investigations required are usually the most expensive parts of the procedure.

Challenges

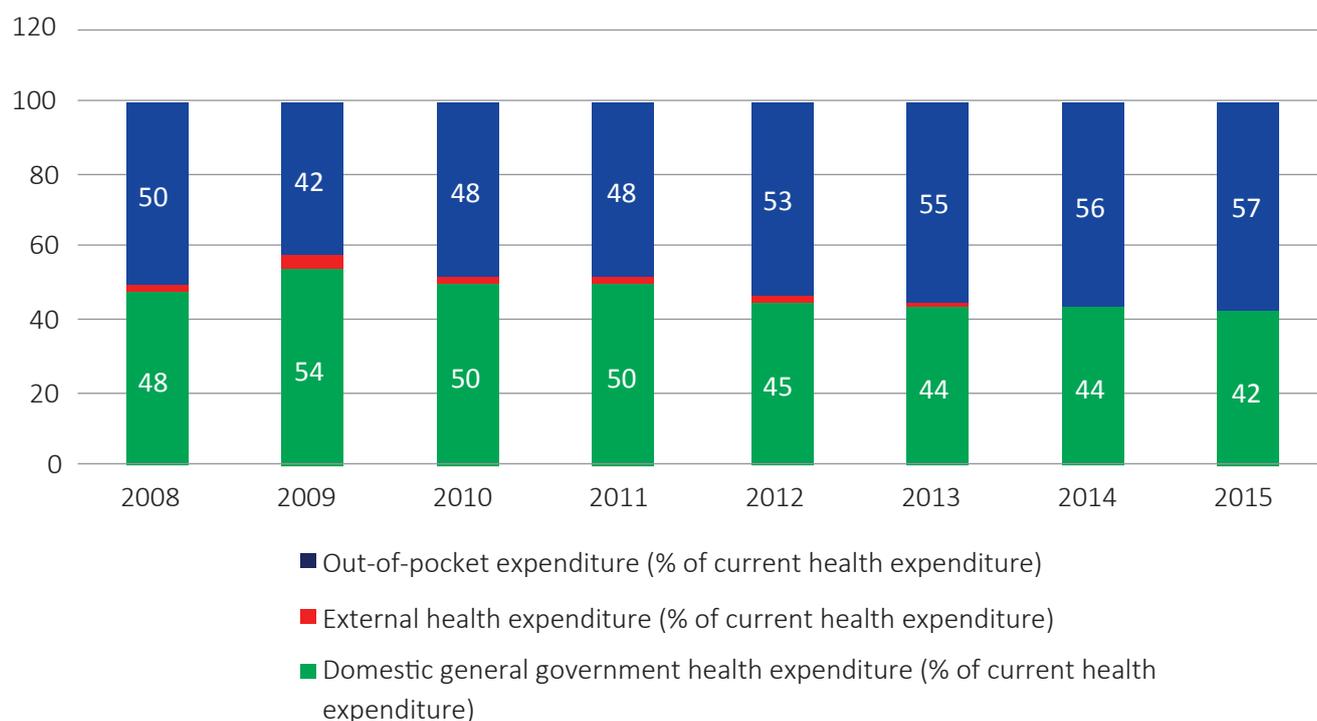
During 2007–2013, household OOP payments more than doubled, from approximately 2.32 billion to 5.28 billion Moldovan lei (from US\$ 191.4 million to US\$ 404.7 million) in nominal value rather than real value terms adjusted for inflation. Over the same period the growth of OOP payments outpaced the increase in government

¹⁰ Official exchange rates [website]. Chişinău: National Bank of Moldova; 2019 (<https://www.bnm.md/en/content/official-exchange-rates>, accessed 26 April 2019).

health spending (from 2.6 billion to 5 billion Moldovan lei).¹¹ Consequently, the share of OOP payments over total health expenditure slightly increased, and at the end of the period was above 50% (Fig. 7).

As a share of total household spending, OOP payments for health services slightly increased from 5.3% in 2007 to 5.7% in 2013. In international comparisons, the Republic of Moldova stands out as a country with high percentage spend on OOP payments (approximately 50%), while at the same time a relatively high percentage of GDP has been absorbed by government health expenditure (above 5%).¹²

Fig. 7. Share of OOP payments in health expenditure



Source: data from World Development Indicators database. New York: World Bank; 2018 (<https://datacatalog.worldbank.org/dataset/world-development-indicators>, accessed 18 October 2018).

The main drivers of OOP payments are medicines and informal payments in facilities. Among those who paid anything, 36% of outpatients and 82% of inpatients reported paying informally, with the proportion increasing over time for inpatient care. Although many patients consider these payments to be gifts, around one third of inpatients appear to be forced, posing a threat to health care access. Patients perceive that payments are driven by the limited list of reimbursable medicines, a desire to receive better treatment and fear or extortion.¹³

The design of the MHI scheme provides incentives for over-hospitalization in the Republic of Moldova, one reason being that medications are provided free if the patient is hospitalized.

Although the Republic of Moldova has increased coverage under the MHI scheme to 85%, the majority of uninsured patients are younger people who are unemployed or have recently finished their education and are

¹¹ How to reduce out-of-pocket payments in the health sector in Moldova? New York: World Bank; 2015 (<http://documents.worldbank.org/curated/en/981401500274985420/How-to-reduce-Out-of-Pocket-Payments-OOPs-in-the-health-sector-in-Moldova-policy-note-health-financing>, accessed 26 April 2019).

¹² How to reduce out-of-pocket payments in the health sector in Moldova? New York: World Bank; 2015 (<http://documents.worldbank.org/curated/en/981401500274985420/How-to-reduce-Out-of-Pocket-Payments-OOPs-in-the-health-sector-in-Moldova-policy-note-health-financing>, accessed 26 April 2019).

¹³ Vian T, Feeley FG, Domete S, Negruta A, Matei A, Habicht J. Barriers to universal health coverage in Republic of Moldova: a policy analysis of formal and informal out-of-pocket payments. *BMC Health Serv Res.* 2015;15:319. doi:10.1186/s12913-015-0984-z.

not yet formally employed. As this is the most productive segment of the population, in cases of illness the cost of health care may push their households into poverty.

Another challenge for the MHI scheme is the complicated mechanism of funding for the services provided, which is a mixture of disease-related groups (DRGs) and global budgets. Both are quite rigid in terms of spending, and facilities require additional funding from the state budget for refurbishments and procurement of new equipment and technology, making Moldovan health care even more expensive.

There are further challenges in terms of service provision. Many services provided at the hospital level could be easily provided by family doctors. For instance, treatment of STIs is provided in outpatient departments of multiprofile hospitals, and medical abortion has to be provided in hospitals. This, in turn, adds to health expenditure, as well as increasing patients' travel costs to attend hospitals, especially in rural areas, where they have to travel to the district centre. Thus, despite the country's attempts to increase financial protection and accessibility, equity in access to health services in general – and to SRMNCAH in particular – remains the main challenge.

The assessment team was not able to speak to the beneficiary patients of reproductive health services. They were absent in primary health care during the visit, which in itself is an important finding, demonstrating how underutilized primary care may be.

Table 3 sets out a summary of the assessment's findings on health system financing.

Table 3. Summary of findings on health system financing

| Policy | Rating | Criteria for rating |
|---|---------------------------|--|
| Coverage under the MHI scheme | Some need for improvement | <p>Coverage under the MHI scheme varies between 80% and 85%, according to the different sources. An explicit policy describes the principles of the MHI scheme, as well as defining vulnerable groups who are entitled to government-subsidized insurance. Despite the clarity in beneficiary groups, equity is a challenge. Financial and geographical access is not equal. Younger and self-employed people and agriculture workers have higher odds of being uninsured.</p> <p>If these groups encounter a medical concern, they have to pay out of pocket, which decreases their financial protection and is a barrier to timely access to care.</p> |
| Financing mechanisms for health providers | Some need for improvement | <p>Financing mechanisms are very complex. Hospitals receive funds through CNAM, which estimates the costs of interventions using DRGs. Apart from this, some facilities – such as the Mental Health Community Centre, early intervention centres and youth-friendly health centres – receive funds through a global budget and via per capita and performance-based financing in primary health care. Demarcation of what is funded through DRGs or the global budget is clear.</p> |

Table 3. (contd)

| Policy | Rating | Criteria for rating |
|--|-----------------------------------|---|
| Financing mechanisms for primary health care | Considerable need for improvement | <p>Primary health care facilities receive funding per capita from CNAM. In urban settings and district centres, primary health care is free of charge for everyone, whether insured or not; however, it is underutilized, mainly because of the perceived low quality of care and the drugs that are covered in cases of hospitalization.</p> <p>Underutilization is also caused by a lack of availability of services that could be provided at the primary care level but are currently only available either at hospitals or at specialized ambulatory units located at district centres, including STI treatment and intrauterine device insertion.</p> |
| Financing mechanisms for Hospital care | Considerable need for improvement | <p>Because budgeting and planning for hospital-level service provision is based on historical budgets, financial resources are often used up early in the year. This often leads to shortages of funds in the second half of the year, forcing patients to pay for services that should be free of charge.</p> |

Essential medicines and health products for SRMNCAH

Strengths

The MHI scheme covers the cost of 148 medications (common international names) for the insured population. For adults, drugs from the list are partly compensated: patient co-payments are 0%, 30%, 50% or 70% of the cost of treatment of various chronic conditions (including cardiovascular diseases, diabetes and asthma), ambulatory treatment of acute conditions and day hospital cases. Children under 18 years of age are fully compensated.

The list of reimbursed medicines is revised annually. At the beginning of the year, CNAM and the Ministry of Health, Labour and Social Protection issue a joint order regarding the list for that year. Pharmaceuticals and medical devices for hospital use are fully covered by the MHI scheme in the context of the DRG system.

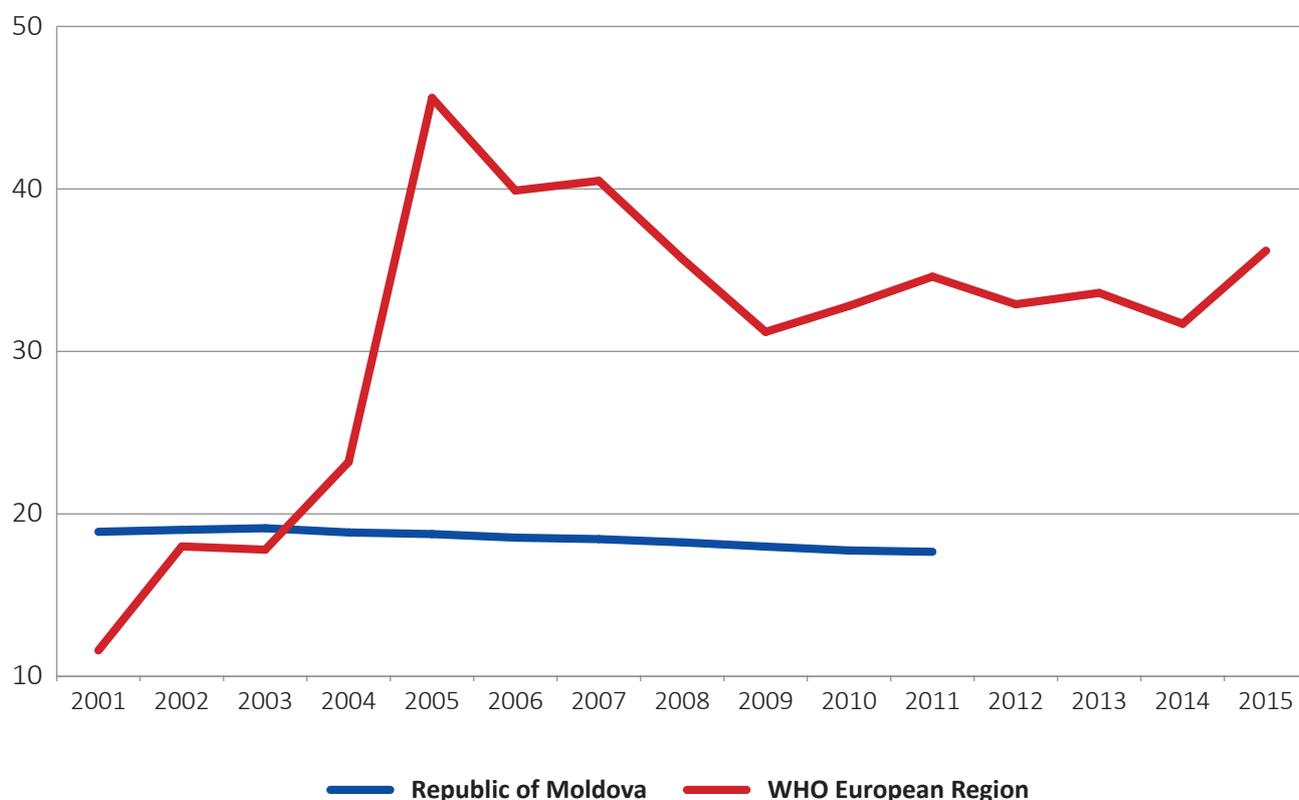
Drugs for common childhood conditions are compensated fully. Similarly, hormone pills (contraceptives) and intrauterine devices (IUDs) are covered in principle for insured people and for adolescent girls in need, in line with the national sexual and reproductive health programme approved in May 2018.

Challenges

The Republic of Moldova spends the highest proportion of its health budget on drugs in the WHO European Region (Fig. 8), but medication is one of the main drivers of high OOP payments. During the interviews, providers expressed concerns about the quality of drugs available on market. The main issue was the generic medications usually procured by the state, including hormone pills. While first-generation contraceptives are procured for distribution to young girls in youth-friendly health centres, many clients ask for prescriptions for “better pills”,

which they can access in pharmacies. This is not a unique problem related to contraceptives: a 2012 WHO assessment report also raised concerns about the quality of drugs available.¹⁴

Fig. 8. Total pharmaceutical expenditure as a proportion of total health expenditure



Source: European Health Information Gateway. Copenhagen: WHO Regional Office for Europe; 2016 (<https://gateway.euro.who.int/en/hfa-explorer/>, accessed 28 April 2019).

The providers interviewed also complained about stockouts and the low capacity for planning and forecasting of the Agency for Medicines and Medical Devices. Following the national tendering process, local health care providers sign contracts with the tender winners to receive medications. The WHO assessment team in 2011–2012 found less than full compliance with good distribution practice and a lack of use of written formal standard operating procedures. In addition, owing to limited capacity and possibly limited technical knowledge, the legal requirements for import and distribution and the methods used for control were inadequate. This could seriously hamper the quality of medicines during transportation and storage. Ministry of Health, Labour and Social Protection has taken into consideration the recommendations of this and other assessments, and on 9 December 2014 issued Decree No. 1400 regarding the establishment of good practices for pharmaceutical distribution for human use.

The government does not run an active national medicines price monitoring system for retail prices, but the Agency for Medicines and Medical Devices, with the customs and revenue service, is supposed to monitor prices of goods from their entry to the country to retail outlets, according to Ministry of Health, Labour and Social Protection Decree No. 600/320 of 24 July 2015. Only the prices of the top-selling medicines are monitored, rather than the prices of the most essential medicines, due to the absence of an official monitoring system. Distributors conduct surveys to monitor trends and collect useful information for marketing purposes rather

¹⁴ Sautenkova N, Ferrario A, Bolokhovets G, Kanavos P. 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; 2012 (<http://www.euro.who.int/en/health-topics/Health-systems/health-technologies-and-medicines/publications/2012/availability-and-affordability-of-medicines-and-assessment-of-quality-systems-for-prescription-of-medicines-in-the-republic-of-moldova-2012>, accessed 28 April 2019).

than generating new evidence for the benefit of public health policy. Further, no regulations require retail price information to be publicly accessible.

In addition to these financial and quality issues, drugs are often overprescribed by service providers and the fact that drugs are free of charge, in principle, if patients are admitted to hospital provides incentives for many patients to go directly to hospitals for care instead of a family doctor.

Service delivery and safety of SRMNCAH

Protocols delineating standards for care provision approved by a ministerial order are in place and are reportedly followed. Overall, there are 327 national protocols, of which two thirds refer exclusively or additionally to children. These are developed through a consultative process and are based on evidence and international guidelines; where no evidence exists, expert opinion is used.

The responsibilities of the family doctor include a wide variety of services, such as management of pregnant women (six scheduled routine visits), management of childhood conditions, vaccinations, provision of contraceptives and counselling. In practice, however, patients are often referred to ambulatory or hospital-based specialists, causing fragmentation of services delivered at the primary care level and resulting in multiple referrals for diagnostic tests and/or treatment, as with STI diagnosis and treatment, IUDs, implants and other family planning services. For more information see the section on the STIs tracer intervention.

Many patients bypass the primary care level and go directly to hospitals, where all services are provided in one place and the quality of care is perceived to be superior. Key informants also reported indiscriminate use of the ambulance system for conditions that do not require transport by ambulance, leading to a high-cost transport system.

A large network of hospitals exists, comprising 87 (an increase from 82 in 2011) institutions, and many patients with ambulatory-sensitive conditions continue to be treated as inpatients, leading to over-hospitalization (Fig. 9). Variations in caseloads are considerable, with some hospitals carrying out fewer than 100 deliveries a year.

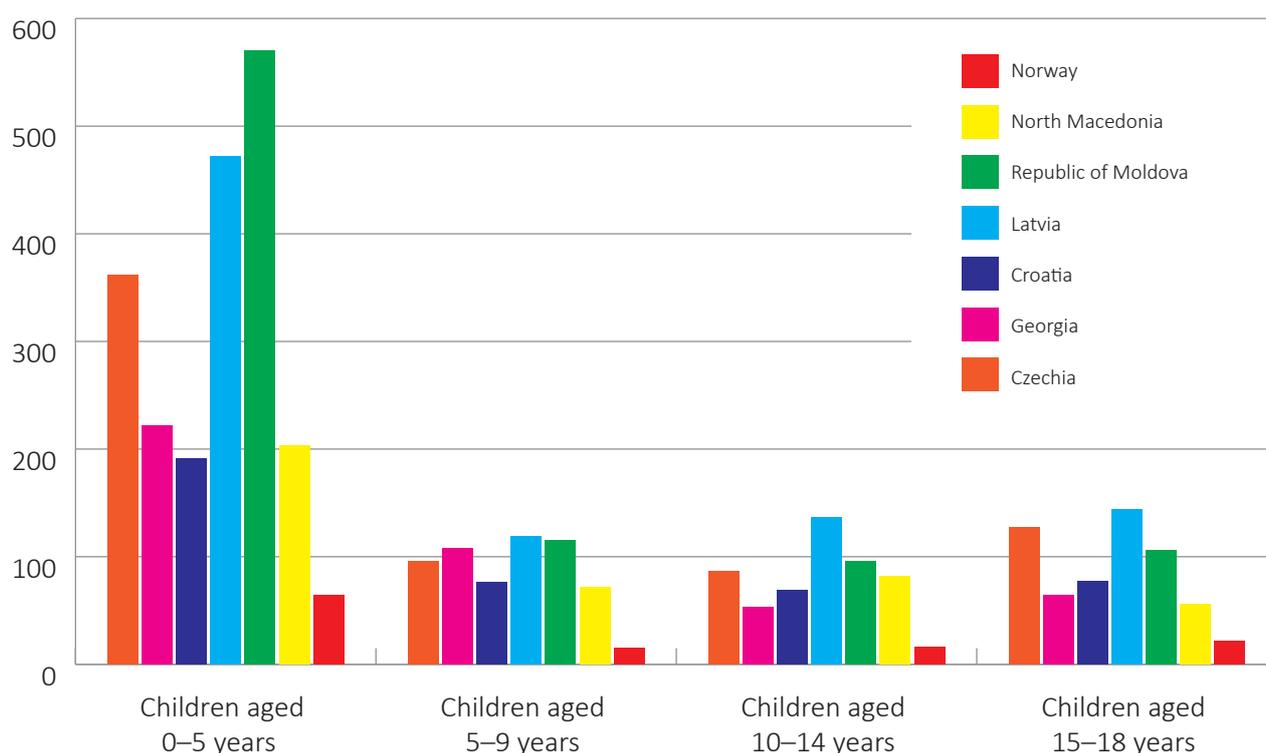
Key informants stated that referral mechanisms are in place and working well. There is, however, scope for improvement for emergency transport of severely sick neonates, as considerable waiting times for pick-up by the ambulance reportedly occur at times (see the section on the transport of sick neonates tracer intervention).

CNAM contracts private providers, who are supposed to provide health care according to the same Ministry of Health, Labour and Social Protection standards. Costs of, for example, deliveries in the private sector amount to €1000–1500, however, and key informants reported that informal payments for deliveries in general are the norm.

The legislative basis for allowing service provision to adolescents without parental consent has been established. However, the legislation is not clearly understood and/or applied uniformly across the different levels; this limits service provision (see the section on the adolescent-friendly sexual and reproductive health services tracer intervention).



Fig. 9. Total hospitalizations for children under 18 years (per 1000 in each age group)



Source: Status of child and adolescent health in Europe: baseline survey [online database]. Copenhagen: WHO Regional Office for Europe; 2018 (https://gateway.euro.who.int/en/datasets/cahb_survey/, accessed 23 May 2019).

Health workforce for SRMNCAH

During the assessment, human resources appeared to be one of the most important issues to address for improving access to and use of SRMNCAH services in the context of UHC, as described in more detail in previous reports.¹⁵ The most prominent issues are difficulties recruiting and retaining health workers (low salaries and poor working conditions are key reasons); migration abroad of qualified personnel (both doctors and nurses), particularly to Romania; unequal geographical distribution of the health workforce (rural versus urban areas); low motivation; a lack of young specialists, particularly in rural areas; and low remuneration of health staff in the public sector.

Data suggest that there has been a substantial reduction in medical staff since 2008 (Table 4).

Table 4. Number of physicians and medical staff 2007–2016

| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 |
|--------------------------------|------|------|------|------|------|------|------|------|------|------|
| Physicians | 4786 | 5667 | 5625 | 5996 | 5057 | 5605 | 5683 | 5840 | 6156 | 5727 |
| Medical staff (non-physicians) | 7989 | 8064 | 7700 | 7245 | 6642 | 5783 | 5833 | 5764 | 6076 | 5416 |

¹⁵ Unpublished WHO assessment of the healthcare system development strategy 2008–2017 for primary care and specialized ambulatory care in the Republic of Moldova.

Source: Nicolae Testemițanu State University of Medicine and Pharmacy, Chișinău.

It appears that the total numbers of physicians, dentists and nurses per 100 000 population are comparable to the average numbers in countries in the WHO European Region, however, although the number of midwives per 100 000 population remains very low – about half the average in the Region (Table 5). No midwives work at the primary health care level in the Republic of Moldova: all are hospital-based.

Table 5. Comparison of key health workforce indicators, 2013 or latest available year

| (per 100 000 population) | Republic of Moldova | Change since 2000 (%) | WHO European Region | CIS |
|--------------------------|---------------------|-----------------------|---------------------|-------|
| Physicians | 293.3 | 20 | 307.9 | 270.4 |
| Dentists | 49.2 | 58 | 53.4 | 34.8 |
| Nurses | 628.3 | 13 | 729 | 617.2 |
| Midwives | 20.9 | –34 | 40.2 | 47.4 |

Source: Republic of Moldova: highlights on health and well-being. Copenhagen: WHO Regional Office for Europe; 2016 (<http://www.euro.who.int/en/countries/republic-of-moldova/publications/republic-of-moldova-highlights-on-health-and-well-being-2016>, accessed 23 May 2019).

A strategy exists to retain human resource in the health system and the government provides financial incentives for health workers to work in rural areas. The additional remuneration covers three years and is specifically designed for younger doctors. The overall salary for doctors is relatively low (5000 Moldovan lei or €250 per month), however, and does not increase significantly over time.

The Republic of Moldova has had considerable success in reorienting the health system towards primary care, and the primary care system functions wholly on a family medicine basis: services are provided by family doctors' offices. All doctors working at the primary care level practise family medicine, but they are overburdened and many are now close to retirement age.

Furthermore, interviewees highlighted that the training and skills of family doctors are at times limited, resulting in multiple referrals to specialist doctors. Some patients indicated that family doctors would often refer to specialists for minor issues, meaning that it was sometimes easier to go directly to the hospital, where full investigation and treatment are given in one place. A lack of competence of family physicians perceived by patients often leads them to seek care in tertiary care centres, leading to underutilization of family medicine offices and subsequent over-hospitalization.

Health facility managers interviewed at the district level indicated difficulties in attracting and retaining staff and had little influence over the staff mix and numbers. Health workers interviewed at the district level expressed frustration over low salaries and lack of appreciation of their work. In one district health facility the head of the obstetrics department often had to be on call 24 hours a day for caesarean sections and other emergency procedures owing to the lack of other qualified staff.

Specific implications for SRMNCAH services

- The lack of health staff, particularly specialist doctors in rural areas, poses a risk to the quality of SRMNCAH services, including safe delivery care and the tracer interventions of antenatal care and transport of sick neonates. When skilled specialist doctors are lacking in the public sector, patients who can afford it may go to private clinics, causing further inequities in access and utilization of services.

- Family doctors are not always trained sufficiently in SRMNCAH, which causes fragmentation of services and multiple referrals to specialist doctors. For example, insertion of IUDs or diagnosis and treatment of simple STIs is done in a specialist setting rather than in primary health care. Furthermore, as family doctors at primary health care level offer limited paediatric services, most children go directly to hospitals for consultations.
- Family planning is rarely selected by family doctors as a topic in continuing medical education, resulting in a lack of practical skills to insert IUDs.
- The establishment and staffing of 41 youth-friendly health centres covered by the health insurance system is remarkable. The clinics visited seemed uneven in the approach taken – some include a focus on individual services for adolescents with specific problems; others appear to use clinics as a setting for health promotion. These clinics reach 25% of adolescents, but coverage is lacking in rural areas, where mobile clinics might be a good way to reach children and adolescents.
- Regarding the limited amount of human resources for health overall, particularly in rural areas, the relatively low number of midwives is concerning. No data are available for the specific distribution of midwives in rural and urban areas, but if they follow the pattern for other health worker categories it is likely that rural areas are more affected. Further, midwives are only present at the hospital level and not in primary health care.
- Immunization rates are generally high, but some groups have much lower coverage – for example, the Roma population. Human resources to reach out to vulnerable populations are lacking at the district level.

Health statistics and information systems for SRMNCAH

The health information systems (HISs) are managed by the National Public Health Agency and data are collected from both public and private institutions. Data collected include mortality; birth rate; incidence and prevalence of certain diseases; health resources, such as number of medical facilities, beds and staff; and services provided, such as number of visits and treated cases. Data relating to SRMNCAH come from both official statistics and population-based surveys. Annual statistics are published on the website of the National Bureau of Statistics and all institutions are notified. Civil registration and vital statistics data are reliable, and data from official statistics comply with survey-based data such as UNICEF's Multiple Indicator Cluster Survey and demographic and health surveys.

The Moldovan HIS, however, suffers from fragmentation and a lack of qualified data analysts. Different institutions collect data that are not used in combination, meaning that data on health status, quality and performance of health service providers are not used for informed policy-making. Interviews with key stakeholders underlined the strong need for a well functioning system of data collection and disaggregation. Although a plan is in place, the information system is still not fully digitalized, and medical reports from family doctors are still on paper.

Four key issues surround the implementation of a uniform HIS:

- a lack of funds for such a monitoring and evaluation system;
- a lack of qualified human resources (data analysts) to check the reliability and feasibility of data – it is difficult to recruit these professionals because of the low salary levels compared to other health system areas;

- a lack of continuous education and training schemes for staff working with data at all levels – central and local;
- a lack of political demand for an integrated HIS that would feed into policy- and decision-making processes at the strategic and operational levels.

Discrepancy also exists regarding information on population numbers. The national census conducted in 2014 estimated the total population at 2.8 million inhabitants. The administrative statistics, however, report an average total population of 3.5 million people for the period between 2007 and 2017. Undoubtedly, this affects the statistics, as district data are divided by the total population numbers to provide health statistics. The next national census is planned for 2021.

A major issue for SRMNCAH is the lack of disaggregated data. In the case of morbidity, no disaggregation takes place for age (only below and above 18 years), sex, rural/urban populations, wealth, ethnicity and so on. Without such disaggregation of data it is difficult to monitor trends along the continuum of care. Furthermore, health information and data are submitted to the central/national level by each district facility, but no formal mechanisms are in place and capacity for analysis at the district level is limited.

Findings on tracer interventions

Six tracer interventions were examined in particular detail during the assessment. This section provides a description and analysis of each, concluding with summary tables reviewing different dimensions or attributes, with colour codes based on a traffic-light system:

- red – considerable need for improvement or equating to service not being provided/totally inadequate care/potentially life-threatening practices;
- yellow – some need for improvement to reach standards;
- green – good practice or showing little need for improvement.

The attributes of the tracer interventions were reviewed using the following themes and associated questions.

- Protocols and legislation: do protocols and legislation exist for the intervention package and are they in line with WHO recommendations?
- Scope of services: are the services provided within the intervention package adequate and in line with WHO recommendations?
- Population coverage and/or access: what is the population coverage of the intervention package or the proportion of the target population that has access to the intervention package?
- Quality of services: is the quality of provision of the intervention package adequate?

Antenatal care

A protocol approved by ministerial order delineating the standards for antenatal care provision is in place and is reportedly followed. The family doctor follows pregnant women according to these standards.

The protocol includes six scheduled visits to the family doctor and two visits to obstetrics and gynaecology. It is being revised to include a guidebook for nutrition and to add a home visit by nurses to all pregnant women at 37–38 weeks according to a newly approved regulation on home visiting. The protocol also includes testing for

syphilis and HIV, including pre-testing counselling; provision of folic acid and iron; and early detection of congenital defects. Ultrasound examination by a specialist is to be carried out twice during a physiological pregnancy. If the woman has been referred and the insurance quota has not yet been depleted, ultrasound is carried out at no cost to the patient; otherwise, it costs 100 Moldovan lei (approximately €5), according to key informants.

For other services the pregnant woman may have to pay out of pocket – for example, 3D-ultrasound is available at private institutions. Three price categories exist for 3D-ultrasound at a state institution:

- if a woman is insured and the quota is not yet depleted, 3D-ultrasound can be offered free of charge;
- a woman can pay the institution privately (approximately 250 Moldovan lei; approximately €13);
- a woman may request a 3D-ultrasound at a private institution for 450 Moldovan lei (approximately €22).

According to key informants, cytogenetic examination during week 16 of pregnancy for Down's syndrome (trisomy 21) and other genetic diseases is available for approximately €35 (680 Moldovan lei). The law allows abortion before 22 weeks.

Pregnant women have the right to choose their family doctor and where they wish to deliver.

CNAM also contracts private providers and care is supposed to be provided according to the same Ministry of Health, Labour and Social Protection standards. If a woman delivers in a private institution, a level of co-payment is required.

Key informants stated that at the private clinic MEDPARK a vaginal delivery costs €1000 and a caesarean section €1500. Patients reported that informal payments for deliveries are the norm.

During key informant interviews family doctors consistently referred to the Ministry of Health, Labour and Social Protection protocols for providing antenatal care. In cases of pre-eclampsia, the family doctor calls an ambulance and the patient is referred to the tertiary facility. The key informants stated that referral is working well, but in one primary health care facility responsible for a catchment population of 35 000, in the last two years no cases of pre-eclampsia were seen according to the family doctors, which may indicate that the condition is underdiagnosed. Interviewees also reported that family doctors are not always skilled in managing complications, leading to an increasing trend in late referral of hypertension and pre-eclampsia.

One of the performance indicators is registration of all pregnant women before week 12. Reportedly, all family doctors follow the standards and 85% of pregnancies are registered before week 12. The remaining cases are – according to family doctors – vulnerable groups such as Roma communities and migrant workers working in Italy, the Russian Federation and other places abroad, who present late in pregnancy.

IVF treatment was added to the CNAM benefits package in 2017, when it covered 30 couples. In 2018, 60 couples received IVF treatment co-financed by CNAM at three private institutions. Necessary medications and laboratory tests are made via OOP payments, while CNAM pays for one procedure, including anaesthesia. The Ministry of Health, Labour and Social Protection established specific eligibility criteria for CNAM-funded IVF treatment: both partners must be insured; the couple must be childless; and certain health requirements – for example, relating to obesity – must be met. A committee reviews the patients' files and makes recommendations for or against treatment based on these criteria. Couples not selected among the first 60 in 2018 have to wait for the following year. More than 1000 couples reportedly attempted to access IVF treatment in 2018.

Table 6 sets out a summary of the assessment's findings on antenatal care.

Table 6. Summary of findings on antenatal care

| Attributes | Rating | Criteria for rating |
|-----------------------------------|---|---|
| Protocols and legislation | Good practice/ little need for improvement | The protocols for antenatal care are being revised to be in line with WHO recommendations. Current practice includes eight points of contact with a physician during pregnancy. |
| Scope of services | Some need for improvement | All WHO-recommended antenatal care interventions are included in the protocol and in the CNAM benefit package. However, due to insufficient funding, pregnant women often pay for some services, including “better” iron supplements and high-quality ultrasounds, and make general informal payments for antenatal care and delivery care. |
| Population coverage and/or access | Good practice/ little need for improvement | Antenatal care coverage is pretty high (94.5% in 2012) and there is no indication that it has decreased since then. |
| Quality of services | Some need for improvement | The services are often fragmented: pregnant women have to see many different providers with multiple referrals. Family doctors are often not confident in the detection and management of complications. |

STIs (excluding HIV)

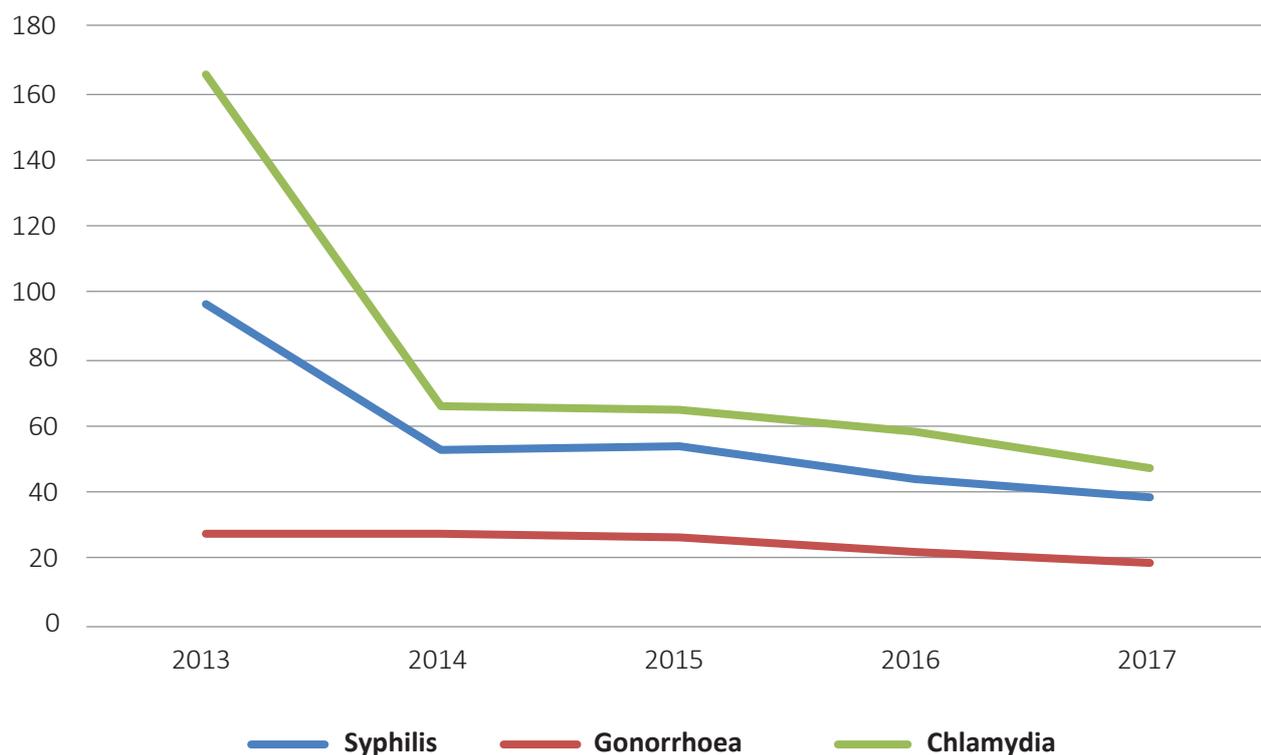
According to key informants, national policy stipulates that the whole population should have access to all services provided at the primary health care level. Syphilis and HIV/AIDS are considered socially dangerous diseases and diagnostics and treatment are free of charge, including for uninsured patients. Interviewees reported, however, that chlamydia testing and treatment are free of charge only for pregnant women.

Testing for gonorrhoea and trichomoniasis is covered by CNAM at the primary care level and treatment is provided at the level of specialized ambulatory care or in hospital. Syphilis and gonorrhoea cases are sent for treatment to a specialist dermato-venereologist; all others are treated by the obstetrician/gynaecologist. Syphilis appears to be a priority infection; this may, in part, be attributed to the uptake of the WHO strategy for elimination of mother-to-child transmission elimination of HIV and syphilis in the Republic of Moldova. The only source of information regarding STI prevalence in the country is the Hospital of Dermatology and Communicable Diseases, according to whose electronic STI surveillance system the number of cases has decreased (Fig. 10).

The number of congenital syphilis cases has decreased considerably, and the country was acknowledged as eliminating congenital syphilis in 2016. This status was revalidated by WHO in 2018.

Increasing availability of rapid tests for STIs at primary health care level was reported. Reaction of microprecipitation can be carried out. The public and private sectors are required to report results; however, as it is a sensitive subject, patients do not like their details to be reported. Contrary to previous practice, employers no longer need to be informed of the STI status of their employees. Information provided by key informants about the legislation on management of STIs – particularly on parental consent for adolescent patients (see also the section on adolescent-friendly sexual and reproductive health services) – was contradictory, unclear and/or not clearly understood uniformly across the different health service levels.

Fig. 10. STIs per 100 000 population, 2013–2017



Source: data from Hospital of Dermatology and Communicable Diseases database.

Key informant interviews revealed that no STI treatment is available at the primary health care level: family doctors refer patients for treatment to a variety of specialists, such as dermato-venereologists, gynaecologists and infectious disease specialists. For insured patients, services are covered by CNAM; uninsured patients pay out of pocket. Doctors write a prescription and drugs can be obtained through pharmacies. Inpatients receive treatment free of charge.

Youth-friendly health centres are equipped to provide rapid HIV and syphilis tests. Laboratories also exist in some primary health care facilities and offer testing for IgG but not for DNA of chlamydia, herpesvirus etc.

Private laboratories, where patients can obtain all required laboratory tests – including thyroid hormones, hormonal status of pregnant and sterile women – are present on the premises of primary health care facilities at the district level.

CNAM covers a Pap test (smear) every three years. Colposcopy is covered only if a patient is under the national insurance.

Table 7 sets out a summary of the assessment’s findings on STIs.

Table 7. Summary of findings on STIs

| Attributes | Rating | Criteria for rating |
|-----------------------------------|-----------------------------------|--|
| Protocols and legislation | Some need for improvement | Legislation on management of STIs, particularly on parental consent for adolescent patients (see also the section on adolescent-friendly sexual and reproductive health services) is not clearly understood or uniformly applied across health service levels. |
| Scope of services | Some need for improvement | Availability of rapid tests at the primary health care level is increasing. Referrals for laboratory testing are required in many settings, however, and services are sometimes offered only at private laboratories. |
| Population coverage and/or access | Some need for improvement | For insured people services are covered by CNAM; uninsured people pay out of pocket for drugs, although they are free of charge for inpatients. |
| Quality of services | Considerable need for improvement | Limited treatment is available at the primary health care level: referrals to specialists are required for all STIs, resulting in fragmentation of services. Benzathine penicillin G (the cheapest and most common antibiotic to treat syphilis) is unavailable. |

Transport of sick neonates

A pick-up mechanism for neonatal transport is in place between tertiary care and district institutions, organized by the AVIASAN patient transport service, enlisting doctors on duty (provided by Municipal Hospital No. 1 and the Mother and Child Institute in Chişinău, alternating fortnightly).

Only two ambulances are equipped for neonatal transport in the country: one is stationed in Chişinău; the other in Bălţi. The first has covered more than 1 million km since 2008 and is stationed at the Emergency Hospital in the centre of Chişinău, which is in charge of its maintenance and of the equipment and required medications it carries. Key informants report that no stockouts have occurred but that the equipment is very outdated and the transportation is not safe. One stated that the ventilator is “infected”.

Surfactant, a treatment for neonatal respiratory distress, is only stored at the two tertiary care institutions (Municipal Hospital No. 1 and the Mother and Child Institute in Chişinău) for the whole country. This can mean delays in treatment reaching rural areas.

Two ambulances for neonatal transport are insufficient for the entire country, according to key informants. While the ambulance stationed in Chişinău had to undergo maintenance, doctors had to call the ambulance from Bălţi for emergencies. The doctor on duty for AVIASAN had to wait for the ambulance from Bălţi to reach the capital, get the surfactant, go to pick up the neonate in the district and return to the capital.

Key informants reported that no neonate arriving in the ambulance had had hypothermia, and stated that temperature of neonates was routinely documented on arrival. Documentation was not available to the assessors during the assessment to cross-validate these findings.

Key informants at the district level stated that there is good communication with the tertiary care institutions in general and in case of an emergency. They reported waiting times of 2–6 hours for the ambulance to pick up the

neonate. Particularly when extrapolating the time to more distant districts, waiting and referral times may be considerable.

Table 8 sets out a summary of the assessment’s findings on transport of sick neonates.

Table 8. Summary of findings on transport of sick neonates

| Attributes | Rating | Criteria for rating |
|-----------------------------------|--|--|
| Protocols and legislation | Some need for improvement | Clinical protocols for management of pre-term and/or severely sick neonates are available; specific protocols for mechanism and organization of neonatal transport were not seen. |
| Scope of services | Good practice/ little need for improvement | Transport of stabilized neonates and required treatment is available. |
| Population coverage and/or access | Considerable need for improvement | A system of referral (in-utero transport) for at-risk pregnancies prior to delivery is in place, but two ambulances for neonatal transport are insufficient for the entire population of the country. |
| Quality of services | Considerable need for improvement | Equipment is reportedly outdated and both ambulances are old, procured in 2008. Surfactant is only stored at the two tertiary care institutions in Chişinău for the whole country. Significant delays are reported to occur at times. |

Case management of common childhood conditions

Protocols

Protocols for the management of common childhood conditions are in place and are reported to be followed. They were developed by the Department for Quality Management of Health Services of the National Public Health Agency, coordinating a working group of specialists using an evidence-based approach, and are reportedly based on international standards. If no evidence-based guidelines are available, expert opinion is followed.

Once the protocols are drafted, they are sent to institutions such as CNAM, the Agency for Medicines and Medical Devices and the Ministry of Health, Labour and Social Protection’s council of experts. They are then distributed through the medical institutions to all users and implemented. The protocols reflect the organizational systems and how patients should navigate through it: primary health care, emergency care, ambulatory specialized medical care and the steps to reach hospital care. Each standard document includes provisions for services deemed mandatory and covered by CNAM; if CNAM cannot afford them they are still recommended and people may decide to access them through the private sector and/or abroad.

Service delivery

All primary health care services for children under 5 years of age are covered by CNAM, subsidized by the state budget; in cases of referral, outpatient-specialized services are offered free of charge. In the absence of a referral, services are available for a fee.

In the case of a child with pneumonia, the family doctor follows a one-page protocol on pneumonia in children. This contains a brief description and a step-by-step approach standardized for all family doctors in the country. If

required, the child is referred to the district hospital; if the case is beyond the capacity of the district level, further referral is made to a collaborating centre, which for pneumonia in children is the Institute of Mother and Child Health in Chişinău.

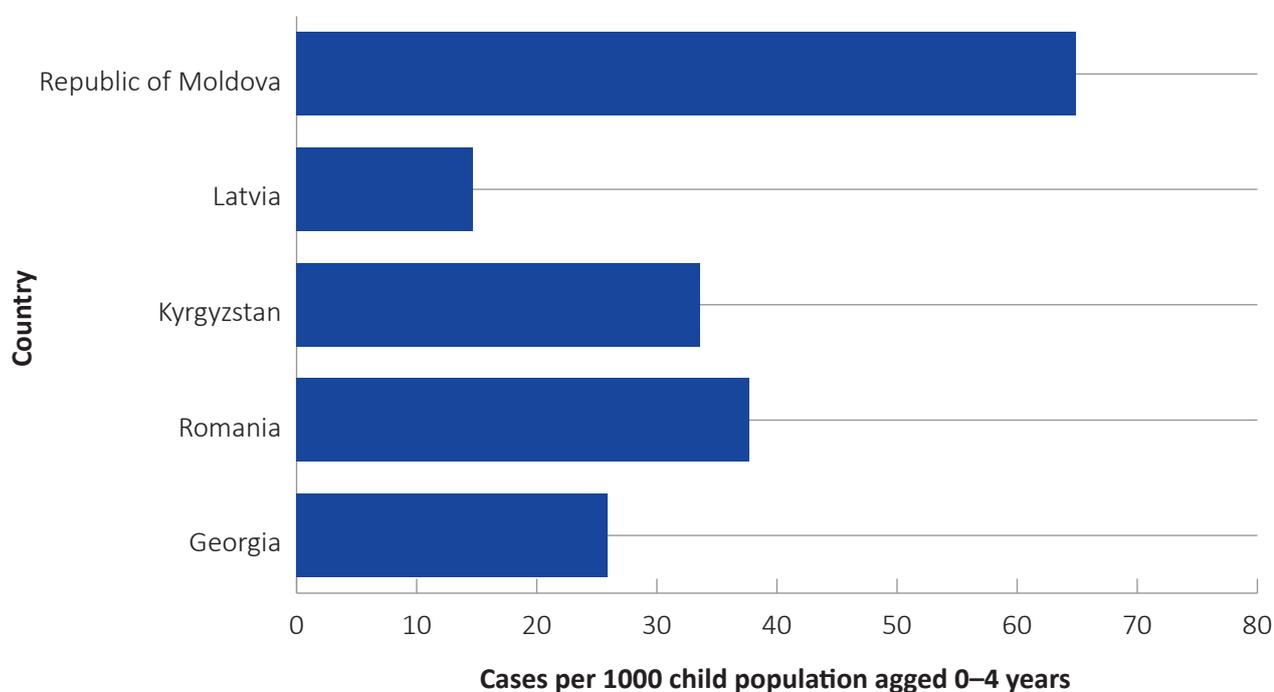
At the district level, paediatricians usually work half time at the district hospital and the other half at the ambulatory level. They are reimbursed based on services (not on capitation). Some districts do not have paediatricians because of a severe lack of staff.

The Department for Quality Management of Health Services of the National Public Health Agency does not track the number of people who access specialized care directly.

Over-hospitalization

Despite clear protocols for treatment of pneumonia at the primary health care level, the hospitalization rate of children with pneumonia in the Republic of Moldova exceeds hospitalization rates in other countries considerably (Fig. 11).

Fig. 11. Total hospitalization rate for pneumonia for children under 5 years



Source: Status of child and adolescent health in Europe: baseline survey [online database]. Copenhagen: WHO Regional Office for Europe; 2018 (https://gateway.euro.who.int/en/datasets/cahb_survey/, accessed 23 May 2019).

Key informants at the 300-bed Ignatenco children’s hospital in Chişinău reported approximately 150 presentations at the emergency department daily, of which about 30% are admitted. Below the age of 3 years, rooming-in is allowed and accommodation for mothers is provided. In 2017, rooming-in was also established in intensive care units.

When asked the reasons for the high hospitalization rates compared to neighbouring countries, interviewees gave the following responses.

- “People do not want to go to the family doctor but rather come here and see all the specialists at once.”
- “The oncology hospital does not take children under 10 years and thus we admit all children with cancer.”

- “We have many admissions because of socioeconomic factors: medication is free in the hospital.”
- “Family doctors are afraid of trouble if they do not manage patients properly – so they predominantly refer.”

Respondents also mentioned other challenges.

- “Small salaries, particularly at the community centres, high-staff turnover and migration are issues – private institutions have attractive salaries and they recruit the best doctors.”
- “The children’s hospital is in a disadvantaged situation vis-à-vis adult hospitals as it does not receive payment from patients in the way adult hospitals do.”

Interviews with patients confirmed ongoing over-hospitalization and indicated continuing polypharmacy and overuse of antibiotics, including use of cephalosporines and other antibiotics not recommended as first-line drugs by standard treatment guidelines.

Many patients reported having arrived with ambulance services without clear indication and need.

Acute pancreatitis seems to be overdiagnosed. Children who are vomiting seem to receive blood tests for amylase and lipase levels routinely. This is not in line with standard treatment guidelines but seems to be included in the protocol for management of pancreatitis in children in the Republic of Moldova.

Table 9 sets out a summary of the assessment’s findings on case management of common childhood conditions.

Table 9. Summary of findings on case management of common childhood conditions

| Attributes | Rating | Criteria for rating |
|-----------------------------------|--|--|
| Protocols and legislation | Good practice/ little need for improvement | Integrated management of childhood illnesses, the WHO strategy to reduce under-5 mortality, and the WHO Pocket book of hospital care for children, a related guide to treatment of children for most common conditions at the hospital level, have been adopted, as well as national protocols following international evidence-based standards. Protocols on pancreatitis need be reviewed, however. |
| Scope of services | Some need for improvement | Management of common childhood conditions is included in the package provided free of charge for children under 5 years of age. Some services, however – particularly drugs – have to be paid out of pocket. While most drugs recommended for first-line treatment of cough and pneumonia are included in the essential drug list and covered by CNAM, others are reported to be prescribed frequently and have to be paid for by parents. |
| Population coverage and/or access | Some need for improvement | The proportion of children aged under 5 years with pneumonia taken to a health care provider is 79.2%. |

Table 9. (contd)

| Attributes | Rating | Criteria for rating |
|---------------------|-----------------------------------|--|
| Quality of services | Considerable need for improvement | <p>There is over-hospitalization of cases that could be safely managed as outpatient due to:</p> <ul style="list-style-type: none"> ● self-referral to hospital by parents; ● financially perverse incentives (such as requiring drugs prescribed at the primary health care level to be purchased by the patient, while the same drugs are provided free of charge if admitted to hospital for the same condition); ● overdiagnosis of pneumonia; ● polypharmacy and overuse of antibiotics, particularly newer antibiotics not recommended by the WHO integrated management of childhood illnesses strategy. <p>Unclear overdiagnosis of pancreatitis is common.</p> |

Adolescent-friendly sexual and reproductive health services

Unprecedented work has been carried out in the Republic of Moldova to ensure access of adolescents to sexual and reproductive health services across the country, following a systematic process outlined by WHO.¹⁶ Legislation and availability of adolescent-friendly services are set up to allow equitable access. Services for adolescents are provided in 41 youth-friendly health centres in municipalities and districts, which cover the whole country. In addition, efforts are under way to set up mobility teams to provide clinical outreach services to adolescents in villages. Funds to purchase the required vehicles had not been identified at the time of the mission, however.

Legislation

For patients under the age of 16 years, parental consent is required to access health services, according to Moldovan law. The Law on HIV Prevention stipulates, however, that adolescents can provide consent for medical care from 15 years of age, or even younger if parents cannot be reached, in order to receive health services. In practice, this means that if the patient is less than 16 years old and it is not possible to find the parent, the health worker can act in the child's best interests. For example, if a 15-year-old girl attends the doctor's practice and says, "I will kill myself if you tell my parents I am pregnant", health care providers can establish a clinical review group and jointly decide what is in the best interest of the child.

While the law, when applied to its fullest extent, allows provision of abortion services to minors without parental consent, many health care providers are either unaware of or unwilling to apply the relevant clauses. One key informant stated that "doctors are afraid of acting in the best interests of the child".

Overall, there was discrepancy in the reported age at which adolescents can seek medical help without parental consent. While many informants at the health care provision level reported the age to be 16 years, at the ministry level key informants stated that according to legislation all interventions require parental consent for adolescents under the age of 18 years.

¹⁶ Strengthening the health sector response to adolescent health and development. Geneva: World Health Organization; 2010 (https://www.who.int/maternal_child_adolescent/documents/cah_adh_flyer_2010/en/, accessed 26 April 2019).



Contraception

When asked about adolescent girls' access to contraceptive pills, one key policy-maker replied that this was an interesting question. Adolescent-friendly health services work with adolescents on promoting abstinence and “waiting for the right time”.

UNFPA was the only provider of contraceptives for many years, but the state has slowly been taking over: in 2018, 3.5 million Moldovan lei (approximately €175 000) were made available from the state budget for contraception for vulnerable groups and adolescents. Condoms and oral contraceptive pills are offered at youth-friendly health centres free of charge. Key informants reported stockouts as a result of complex procurement rules and mechanisms, however; for example, only a two-month stockpile is allowed, but re-ordering takes longer than two months. Decisions on procuring contraceptives from the state budget and the amount allocated to contraception are taken by the head of the institution at the local level. Youth-friendly health centres are not contracted directly but are a subdivision of primary health care and receive a global budget from CNAM. Better mechanisms for estimating needs, more efficient procurement of oral contraceptive pills and more autonomy of youth-friendly health centres in the use of their funds were identified by key informants as necessary to improve access to contraceptives.

The assessment revealed several challenges for procurement of contraceptives in the Republic of Moldova:

- difficulties with procurement of modern contraceptives through UNFPA procurement services, as this requires amendments to national legislation, including registration/notification of medical devices and medicines;
- lack of inclusion of modern contraceptives in the list of subsidized (compensated) medicines, meaning that they are not affordable for people from lower middle-income segments of the population;

- low awareness among vulnerable populations on their rights to benefit from free-of-charge modern contraceptives in primary health care facilities;
- the relatively small market for contraceptives in the country, resulting in limited interest of private manufactures in supplying modern contraceptives, including registering them at the national level – consequently, injectables, implants, contraceptive patches and female condoms are not widely available.

The assessment found that the majority of oral contraceptives prescribed were first-generation pills, with a higher rate of side-effects. In addition, some health care providers disapproved of prescribing hormonal contraceptives to adolescent girls, quoting concerns about infertility, interference with physical development and similar.

Oral contraceptive pills are available from pharmacies without prescription at a price ranging from €2–3 to €7–11 per month, according to the drug type. Emergency contraception is reportedly also available through pharmacies without prescription.

Abortion

At the hospital level, curettage and vacuum aspiration are offered. No medical abortion is offered, as there is reportedly a monetary incentive against it.

With a prescription, medication needed for a medical abortion can be purchased at pharmacies for €10. Some pharmacies sell the medication unofficially without a prescription. According to key informants, no complications are seen. Nevertheless, the youth-friendly health centres work with pharmacies to improve the protocol on how to advise and treat girls and to stress the importance of contraception.

Key informants reported that, based on the amount of medication sold by pharmacies for medical abortions, it appears that the medical abortion rate is much higher than officially reported.

STIs

The information provided on the age of consent for access to STI diagnosis and treatment for adolescents varied across key informants. While it seems not required by law, several key informants believed that for testing and treatment of STIs in adolescent patients under 18 years, it is mandatory to inform the parents.

STI prevention, diagnostic and care services are reportedly not all provided at one place but rather through a number of referrals, which particularly for victims of violence may be detrimental to treatment outcomes. Key informants provided the example of several young women who were victims of violence who did not received the required treatment for STI prevention/care as they were referred by the family doctor to obstetrics and gynaecology, and from there to multiple different laboratories.

Youth-friendly health centres at the district level

Key informants provided an example of adolescent-friendly health services provided at the district level, in which a group of 15-year-old girls were called in for check-up. Services provided included measurement of height, weight, body mass index and vision, and history taking. When problems were identified the girls were sent to a psychologist and/or social assistant. A gynaecological assessment was also carried out, assessing the nature of the menstrual cycle (such as presence of pain or irregularity). In cases of irregular cycles, the girls were asked to come back with a guardian. According to the service provider an adolescent below the age of 16 must come with a legal representative.

Some inconsistencies exist as the key informant also stated that adolescents could ask to access services anonymously, in which case they are given a number on the medical record and the registration book. The

service provider also stated that given the small community sizes, all adolescents are known to the service providers and anonymous services are therefore difficult to implement.

Table 10 sets out a summary of the assessment’s findings on adolescent-friendly sexual and reproductive health services.

Table 10. Summary of findings on adolescent-friendly sexual and reproductive health services

| Attributes | Rating | Criteria for rating |
|-----------------------------------|---|---|
| Protocols and legislation | Good practice/ little need for improvement | <p>41 youth-friendly health centres have been established.</p> <p>The age of consent is 16 years; under the Law on HIV Prevention it is 15 years, with the option of providing services to even younger adolescents without parental consent when in the best interests of the child.</p> |
| Scope of services | Some need for improvement | <p>The package of services provided by youth-friendly health centres free of charge is comprehensive. The range of services is, however, not uniform across youth-friendly health centres. For example, in some settings services are mainly limited to information provision and check-ups, whereas other facilities provide a larger range of individual services, including access to contraceptives and abortion.</p> |
| Population coverage and/or access | Some need for improvement | <p>25% of 10–24-year-olds have been reached through the adolescent-friendly health services network, according to key informants.</p> <p>There are currently no resources to provide mobile clinics in rural areas.</p> |
| Quality of services | Some need for improvement | <p>Legislation on parental consent for adolescent patients is not clearly understood and/or applied uniformly across the health service levels.</p> <p>The range of services is not uniform across youth-friendly health centres. For example, in some settings services are mainly limited to information provision and check-ups, whereas other facilities provide a larger range of individual services, including access to contraceptives and abortion.</p> <p>The majority of oral contraceptives procured are outdated first-generation pills.</p> |

Immunization

Of children aged 15–26 months, 89% (82% urban, 93% rural) were vaccinated against preventable childhood diseases in the Republic of Moldova, according to UNICEF’s Multiple Indicator Cluster Survey in 2012.¹⁷ Vaccine coverage has decreased substantially over recent years according to key informants, however.

Vaccinations are made available through the national immunization programme. The National Public Health Agency has procured vaccines through UNICEF since 2016, and family doctors in villages and in primary health care facilities carry out the vaccination process. Supply chains are reportedly working well, although a vaccine shortage was reported in 2016 as a national tender had been organized to source vaccines but did not lead to successful procurement. Gavi, the Vaccine Alliance, supports human papillomavirus (HPV) vaccinations as a demonstration project for the cohort of girls aged 10 years, reaching 65% coverage of these girls. The Ministry of Health, Labour and Social Protection, supported by UNICEF and WHO, carried out an information campaign among parents of this target group to increase vaccine acceptability and uptake. The nongovernmental organization Neovita ensured wider dissemination of information on HPV for adolescents.

Primary health care informants reported that vaccinations are administered every day except Fridays, as facilities are closed during the weekend, so Friday is avoided in case of adverse post-vaccination events. Most are administered on Tuesdays and apparently in August: one interviewee stated, “August is the month of vaccinations”. Measles, mumps and rubella (MMR) vaccine is contained in a large vial consisting of 4–5 doses and can thus be administered only on Tuesdays when many children happen to attend. In some cases, anti-inflammatory medications are given to prepare the child for immunization. After vaccination, children are observed in the clinic for 30 minutes.

When the family doctor is not sure whether a vaccination is contraindicated, a medical immunological council is called to discuss and decide on the specific case. Absolute contraindications mentioned by key informants include:

- measles
- allergies; anaphylactic reaction to previous vaccinations
- immunosuppression
- adverse reaction to neomycin.

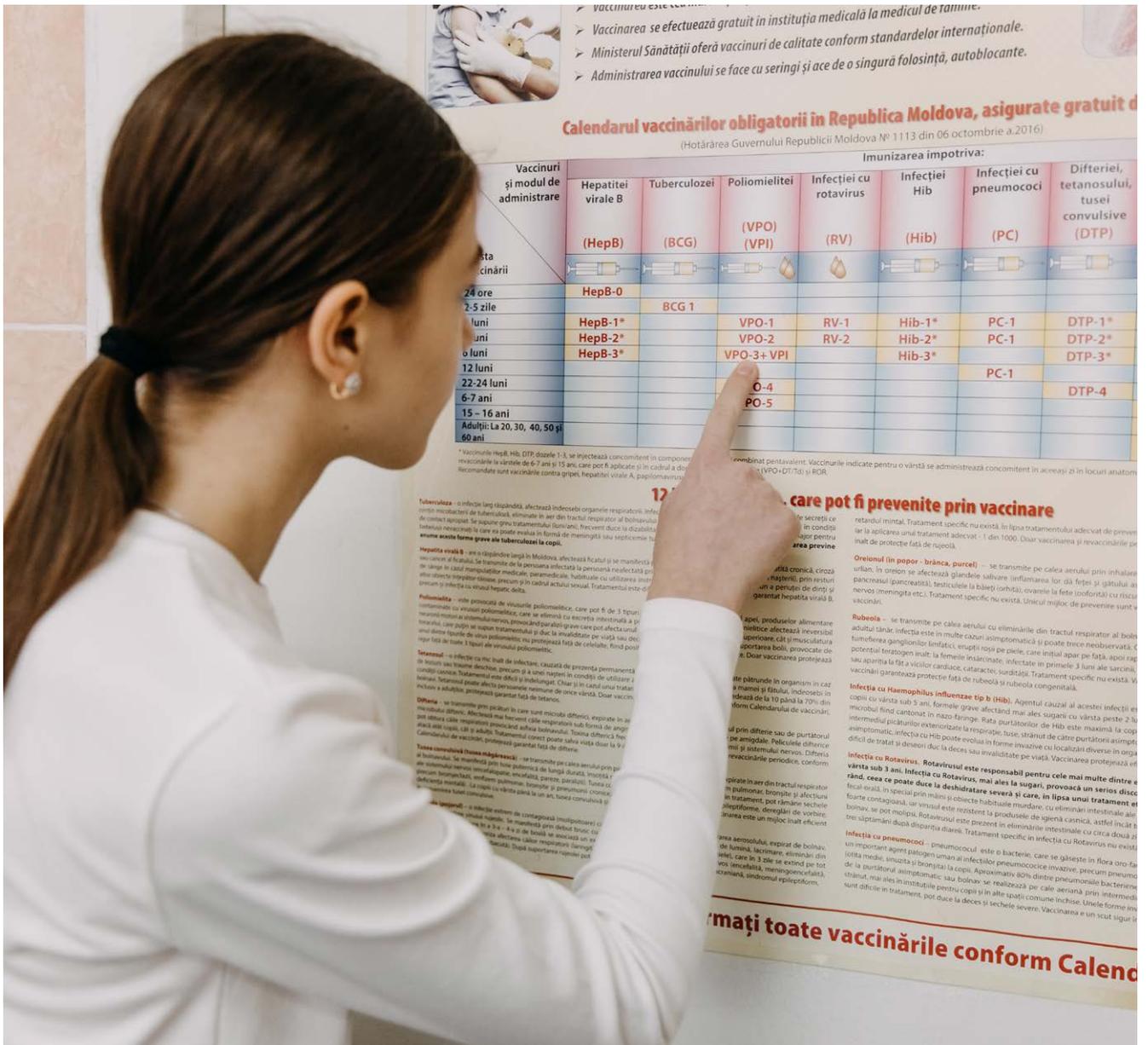
Relative contraindications mentioned include:

- pregnancy
- haemotransfusion
- severe pneumonia.

There has been a significant reduction in immunization rates: from 95% in 2006 to 89% in 2013 and 87% in 2017. Family doctors reported that MMR coverage in a specific village was as low as 40%. Uptake of first-dose hepatitis B vaccination is good, with only 3.5% refusal, and coverage for bacille Calmette–Guerin was reported to be 88%. Rotavirus and pneumococcal vaccine rates lag behind these.

Strong anti-vaccination movements have recently spilled over from Romania, Ukraine and European countries. The urban population with high levels of education and Roma population groups are the least vaccinated groups in the Republic of Moldova. Religious reasons were also cited for declining vaccinations.

¹⁷ Republic of Moldova: Multiple Indicator Cluster Survey 2012. New York: United Nations Children’s Fund; 2012 (<https://www.unicef.org/moldova/en/reports/multiple-indicator-cluster-survey-mics>, accessed 26 April 2019).



The country was declared free of measles for three years before a new outbreak occurred in 2018, with 283 measles cases as of October 2018. Other outbreaks included rubella (2002), mumps (2008) and tetanus (2010).

Key informants reported “a lack of trust of parents in the safety and efficacy of the vaccines and low capacity of workers to communicate with parents”. They also stated that “many conditions that are considered contraindications are not, in reality”. Medical workers themselves often have negative views of vaccination safety: one interviewee said, “HPV vaccines can cause infertility and development issues for the girls”. These issues combined often result in vaccination hesitancy from both the provider and the patient.

Key informants stated that people who can afford to do so choose to vaccinate their children in private institutions (for example, an MMR vaccine costs up to almost 2000 Moldovan lei (approximately €100) per shot), despite services being available free of charge in the public sector. Private immunization centres buy some vaccines privately, sourcing them from western European manufacturers and markets. One interviewee said, “I don’t go to the state sector: I go to the private sector for vaccinations.”

Table 11 sets out a summary of the assessment’s findings on immunization.

Table 11. Summary of findings on immunization

| Attributes | Rating | Criteria for rating |
|-----------------------------------|---------------------------|---|
| Protocols and legislation | Some need for improvement | The national immunization schedule is in line with WHO recommendations for routine immunization, but HPV is not available free of charge outside the Gavi-funded project, through which is made available to the cohort free of charge. It is reportedly also available in the private sector, where it has to be paid for. |
| Scope of services | Some need for improvement | HPV vaccine is part of the national immunization schedule but is only available to a cohort of 10-year-old girls under the Gavi-funded project and in the private sector. |
| Population coverage and/or access | Some need for improvement | The proportion of children receiving the third dose of diphtheria, pertussis and tetanus-containing vaccine in 2017 is reported to be 88%. Coverage has, however, been decreasing, with several outbreaks of vaccine-preventable diseases in recent years; the lowest vaccination rates are among Roma populations, some religious communities and educated urban populations, according to key informants. |
| Quality of services | Some need for improvement | <p>Contraindications for vaccinations are not always evidence-based.</p> <p>There is distrust among patients and providers of some vaccines.</p> <p>Organization of vaccination services at the primary health care level is not often patient-centred; for example, it is only available on certain days.</p> <p>People who can afford to do so choose to vaccinate their children in private institutions, paying fees out of pocket.</p> |

Policy recommendations for SRMNCAH

The Republic of Moldova has demonstrated willingness to move towards UHC by adopting health policies and financing strategies aimed at increasing coverage, reducing inequities and expanding financial protection, and has made progress. The health of women, children and adolescents is given high priority, expressed through the intended full coverage of health services for pregnant women, women in delivery and postpartum and children aged 0–18 years, among others.

Analysis of the tracer interventions revealed that protocols and legislation and the range of services included in the SRMNCAH health packages are good in general and follow WHO standards and guidelines. The most critical challenge remains implementation of the existing laws, regulations, protocols and standards, as well as financial protection mechanisms. Not all services are provided free of charge or with the adequate quality at the relevant

level. This results in barriers to access to essential SRMNCAH services, so some patients seek alternative ways of obtaining treatment, including bypassing the primary health care level.

The issue of increasing insurance coverage needs to be viewed in the context of the broader health system. Finding savings and efficiency gains in service organization, delivery and financing is crucial to ensuring greater coverage of SRMNCAH while maintaining the quality of the services provided. The recommendations proposed below are intended to provide the basis for policy changes and implementation arrangements along the essential pillars of UHC.

Strengthening governance, health literacy and multisectoral action

Overall spending on health in 2013 was 5.1% of GDP and 12.5% of the total state budget. Given the country's low GDP, health expenditure reflecting PPP is very low, so efficient use of existing resources is critical. A large network of hospitals comprising 87 (an increase from 82 in 2011) institutions exists, and many patients with ambulatory-sensitive conditions continue to be treated as inpatients, leading to over-hospitalization. Many patients call an ambulance directly for transport to hospitals without any prior triage. Efficient use of resources would include strengthening multisectoral action, health literacy and initiatives to empower women, children and adolescents to improve their own health.

The assessment team recommends the following.

- The balance between resources spent on keeping open a large number of hospitals and beds and the need to strengthen the primary health care level – particularly ensuring adequate salaries for health workers – should be reviewed. Some functions (such as obstetric care including deliveries and intensive neonatal care) require a certain case-load per year to be performed safely.
- The current system of ambulance transport to hospitals should be reviewed and improved. While only two ambulances are available countrywide for transport of sick neonates, ambulance services are provided for less critical conditions without prior triage, particularly at the urban level.
- Health literacy programmes and initiatives (such as information on access to contraception, sex education, promotion of early detection of cervical cancer and HPV immunization) should be reviewed, with the aim of standardizing and obtaining full coverage, including to the most vulnerable population groups. A starting-point could be the adolescent-friendly sexual and reproductive health services.
- Multisectoral collaboration in the area of SRMNCAH should be analysed, with the aim of identifying and optimizing the most important entry points for action, such as sex education and prevention of and response to gender-based violence.
- Current accountability mechanisms should be reviewed and areas for improvement identified, including for joint action and monitoring across sectors.
- Rights-based approaches to health, achieving equity and “leaving no one behind” should become an explicit objective for all SRMNCAH policies, implementation and monitoring/evaluation activities. This would include:
 - involving a broad range of partners within and outside government, including representatives of the populations concerned, in the formulation of strategies and action plans to provide services to population groups with specific needs;
 - setting policy targets for closing equity gaps – for example, between geographical areas and population groups – presenting all SRMNCAH data disaggregated for sex, age, geographical location, ethnicity and wealth and monitoring the data over time to ascertain that equity gaps are closing;
 - targeting SRMNCAH services to population groups with specific needs, including people with lower socioeconomic status and other vulnerable, disadvantaged and hard-to-reach groups, and ensuring that the services are provided free of charge and made accessible.

Orienting health financing to improve coverage

The overall coverage of health insurance is almost 85%. Those uninsured are mainly unemployed young people, people not formally employed (of whom women usually make up a large proportion) and self-employed workers in the agriculture sector. Health care is, in principle, provided free of charge at the point of delivery for pregnant women, women in delivery and postpartum and children aged 0–18 years. A general problem, however, is that the current funding for the services included in the benefit package is insufficient, leading to informal and OOP payments, including for SRMNCAH services. Better prioritization is needed so that can resources be targeted at the most vulnerable. The interventions included in the health benefit package cover a wide range of SRMNCAH services, but no clear criteria and processes are in place to decide which services are included. For example, IVF for a limited number of couples is currently included, whereas emergency contraception for adolescents is not universally applied; this calls for an examination of the best use of financial resources, given other deficiencies in the health system. Family doctors are paid per capita for 80% of their salaries, with the remainder based on performance indicators. According to key informants, performance indicators always are met, however, which indicates continuing this financing structure may not be the best approach.

The assessment team recommends the following.

- The coverage gap of health insurance should be reviewed, particularly with regard to young people, women and vulnerable groups such as Roma populations, migrants and others, with a view to ensuring that those in need of SRMNCAH services are covered.
- Existing SRMNCAH services and supplies included in the health benefit package should be reviewed with regard to their cost–effectiveness, feasibility, affordability, equity dimensions and other relevant parameters, with the aim of achieving progressive realization of universal coverage. Examples would be provision of family planning services (specifically emergency contraception) for adolescents and STI diagnostics and treatment.
- Clear criteria and transparent processes should be developed for inclusion of SRMNCAH and other interventions in the health benefit package. The content of the package should be clearly communicated to health service providers and the public. The services included should reflect the epidemiological situation, potential cost associated with treatment/management of the condition and, more importantly, the real needs of women, children, adolescents and other vulnerable groups.
- Key performance indicators should be reviewed and revised for family doctors, particularly in relation to SRMNCAH, with the aim of creating incentives for better services.

Reducing OOP payments for essential medicines and health products

According to national policies, the MHI scheme covers the cost of 148 medications for the insured population. For adults, drugs from the list are partly compensated, depending on the condition; children under 18 years of age are fully compensated. In 2015, 36.2% of total health expenditure in the Republic of Moldova was on pharmaceuticals but the government share amounted only 6.5%, resulting in considerable OOP payments by patients. Stockouts in facilities are common and the quality of procured drugs is not optimal at times, as in the case of first-generation contraceptive pills; this results in patients having to buy drugs themselves in pharmacies. A sufficient price monitoring system for retail prices is not in place, and no regulations require retail price information to be publicly accessible.

The assessment team recommends the following.

- Measures should be taken to dramatically reduce OOP payments for essential SRMNCAH drugs, including contraceptives, and to make access to the drugs easy at the point of care. Reducing polypharmacy could reduce overall expenditures on drugs as well as OOP payments.

- Solutions should be found for contraceptive registration and procurement through UNFPA procurement services.
- The procurement and logistics management information system of drugs – including condoms, contraceptives, antenatal medications and drugs included in the WHO integrated management of childhood illnesses strategy – should be reviewed and strengthened to avoid stockouts and ensure adequate quality.
- The monitoring system for retail prices of pharmaceuticals should be reviewed, with the aim of reducing expenditure.

Developing a more effective service delivery model, improving coordination between providers and strengthening evidence-based practice

A wide number of protocols have been developed through consultative processes and based on evidence and international guidelines in the area of SRMNCAH. Despite this, over-hospitalization of patients with ambulatory care-sensitive conditions, which could be treated better and more efficiently at the outpatient level, is a major challenge. At the primary health care level, services are often fragmented, resulting in multiple referrals.

The assessment team recommends the following.

- Evidence-based guidelines and protocols for when to admit and refer patients to hospital should be followed, and measures put in place for their re-enforcement at both the primary health care and hospital levels. This could include reviewing purchasing and payment mechanisms, with the aim of incentivizing more effective service delivery at the primary care level.
- Self-referrals to hospital should be addressed by strengthening the quality of care at the primary health care level and enabling the gatekeeping function of family doctors. Measures should be put in place that do not allow patients to go directly to the hospital for minor conditions that could be better managed at the primary health care level.
- The system for referral of sick neonates should be reviewed and strengthened, ensuring that waiting times for transport are reduced and that equipment for transportation is up to date.
- Access to high-quality comprehensive sexual and reproductive health services at the primary care level should be strengthened, as core issues should be diagnosed and treated at that level. For example, the system for STI treatment should be reviewed in the light of advances in rapid tests moving towards testing and treatment at the point of care, with the aim of avoiding multiple referrals and fragmentation.
- Legislation on adolescents' access to sexual and reproductive health services without parental consent should be clearly communicated to all health workers to make it understood and applied uniformly across the different levels of care.
- Collaboration and coordination between family doctors and specialized ambulatory services should be strengthened to improve and increase coverage of cervical cancer screening, among others.

Strengthening human resources for SRMNCAH service provision

There is a perceived lack of human resources, with migration of specialists and an increasingly ageing health workforce, which is not equally distributed across the country. The overall number of health workers (doctors, nurses) per 100 000 population seems close to the average for the WHO European Region, however, suggesting that there may be scope to use the existing health workforce more efficiently. The primary health care system is built around family doctors as the main entry point to access health services, but in many instances this level is bypassed and/or not fully functioning in a coherent way, causing fragmentation of services.

The assessment team recommends the following.

- The role of family doctors in providing SRMNCAH should be reviewed and strengthened. This would include an assessment of:
 - skills, competencies, training and supervision/mentoring needs;
 - professional development related to re-certification;
 - incentives for working in rural areas (accommodation, education for children, professional development);
 - incentives/disincentives for providing a core package of SRMNCAH services, since referral is currently the “easy” choice;
 - other factors that may undermine the perception of family doctors and their competencies, and the roles of specialists versus generalists.
- Human resources and financing policies should be reviewed to expand the scope of health promotion and prevention, and should include task-shifting to nurses to assume monitoring, check-ups and provision of basic interventions in SRMNCAH.
- The norms and needs for staffing in the area of SRMNCAH at the hospital level should be reviewed, using data from the HIS, considering the many patients with ambulatory care-sensitive conditions that continue to be treated as inpatients, leading to over-hospitalization.

Using health information and performance monitoring systems to improve outcomes and accountability

A well functioning HIS is a prerequisite for informed decision-making at all levels. Although improvements have been made, the system still suffers from fragmentation and a lack of analytic capacity. For SRMNCAH services, the disaggregation of data – particularly for age and sex but also for other parameters such as rural/urban locations, wealth and others – is essential to understand and address equity issues.

The assessment team recommends the following.

- A major effort should be made to ensure that sex and age disaggregation at least are done for all reported data in the HIS.
- Information gaps on SRMNCAH in the context of UHC should be reviewed, particularly with regard to data on equity and vulnerable populations.
- Existing data on SRMNCAH status, quality and the performance of health service providers should be used in conjunction with analysis and generation of actionable information for policy-making and programming at all levels.

The WHO Regional Office for Europe

The World Health Organization (WHO) is a specialized agency of the United Nations created in 1948 with the primary responsibility for international health matters and public health. The WHO Regional Office for Europe is one of six regional offices throughout the world, each with its own programme geared to the particular health conditions of the countries it serves.

Member States

Albania
Andorra
Armenia
Austria
Azerbaijan
Belarus
Belgium
Bosnia and Herzegovina
Bulgaria
Croatia
Cyprus
Czechia
Denmark
Estonia
Finland
France
Georgia
Germany
Greece
Hungary
Iceland
Ireland
Israel
Italy
Kazakhstan
Kyrgyzstan
Latvia
Lithuania
Luxembourg
Malta
Monaco
Montenegro
Netherlands
North Macedonia
Norway
Poland
Portugal
Republic of Moldova
Romania
Russian Federation
San Marino
Serbia
Slovakia
Slovenia
Spain
Sweden
Switzerland
Tajikistan
Turkey
Turkmenistan
Ukraine
United Kingdom
Uzbekistan



World Health Organization Regional Office for Europe
UN City, Marmorvej 51, DK-2100 Copenhagen Ø, Denmark
Tel.: +45 45 33 70 00 Fax: +45 45 33 70 01
Email: eurocontact@who.int