Joint appraisal report

Country	Moldova
Reporting period	*Previous appraisal:* **Internal Appraisal Report, June 2014** *Current appraisal:* **July 2015**
cMYP period	*2011-2015*
Fiscal period	*January – December*
Graduation year	*Last year of Gavi funding – 2016*

1. EXECUTIVE SUMMARY

1.1. Gavi grant portfolio overview

Gavi began financing immunization activities in Moldova in 2002, providing support for HepB monovalent vaccine (2002-2008), injection safety (2005-2007), tetra DTP-Hib vaccine (2008-2010), Hib-containing pentavalent vaccine (2011-2015), rotavirus vaccine (2012-2015), PCV (2013-2016), IPV (2015-2018) and for implementation of the graduation action plan (2015-2016). Since 2002, Moldova received a total of $5,779,819 in both vaccine and cash support from Gavi, including US$906,132 in 2014 and US$1,190,621 in 2015. Currently, three vaccine grants remain active: pentavalent, introduced in 2011, rotavirus, introduced in 2012, and PCV, added to the national immunization schedule in 2013. An additional grant for IPV was approved in November 2014 for a total amount of US$383,000 including a US$100,000 vaccine introduction grant, with the introduction originally scheduled for October 2015 but delayed due to supply constraints until early 2016. Moldova has not received any HSS support from Gavi.

In 2014, the share of Gavi's financing in the country's total expenditures for immunization was 9% (as per the 2014 APR report), but it will be progressively reduced to 0% once the country starts fully financing all of its EPI vaccines. The last year of Gavi's support is 2016 for vaccines other than IPV, funded through 2018. Graduation grants with UNICEF and WHO covering the 2015- 2016 period were signed in 2015.

As per the June 2015 Gavi Board Decision, Moldova can benefit from access to Gavi's catalytic support for HPV vaccine. The Ministry of Health is considering a possibility of introducing HPV vaccine with GAVI support. The NITAG is going to discuss HPV introduction and develop recommendations for the MoH.

For 2016, Moldova is eligible for requesting renewal for only one vaccine grant (PCV), as the country has been informed that it starts fully financing both pentavalent and rotavirus vaccines in 2016. The IPV support has already been approved through the end of 2016.

1.2. Summary of grant performance, challenges and key recommendations

Grant performance (programmatic and financial management of NVS grants)

Immunization program in Moldova remains strong and well-performing: the overall coverage with the routine and new vaccines in 2014 was between 89% and 97%. However, the country has been experiencing declining coverage rates since 2009 for all antigens included in the national immunization schedule. In 2014, this decline continued, with the country failing to reach target vaccination rates (95% coverage) for most antigens, with the exception of BCG and hepatitis B (birth dose) vaccines. Although the decline in immunization coverage is observed in all sub-regions, the coverage rates in the Transnistria region are significantly lower than in the rest of the country.

The main reasons for declining coverage are growing skepticism about benefits of vaccination and concerns among medical workers and parents about vaccine safety. Medical specialists and general practitioners provide medical contraindications (most of them – false) against all vaccines to significant proportion of infants, which delays vaccinations and notably leaves children unprotected against rotavirus due to age restrictions.

Many parents who are influenced by anti-vaccination publications in mass media or by their religious beliefs refuse to vaccinate their children and submit written refusals to general practitioners. Some infants are not vaccinated or their vaccination status is unknown because their parents migrate within and outside the country.

The coverage with three doses of PCV could not be assessed because only small proportion of infants was eligible for the 3rd dose of vaccine in 2014. PCV was introduced in October 2013 and the 3rd dose is administered to children at the age of 12 months. Coverage with the 1st and 2nd doses of PCV is lower than with the 1st and 2nd doses of pentavalent vaccine due to medical workers and parents' suspicions about the new vaccine just after its introduction. The acceptance of PCV has significantly improved since, but some mothers still refuse PCV to avoid giving their children an additional injection.

The coverage with new vaccines was significantly affected by suspension of rotavirus vaccine and non-introduction of PCV in Transnistria, a large sub-region with 14% of country population. The reasons for not implementing new vaccines in Transnistria are lack of funds to reimburse co-financing payment to the Ministry of Health and the need to amend local Law on Immunization to include new vaccines into immunization schedule.

Table 1. Reported Vaccination Coverage, 2010-2014 (WHO UNICEF 2014 estimates).

Vaccine/coverage	2010 (%)	2011 (%)	2012 (%)	2013 (%)	2014 (%)
BCG	98	98	99	96	97
HepB (birth dose)	98	99	99	95	96
DTP1 (pentavalent 1)	93	96	97	96	94
DTP3 (pentavalent 3)	90	93	92	90	90
Polio3	97	96	92	92	92
MCV (2 doses)	98	96	95	94	93
Rota2	-	-	21	65	69
PCV3	-	-	-	1	28

During 2014, no outbreaks were detected, which serves as a good indication of the strength of the national immunization program. Polio-free status has been sustained. The country started development of the plan for switching from tOPV to bOPV within the framework of the global polio eradication end-game strategy.

Table 2. Reported Vaccine-preventable Diseases (WHO)

	2014	2013	2012	2011	2010	2000	1990
Diphteria	0	0	0	0	0	0	6
Japanese Encephalitis	0	0	0	0	0	-	-
Measles	2	27	11	0	0	687	3,242
Mumps	51	60	131	143	144	1,942	-
Pertussis	188	115	92	102	31	169	266
Polio	0	0	0	0	0	-	-
Rubella	0	0	3	0	0	2,803	-
Tetanus (neonatal)	0	0	0	0	0	0	-
Tetanus (total)	1	0	1	0	2	1	-
Yellow Fever	0	0	0	0	0	-	-

Moldova implemented several activities to address challenges with acceptance of routine and new vaccines and improve coverage. In 2014, two trainings on contraindications and vaccine safety for medical academia, leading health care professionals from national and regional levels, and immunization programme staff were conducted in Chisinau and Transnistria with WHO support. WHO developed manual and training materials which will be used to conduct further trainings for medical workers in sub-regions in 2015.

WHO EURO assisted the country in assessment of immunization communication and recommended activities to address vaccines skepticism and safety concerns. Some of these activities were already implemented (MoH website on vaccination, pro-vaccine accounts in social media and so on). More activities are planned in 2015-2016 with WHO EURO consultancy and technical support.

Financial Management: During 2014, Moldova has not received any cash support from Gavi. No FMA has been conducted in Moldova during the years of Gavi support. There were also no audits of previously disbursed cash grants due to their amounts being below the established threshold.

Vaccine resource requirements have been adequately calculated and well communicated to relevant budget holders. The process benefits from multi-year planning in calculation the costs and forecasting funding with involvement of all stakeholders in the process. Country co-financing requirements have been met on time in 2014 and in previous years. The 2015 co-financing requirements have been fulfilled in September 2015.

Key findings

Strengths:

- Strong political commitment to the National Immunization Program (NIP)
- Devoted, highly professional and motivated immunization staff
- Well-established organizational structure for vaccine management, with defined roles and responsibilities, strong management and committed human resources
- Strong technical capacity of the National Immunization Programme
- Successful implementation of the multi-year plan on immunization and national immunization plan (programme financial requirements are met and available resources efficiently used)
- Robust and functional reporting system
- No gender inequity according to MICS and coverage surveys

- Effective and supportive ICC that operates effectively
- Supportive supervision in place, with defined frequency of visits, supervisory tools and feedback mechanism
- Timeliness of vaccinations is being monitored
- Functional rotavirus surveillance

Challenges:

Vaccines acceptance:

- Declining coverage with routine vaccines and low coverage with recently introduced rotavirus vaccine
- Suspension of rotavirus vaccination and non-introduction of PCV in Transnistria
- Skepticism about benefits of vaccination and concerns about vaccine safety among medical workers and parents which result in false medical contraindications against vaccination and parental refusals to vaccinate children
- Anti-vaccination campaigns, including campaigns in social networks which influence parents' decision to vaccinate their children and contribute to medical workers' concerns about vaccine safety
- Initiatives and attempts to abolish mandatory vaccination of children, including in Constitutional Court in 2013

Immunization financing, vaccines supply and regulation:

- Challenging economic situation that threatens financial sustainability of the immunization program
- Challenges with vaccines supply caused by complex procurement legislation and restrictive/ rigid mechanisms
- Serious gaps and shortcomings observed in the functioning of the National Regulatory Agency
- Marketing authorization for vaccines requires strengthening
- Insufficient use of NITAG as a platform for advising policy-makers and stakeholders, including in resource mobilization
- ICC should be brought at the higher level, e.g. Prime Minister Cabinet (e.g. Deputy Prime Minister). That will demonstrate that immunization is on the high political agenda and will ensure strengthening of inter-sectorial cooperation.

Cold chain and vaccine management:

- Non-prequalified cold chain equipment widely used at service delivery level
- Limited use of cold chain inventory data for further actions (i.e. formal review, needs assessment, equipment planning, maintenance support)
- Lack of institutionalized training programme on immunization and vaccine management
- Moderate progress in implementing Effective Vaccine Management recommendations
- Limited use of computerized data management systems (temperature monitoring, stock management, cold chain inventory, etc.)
- Temperature monitoring in vaccine cold chain requires further strengthening
- Shared budget line for EPI and non-EPI vaccines (could be a threat for EPI vaccines if self-procurement is not efficient, but also an opportunity if used efficiently)

Key recommended actions to achieve sustained coverage and equity

1. Maintain immunization as a high-level political priority
2. Secure sufficient financial resources for the NIP, notably through expanding resource mobilization efforts
3. Identify alternative vaccine procurement mechanisms to ensure efficiency and sustainability of vaccine procurement
4. Strengthen the efficiency of the vaccine procurement system
5. Further expand advocacy efforts and continuing to educate medical workers on immunization benefits and safety and other key immunization-related issues
6. Implement a comprehensive behaviour change communication strategy to improve public trust and create demand
7. Address challenges of low coverage of routine vaccines and potential (re)introduction of new vaccines in the Transnistria region
8. Introduce measures for attracting and retaining health care professionals working in primary care and immunization
9. Further improve cold chain and vaccine management, notably with respect to temperature monitoring, use of pre-qualified equipment, and wider use of computerized data management systems.

1.3. Requests to Gavi's High Level Review Panel

Grant Renewals

For 2016, Moldova is requesting a renewal of Gavi support for PCV in the existing presentation (PCV13, 1-dose vial, liquid).

Moldova is not eligible for requesting renewed support for other Gavi-funded vaccines, as 2015 was the last year of Gavi funding for pentavalent and rotavirus vaccines, and IPV doses have already been approved until the end of 2016.

1.4. Brief description of joint appraisal process

The Joint Appraisal was conducted from 7 to 10 July 2015. During the mission, participants from Gavi Secretariat, WHO EURO office, UNICEF Regional Office and Sabin Institute met with representatives of the Ministry of Health, National Center of Public Health, National Immunization Program, National Health Insurance Company, Ministry of Finance, NITAG, and the WHO and UNICEF country offices. Based on the discussions during the JA mission and relevant background documents, the Joint Appraisal report was drafted by independent technical expert in close cooperation with Gavi SCM and WHO DCI VPI. The report was shared for feedback with mission members and in-country stakeholders met during the mission, and the final findings and recommendations were discussed with and endorsed by the Deputy Minister of Health and ICC members.

2. COUNTRY CONTEXT

2.1. Key contextual factors that directly affect the performance of Gavi grants.

2.1.1. Leadership, Governance and programme management

The Immunization Program of Moldova has benefitted from strong political commitment and support until now, but recent political and economic challenges in the country create significant challenges for maintaining political and especially financial support for the Immunization Program. The Program has experienced and highly qualified program management, existing communication channels with major international organizations (Gavi, UNICEF and WHO) and policy- and decision-makers, newly established influential NITAG with well-defined structure enjoying a strong political support, and ICC with a high-level political and professional representation.

Political support: The Government of Moldova recognizes NIP as a priority national public health program, as confirmed by the Government commitment to provide adequate financing to the NIP and 100% execution of approved budgets. The Deputy Minister of Health chairs the ICC and senior representatives from a number of ministries are among the ICC members. In 2010, The National Programme on Immunization for 2011-2015 is aligned with the WHO Global Immunization Vision and Strategy.[1] Currently the MoH is developing the new National Immunization Program for 2016-2020. The NIP targets introduction of universal immunization against rotavirus and pneumococcus and provides more room for delivery of additional antigens requested by specific populations at risk by engaging both public and private sectors in immunization.

Situation in Transnistria region: In the region of Transnistria, a narrow strip of land between the Dniester river and the Ukrainian border which proclaimed independence from Moldova in 1990, serious economic challenges have reduced resources available for health services and specifically for the immunization program. The core organizational structure of health system and immunization programme has changed little there in the past 30 years and reflects features typical of the Soviet health care system. Health expenditures are estimated at US$ 7 per person (compared to US$ 300 in the rest of Moldova). The region participates in major international assistance programs through an agreement with the Moldovan Government in Chisinau. Selected areas, such as HIV, TB, immunization, blood transfusion, reproductive health and perinatal care have benefited from funds provided by Gavi, the Global Fund, UNDP, WHO, UNICEF and UNFPA.

WHO has been implementing a Confidence Building Measures Project in the region. UNICEF is also part of the CBM project on strengthening perinatal and immunization systems The health-specific objective of the Project is to improve access of population on both banks of the Dniester River to quality, evidence-based and cost-efficient immunization and perinatal healthcare services. A comprehensive review of the Immunization Programme was in that regard planned with the Health Authorities of Transnistria Region with the support of WHO.

Strong leadership and national level program management: The National Centre of Public Health (NCPH) is authorized by the MoH to provide overall management of the NIP and to ensure development and maintenance of strong and effective links to other departments within the health sector. Overall, Moldova's NIP is an integrated effort involving national, regional and local authorities, different sectors, a range of institutions and health services, including public health and primary health care services. The NIP, led by the experienced and highly qualified immunization professionals extensively communicates with the media and provides clear messages to key stakeholders on promotion of immunization.

ICC is composed of seven members and chaired by the Deputy Minister of Health. ICC members include senior representatives from the MoH, MoF, National Medical Insurance Company and National Public Health Centre as well as representatives of WHO and UNICEF country offices. No Civil Society Organizations (CSOs) are currently represented in the ICC. However, ICC is not used at full potential with clear plan and results.

NITAG was established in Moldova in 2013 to provide scientific recommendations to the MoH on immunization policy and practice. The composition and Terms of Reference of NITAG was approved by the MoH order. The NITAG composition is in

[1] WHO 2006

line with WHO recommendations: 13 core voting experts representing different disciplines and non-voting ex-officio and liaison members. As an agreement of membership, all core members of NITAG are required to submit conflict of interest declaration. The NITAG met twice in 2014 and developed recommendations on BCG, IPV, seasonal influenza and hepatitis A vaccinations. The Ministry of Health accepted and implemented all NITAG's recommendations.

Legislation Framework: There are two key policy documents regulating immunization-related aspects: the law on public health of the Republic of Moldova[2] and the Decree of the Government of Moldova on Approval of National Immunization Program for 2011-2015. The law on Public Health guarantees free access to immunization services against the specific illnesses listed in the National Immunization Program. The MoH sets regulations related to the list of infectious diseases to be addressed through the routine immunization.

In July 2015, the Government of Moldova approved new law on State Procurement, prohibiting advance payment for the State Procurement contracts. The law is in conflict with the UNICEF procurement mechanism procedures, which requires 100% advance payment for the vaccines, even though Art 4 , alin (1) stipulates that the act shall not apply to: (m) "public procurement contracts governed by different procedural rules and awards: … In accordance with the special procedure of an international organization".

Partnership Framework Agreement (PFA): Moldova signed the PFA with Gavi in February 2015.

National Regulatory Authority (NRA): The Medicine Agency acts as the NRA. It is in charge of registration of medical drugs and biologicals for human use, including vaccines. The National Public Health Centre (NPHC) provides expertise during the process of vaccine registration. The country does not have a laboratory investigation function of vaccine quality and safety, and only vaccines prequalified by the WHO are admitted to national registration and procurement. In addition, the Medicine Agency organizes national tenders and all contracting procedures for procurement of vaccines and immunization injection supplies. However, the Medicine Agency does not perform all required regulation functions at a desired level of performance (lot release, AEFI/MS, registration and access to the laboratories). Moreover, there is a conflict of interests as the agency is purchasing and regulating vaccines and other products, and thus holds a dual role of both the regulatory body and holder of procurement functions.

Gender and equity: According to sex-disaggregated data provided by the country, there are no major variations between boys and girls in terms of vaccine access. No gender barriers have been identified. However, geographic equity is an issue with regards to access to PCV and rotavirus vaccines in Transnistria. Human trafficking is a serious problem: Moldova is a source, and to a lesser extent a transit and destination country, for both sex trafficking and forced labor.

2.1.2. Costing and financing

Gavi is the only external donor to Moldova's immunization program, but its support will cease in 2017 following the country's graduation. Until 2015, Moldova has consistently complied with its co-financing obligations and has never defaulted on its co-payments. The 2015 co-financing requirements have been fulfilled in September 2015 despite a challenging economic situation driven by serious irregularities in the banking sector uncovered at the end of 2014 and a steep fall in the value of the national currency in January-February 2015.

Fiscal space[3]: Moldova's economic performance over the last few years has been volatile because of climatic and global economic conditions. Real GDP growth decreased from 7.1% in 2010 to 4.7% in 2014. In Q1 of 2015, the GDP grew by 4.8%, which can be partially attributed to the signature of treaty of Association with the European Union.[4] European integration anchors the Government's policy reform agenda, but political tensions and weak governance pose risks to reforms.

Despite recent reduction in poverty levels, Moldova remains one of the poorest countries in Europe. The most vulnerable groups at risk of poverty in Moldova are those with low education levels, households with three or more children, those in rural areas, families relying on self-employment, the elderly, and Roma. Recent reduction in remittances could have a significant impact on consumption and poverty.

cMYP: Moldova's current cMYP (costed and budgeted) covers the period of 2011-2015. The program financing requirements are being met and available resources efficiently used. The country is currently working on the 2016-2020 cMYP and expects to finalize it in Q4 of 2015.

Government funding: The Government of Moldova showed sustainable gradual increase of its financial commitment toward the NIP and currently fully covers all programme antigens with the exception of GAVI co-financed vaccines. Moldova's immunization program benefits from availability of secured funds through the use of a separate budget line for vaccines. MTBF has a separate budget line for all National Program in Public Health (including immunization). This gives to MoH a secured budget and flexibility to re-allocate funds among Public Health Programmes. Since the immunization is on high political agenda, funds are secured. The Government financing of immunization services in Moldova is shared between

[2] The Law # 318 of Republic of Moldova on "State Promotion of Public Health", approved on 27.12.12

[3] Source: WB country overview 2015.

[4] Signed on June 27, 2014

the central budget and National Health Insurance Agency. Central Government is responsible for procurement of vaccines and injection supplies and cold chain and laboratory equipment as part of the targeted national program. The National Health Insurance Agency is responsible for covering personnel and operational costs of service provision, i.e. salaries of PHC teams as well as training, vaccine storage and transportation costs. It also maintains facilities at the national level. Donor support is mainly targeting program activities such as training, program management and disease surveillance. Health Care Sector financing is included in the Mid-Term Evaluation Framework (MTEF) that ensures availability of funds for implementation of all national programs related to the health care sector. According to the finance department of the MoH, the current MTEF for the period 2016-2018 is at the stage of development and will include financial allocations for implementation of the National Immunization Program.

Figure 1. Government financial allocations for immunization program, USD

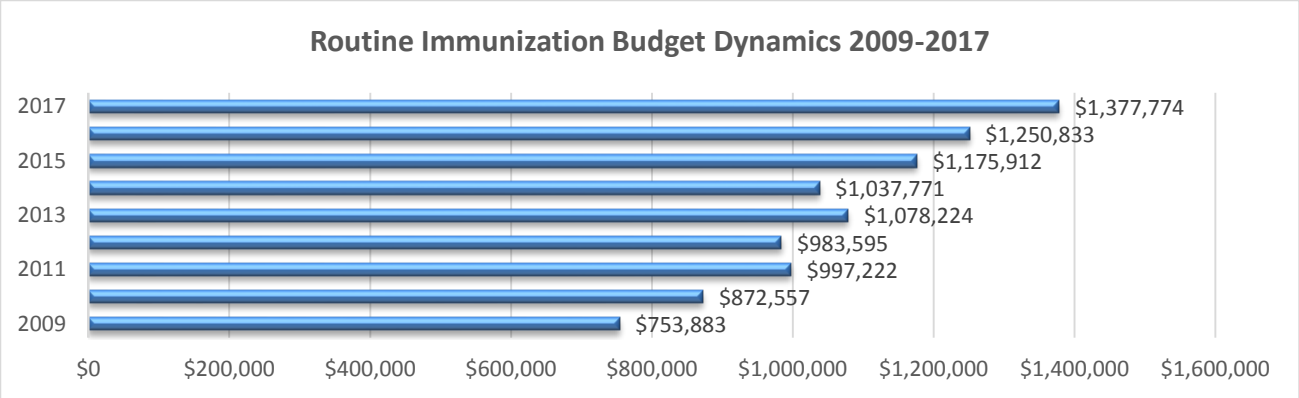


Table 3. Total Government Funding for Health

Years	2009	2010	2011	2012	2013	2014
GDP (Million USD)	5,438	4,887	5,149	4,989	4,800	4,304
The Approved (Million USD)	350	315	332	321	309	277
The Executed Million USD	346	311	328	318	306	274
The % of GDP	6.4	5.6	5.2	5.4	5.2	5.3
Exchange rate	11.1	12.4	11.7	12.1	12.6	14.0

Source: The Ministry of Health

GAVI provides funding for new and underused vaccines and injection supplies. Budget estimates for immunization supplies are approved by the Governmental Decree for a period of five years while approving the National Immunization Program. Moldova has met funding requirements for vaccines in 2012, 2013 and 2014, even as co-financing increased. As of 2017, Moldova will fully finance all of its EPI vaccines with the exception of IPV. Vaccine expenditures will be even higher with the addition of other vaccines such as Rabies and Hepatitis A. Potential introduction of HPV would also increase domestic funding requirements. Moldova's ability to access Gavi prices for EPI vaccines after graduation will be critical. If self-procured, the cost of pentavalent, rotavirus and PCV vaccines could rise to $3-4 million a year, based on experience of other middle-income countries procuring directly from suppliers.

Donor Funding: Gavi is the only external donor supporting National Immunization Program of Moldova. Since 2002, Moldova received a total of $5,779,819 in both vaccine and cash support from Gavi, including US$906,132 in 2014 and US$1,190,621 in 2015. The International Monetary Fund (IMF) and the World Bank have halted their lending to the Republic of Moldova earlier in 2015 following a protracted banking crisis. The IMF is planning a mission to Moldova in September 2015 to look at prospects for a new support program to the country. This visit may lead to a new bailout programme which could unlock withheld budgetary support money from the EU and the World Bank.

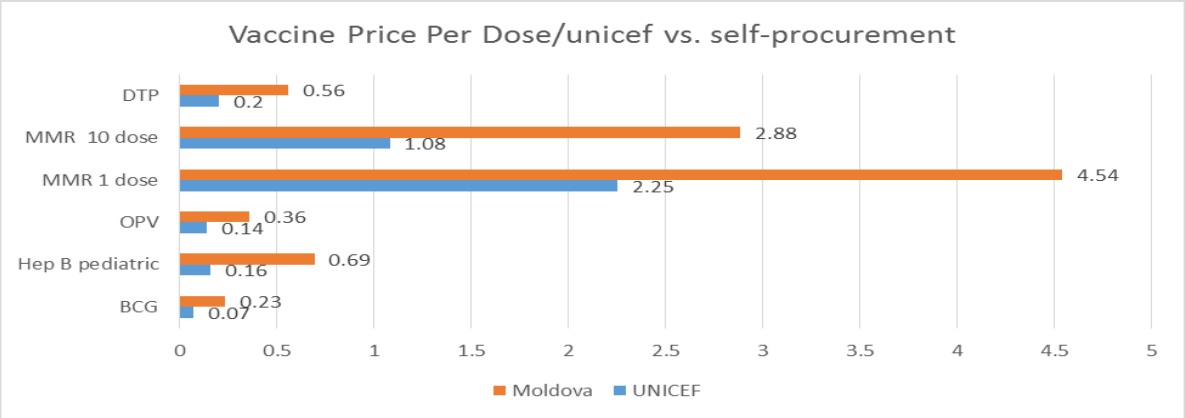
Procurement mechanism: Moldova is procuring all Gavi-supported vaccines through UNICEF Supply Division, including the country's co-financed portion. Other vaccines and supplies, including syringes and safety boxes for Gavi-supported vaccines, are self-procured through open public tenders called by the Medicine Agency, but the country expressed a strong interest to move to procurement of all available routine vaccines through UNICEF Supply Division. National policy of Moldova specifies that only WHO-prequalified vaccines can be subject to tender offers carried out by the State.

Identification of technical requirements for vaccines, syringes and safety boxes, as well as definition of quantities of required vaccines and preparation of supply schedule are done by the NCPH staff responsible for Moldova's Immunization Program. All requirements are submitted to the MoH for endorsement and further submission to the Medicine Agency, which then initiates public tenders through the National Agency for Public Tenders. Procurement contracts are concluded by product suppliers, with the Medicine Agency and the NCPH acting as beneficiaries of goods. Prices of vaccines and other supplies differ significantly from those offered by UNICEF.

The current procurement processes hold considerable potential for improvement related to institutional setting of the procurement system as well as tendering process and opportunities for achieving low and sustainable vaccines prices.

Alternative options for vaccine procurement are essential for Moldova, as increased pressure on national budget after graduation may put adequate financing of the immunization program at risk.

Figure 2. Vaccine Price Information, UNICEF Supply Division vs. self-procurement, USD



Source: EPI Moldova, UNICEF

It should be noted that UNICEF price per dose does above not include cost of buffer and handling fee and the final price could be slightly higher.

2.1.3. Other system components

Human Resources: In Moldova, immunization services are provided through the Primary Health Care (PHC) network. The migration of health workers affects heavily the entire country, as health workers leave looking for better working conditions and new career opportunities abroad. Health care staff migration from rural to urban areas contributes to widening gaps in the health care network affecting all national programs, including immunization. As a result, Moldova experiences shortage of health professionals in PHC facilities that are primarily staffed with aging workforce due to lack of incentives to attract young and qualified trained specialists to work in the field of immunization, lack of epidemiologists in some districts and very limited supervision, resulting in high staff turnover in many areas of the country.

Cold Chain and logistics: Moldova has a well-established vaccine, cold chain and logistics management systems. According to the 2014 EVM assessment, the majority of assessment criteria scored above the 80% target level set by WHO/UNICEF. The country has an uninterrupted and efficient vaccine supply (with stock-outs rare and brief, no unopened vial wastage and low open vial wastage). However, EVM assessment identified non-compliance of national multi-dose vial policy with the latest updated version published by WHO in 2014 and a number of other challenges, including insufficient use of EVM questionnaires as structured supervisory tools to revise/modify questionnaires/monitoring forms currently used during supervisory visits. In 2015, the NCPH started implementation of the EVM improvement plan that was developed in compliance with the recommendations of 2014 EVM assessment aiming at improving vaccine management efficiency.

Immunization service delivery: The MoH coordinates and manages the NIP through the NCPH. At the city or district level, the Program is managed by the city or district Centers of Public Health in close cooperation with the Primary Health Facilities that provide immunization services to the population. In urban areas immunization services are provided through Family Medicine Centers (FMC) targeting from 40,000 to 80,000 inhabitants, while in rural areas, service provision is responsibility of the health centers (HC) established per 4,500 inhabitants, Family Doctor Offices serving between 900 and 3,000 inhabitants and Health Offices, employing only family medicine nurse and serving up to 900 residents. Managers of primary health care facilities are in charge of organization and delivery of immunization services to the population covered by their respective facilities. Private health care facilities do not engage in immunization service delivery. The number of private health facilities is very limited and located mostly in Chisinau. However, private facilities that provide primary health care delivers immunization services (directly or through cooperation with private immunization centers). Personnel involved in immunization activities are pediatricians, family doctors and home care and vaccination nurses. Doctors are responsible for setting an immunization schedule for children, conducting pre-immunization check-ups, supervising nurses in defining target groups, informing parents about vaccination, vaccine and supply provision, record-keeping and delivering vaccine shots. Family Medicine Centers with large catchment areas usually have special immunization wards staffed with a vaccination nurse. The immunization service delivery is fully integrated with other components of the PHC. In all of Moldova's PHC facilities, immunization is delivered as a fixed strategy and no outreach activities are being carried out.

AEFI reporting: The Medicines and Medical Devices Agency is the main authority responsible for regulating medicinal products and medical devices, including licensing and marketing authorization of vaccines. AEFI reporting system is in place and responsibility is shared between the Agency and National Centre of Public Health (NCPH). All AEFIs are reported to district public health centers by health facility staff. AEFI cases are then investigated by the district and national level staff. In 2014, 52 AEFIs were reported for BCG vaccine, 7 for pentavalent vaccine, and 1 for MMR vaccine. Although there is a documented evidence of successful management of serious AEFI cases, existing system faces a number of challenges.

Particularly, the AEFI system lacks guidelines that define organizational structure, provide clear description of roles and responsibilities and the scope of AEFI surveillance. The guidelines should also include case definitions, case investigation forms, and define causality assessment process.

***Communication*:** The NIP lacks sufficient financial support for implementation of communication and social mobilization activities and designated and trained staff capacity to efficiently develop and promote information and communication on benefits of vaccination. In addition, there is a lack of national resource place with information and communication materials on immunization needs. Advocacy has been challenging, especially with respect to communicating to health staff, advocating for resource mobilization, and addressing the growing anti-vaccine movement. The communication department of NCPH in collaboration with UNICEF conducted qualitative studies in 2012 with mothers, health professionals and the media aiming at understanding attitudes on immunization. Based on their results, UNICEF developed a draft immunization communication strategy. The NIP developed a communications plan to increase acceptance of immunization among the population with a focus on vaccine hesitant populations and religious groups that oppose vaccination. However, the plan was developed without taking into account the results of the qualitative research and the draft communication strategy. In 2014, the WHO undertook a mission to develop a communication strategy and activity plan for addressing vaccine resistance, healthcare worker communication with parents about vaccinations, and crisis communication. There is a number of players officially involved in communication and promotion of NIP[5], but the relationships, functions and mandate are not clear to everyone and should be clarified.

Polio Eradication: Moldova maintains a polio-free status. There is no separate polio program in the country, as the polio vaccination and poliovirus surveillance is well integrated into the routine immunization program. In November 2014, Gavi approved the IPV introduction grant, originally scheduled for introduction in October 2015. However, due to the supply issues, introduction has been postponed to early 2016. IPV introduction is part of the "Polio Eradication and End-game Strategy". According to the initial plan, the introduction aims at achieving 95% coverage rate at the national level and at least 90% coverage rate at the district level by the end of 2016, at the same time maintaining OPV coverage rate above 95%. In July 2015 Moldova started development of the "switch plan" to switch from the currently used tOPV to the bOPV.

3. GRANT PERFORMANCE, CHALLENGES AND RENEWAL REQUESTS

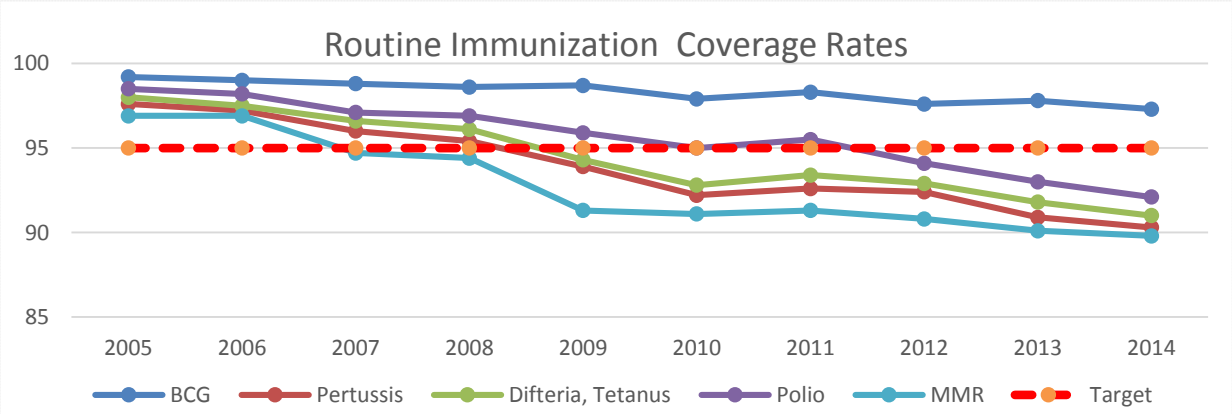
3.1. New and underused vaccine support

3.1.1. Grant performance and challenges

Despite recent challenges linked to declining coverage, Moldova's NIP remains a strong program in the EURO region. In 2014, Gavi provided support to Moldova for three vaccines – pentavalent, rotavirus, and PCV. According to JRF estimates, for each of these vaccines coverage was below 90% (82% for DTP3, 71.7% for PCV3, and 69.3% for rotavirus last dose). Above 90% coverage was reached only for BCG, HepB 1st dose, and MMR 2nd dose.

Since 2009, the coverage for almost all vaccines have been slowly but steadily declining due to growing skepticism about benefits of vaccination and concerns about safety of vaccines among medical workers and parents. Medical specialists and general practitioners provide medical contraindications, most of which are false, against all vaccines to significant proportion of infants, which delays vaccination and leaves children unprotected.

Moreover, the coverage with new vaccines was significantly affected by suspension of rotavirus vaccine and non-introduction of PCV in Transnistria. The reasons for not implementing new vaccines in Transnistria are lack of funds to reimburse co-financing payment to the Ministry of Health and the need to amend local Law on Immunization to include new vaccines into immunization schedule.



Key issues observed in Moldova with respect to routine immunization services and immunization coverage:

- General skepticism among medical workers about safety of vaccines and benefits of vaccination;

[5] NCPH, NITAG, Medicine Agency, ICC, Health Management Center, Scientific Practical Centre of Management in Health

- Growing proportion of parents refusing to vaccinate their children due to concerns about vaccine safety and religious beliefs;
- Missed opportunities to vaccinate children due to false contraindications;
- Unreliable vaccine supply in the eastern region of Transnistria
- Lack of staff in some remote health facilities, inadequate resources for ensuring transportation of staff and vaccines down to the service area;
- Lack of epidemiologists in some districts, migration and lack of motivation, high turnover of staff in many areas;
- Unmet needs for additional and systematic training and for training tools on vaccine management;
- Problems in timely registration of children under 1 within primary health care, especially in urban areas and consequent denominator problems leading to overestimating administrative vaccination coverage figures;
- Very high migration of population in and out of the country, affecting timely coverage and target population estimates;
- Long-standing problems in the Transnistria region, where vaccination for certain antigens and target groups is implemented with significant delays and rotavirus vaccine and PCV are not administered;
- Limited resources and capacity for developing and promoting social mobilization tools and activities.

Pneumococcal Vaccine: Moldova is the first Gavi eligible country in the WHO EURO region to introduce pneumococcal vaccine. PCV13 was introduced in October 2013 in all regions of the country except for Transnistria, and was provided to all children at no cost through the primary health care network (health care centers, family doctor centers, and family doctor offices). The vaccine is administered in three doses at the age of two, four and twelve months. The coverage with three doses of PCV could not be assessed because only small proportion of infants was eligible for the 3rd dose of vaccine in 2014. However, coverage with the 1st and 2nd doses of PCV is lower than with the 1st and 2nd doses of pentavalent vaccine. This is because medical workers and parents were suspicious of the new vaccine just after the introduction. The acceptance of PCV has significantly improved since, but some mothers still refuse PCV to avoid giving their children an additional injection. Another reason for low PCV coverage is non-introduction of PCV in Transnistria region due to the fact that the vaccine was not included in the immunization calendar approved by the local legislation and inability to pay co-financing share of the vaccine by Transnistrian authorities.

The PCV Post-Introduction Evaluation (PIE) was conducted in late 2014. Field visits revealed that up to 55% of the children that were not vaccinated were in this situation due to short-term medical contraindications. A significant proportion of these contraindications were provided by a medical specialist, but many were also given by a general practitioner. A large part of these were false contraindications, including encephalopathy, anemia, hemolytic jaundice of the newborn, low birth weight, and the period after an acute illness. For up to 10% of the unvaccinated children, there were written refusals from parents concerned with the vaccines safety, influenced by anti-vaccine publications in mass media, mainly via internet social networks. Such parents usually refuse all injectable vaccines, but some of them refused only PCV. There were also some written refusals due to religious reasons, but it is not clear whether religion was the true reason behind them (as opposed to the parents considering this reason as the simplest one to give to the practitioner). Finally, up to 7% of the unvaccinated children were not vaccinated due to the migration of families within and outside of the country.

The PIE produced specific recommendations for addressing immunization challenges, including training of medical workers on vaccine safety and contraindications, cold chain and waste management, AEFI, impact evaluation and data management. Most recommendations related to vaccine coverage, immunization communication, AEFI monitoring and surveillance and trainings of providers is still on the EPI agenda and need specific interventions for improvement of EPI overall performance.

Rotavirus vaccine was added to Moldova's National Immunization Programme in July 2012. Moldova is the first middle-income country in the WHO EURO Region to introduce this vaccine. It is administered in two doses at the age of two and four months. Age restrictions for rotavirus vaccination are age 2 to 3½ months for the 1st dose and 4 to 7 months for the 2nd dose. Although the rotavirus vaccine was well accepted by parents and medical workers, the coverage with two doses remained quite low both in 2013 and 2014. The coverage rate for fully vaccinated infants was 43.7% in 2013 and 71.5% in 2014. According to the NIP, the main reasons for low coverage were short-term contraindications and age restrictions.

Rotavirus PIE was carried out in 2013 and identified several unique challenges in the eastern region of Transnistria, including vaccine supply issues. The vaccine was introduced in Transnistria with a delay and suspended in 2014 due to its non-inclusion in the immunization calendar approved by the local legislation; and the region's inability to pay co-financing requirements. The PIE provided specific recommendations related to problems in vaccine coverage, immunization communication, AEFI monitoring and surveillance and training of providers. It also elaborated specific recommendations for Transnistria for resolving stock-outs of vaccines, providing additional trainings to improve knowledge of service providers and acceptance of vaccines and provision the national level supervision of immunization activities, possibly with the support of international partner organizations. As in the PCV case, most of these recommendations are still of the EPI agenda and have to be effectively addressed to increase coverage rates.

Moldova received support from WHO in sentinel implementation of rotavirus surveillance and case control study to evaluate rotavirus vaccine impact. The data from surveillance demonstrated significant decrease in number of children hospitalized with rotavirus diarrheas in sentinel hospitals. The preliminary results of the case control study confirmed high effectiveness of rotavirus vaccine in preventing rotavirus diarrheas in children under 2.

Pentavalent vaccine was introduced in June 2011. The national coverage[6] of this vaccine for January through October 2014 was 76% for 1st dose and 73% for 2nd dose and increased to 82% by the end of 2014. Gavi support for pentavalent vaccine in Moldova ceases in 2016.

3.1.2. NVS renewal request / Future plans and priorities

For 2016, Moldova requested renewal of the support for one vaccine: PCV13 (1-dose vial, liquid).

Table 3: Estimated GAVI support and country co-financing (GAVI support)

PCV13		2014	2015	2016
Number of vaccine doses	#	96,100	50,400	17,900
Number of AD syringes	#	101,400	55,500	18,900
Number of safety boxes	#	1,125	625	200
Total amount to be co-financed	$	351,500	184,500	65,000

Table X: Estimated GAVI support and country co-financing (Country support)

PCV13		2014	2015	2016
Number of vaccine doses	#	57,600	64,800	50,600
Number of AD syringes	#	60,700	70,400	53,400
Number of safety boxes	#	675	800	575
Total amount to be co-financed	$	210,500	234,000	183,500

An additional grant for IPV was approved in November 2014 for a total amount of US$383,000, including a US$100,000 vaccine introduction grant, with the introduction originally scheduled for October 2015 but delayed due to supply constraints until early 2016.

3.2. Graduation plan implementation

The first Graduation Assessment in Moldova was carried out in March 2012, followed up by a re-assessment in 2014. The Graduation Action Plan for 2014-2016 was developed based on the findings of the two assessments, shared and agreed with NCPH. Graduation Grants with WHO and UNICEF have been signed respectively in May and August 2015, with disbursements of funds following shortly thereafter.

Both Graduation Grants were meant to provide activities during two and a half years (mid-2014 to end of 2016), but because of the delays in signing the grants, disbursing funding and allocating funding to WHO and UNICEF country offices, activities may not start until late 2015 or 2016. The progress of implementation will be assessed in mid-2016.

Graduation grants, in the total amount of US$ 523,595 (US$ 488,500 excluding the PSC), target the following strategic areas: vaccine procurement, immunization financing, vaccine regulations, strategic guidance the Programme and Programme performance.

Since the Graduation Action Plan was developed in 2014, the country context had significantly changed due to the recent economic crisis and major political changes. As a result of these developments, as well as policy modifications at Gavi level (such as the possibility to apply for HPV support), additional needs in technical assistance and support have been identified. This additional technical assistance, which was not covered by the Graduation Action Plan, is proposed to be financed through the Partner Engagement Framework channel, as described in Section 4 of this report.

3.3. Financial management of all cash grants

During 2014, Moldova has not received any cash support from Gavi (the most recent cash grant, PCV VIG, was disbursed in 2013, and US$ 116,177 remained unspent as of 1 January 2014). An additional US$ 100,000 VIG for IPV vaccine was received by Moldova in 2015.

2014 financial statements have been submitted with the 2014 APR as per Gavi requirements. Out of US$ 116,177 available cash balance as of 1 January 2014, the NIP spent US$ 71,922 in 2014. US$44,255 remained as available cash balance as of 31 December 2014. According to the financial statements provided, the majority of budget execution in 2014 occurred on

[6] Excluding Transnistria

cold chain equipment (fridges) and office equipment (computers and printers). Additional expenditures were made on supervision and training of medical personnel and printing of instructional brochures on PCV vaccine.

No FMA has been conducted in the country during the years of Gavi support. There were also no audits of previously disbursed cash grants due to their amounts being below the established threshold.

3.4. Recommended actions

Following the technical meetings and discussions that took place during the Joint Appraisal mission, a number of recommendations were raised and discussed by the mission participants with in-country stakeholders, including the top management of the NCPH, Deputy Minister of Health and other local stakeholders. These observations and recommendations focused on the key priority activities and suggested actions for addressing the challenges identified during the Joint Appraisal, notably with respect to enhanced potential for financial and programmatic sustainability of national immunization programme.

Annex D provides a summary of these recommended actions, together with the indication of the responsible implementers, estimated timelines and potential sources of funding. A more detailed activity plan, including full list of proposed technical assistance together with proposed costing, will be available in the coming weeks.

In summary, the key recommended actions for Moldova for the next year, are reflected below:

1. Maintaining immunization as a high-level political priority
2. Securing sufficient financial resources for the NIP, notably through expanding resource mobilization efforts
3. Further expanding advocacy efforts and continuing to educate medical workers on immunization benefits and safety and other key immunization-related issues
4. Implementing a comprehensive behaviour change communication strategy to improve public trust and create demand
5. Addressing challenges of low coverage of routine vaccines and potential (re)introduction of new vaccines in the Transnistria region
6. Introducing measures for attracting and retaining health care professionals working in primary care and immunization
7. Strengthening the efficiency of the vaccine procurement system
8. Further improving cold chain and vaccine management, notably with respect to temperature monitoring, use of pre-qualified equipment, and wider use of computerized data management systems.
9. Identification of different vaccine procurement mechanisms based on the vaccine market changing.

4. TECHNICAL ASSISTANCE

4.1 Current areas of activities and agency responsibilities

In 2014 and 2015, Moldova received the following technical assistance from the Gavi Alliance partners:

WHO EURO

1. Continued support in implementation of rotavirus sentinel surveillance and case control study to evaluate an impact of rotavirus vaccine;
2. Participation of National Immunization Programme Manager in Global Immunization Meeting held on 23-26 June 2015 in Barcelona, Spain to share experiences in rotavirus and pneumococcal vaccines introductions
3. Technical support in conducting EPI review in Transnistria on 7-11 April 2014 and presenting recommendations on immunization programme strengthening to policy- and decision makers.
4. Technical support in conducting PCV post-introduction evaluation
5. Consultancy support in developing of training materials and conducting trainings for medical academia and leading health care professionals from national and regional levels on vaccines safety and contraindications. Two trainings were conducted in Chisinau and Tiraspol (Transnistria)
6. Participation of NITAG members in WHO Regional meeting on "New Vaccine Introduction: Experience and Issues in the European Region" held on 25-27 June 2014 in Izmir, Turkey.
7. Participation of the Chair of NITAG in SAGE meeting was held on 14-16 April 2015 in Geneva, Switzerland.
8. Participation in the Vaccine Safety-Related Events Communications training workshop on 7-10 April 2015.
9. Ongoing technical support in developing and testing vaccine information statements.
10. Technical support in conducting Immunization communication review.
11. EVM assessment and development of EVM improvement plan
12. NRA assessment
13. Graduation re-assessment and development of an action plan to address identified challenges.

14. Capacity building in immunization information systems and immunization financing areas.

UNICEF

1. EVM assessment and development of improvement plan in October 2014
2. Technical support for the development of the new Immunization programme
3. Guidance in strengthening the immunization programme with focus on communication for immunization and diversification of procurement mechanisms
4. Preparatory work for PCV introduction
5. Advocacy on ensuring procurement of GAVI supported vaccines (100% advance payment form public budget in 2015) at the level of MoH and Ministry of Finances
6. Liaise between UNICEF SD and counterparts on availability and possibility to procure vaccines (traditional, new and GAVI supported vaccines)
7. Support to the Immunization week (annually in partnership with MoH and WHO)
8. Comprehensive assessment of cold chain equipment conducted in June 2014
9. Procurement of the most critical pieces of equipment considering the current immunization schedule and potential new vaccines that might be used in the Transnistria Region during the next five years (2015);
10. Development and distribution of immunization promotion materials in Transnistria region (2015);
11. Interpersonal and crisis communication trainings delivered to the epidemiologists and paediatricians (2015).
12. Supported participation of one representative of the National Center of Public Health (NCPH) and one representative of the Agency on Medicine and Medical Devises to the Vaccine Procurement Practitioners Exchange Forum (VPPEF) organized by UNICEF SD. Stakeholders were informed about the vaccine market changes, different ways of vaccine procurement, sources on information on vaccine procurement, UNICEF SD support to countries in vaccine procurement, etc (2015)
13. The draft plan in partnership with NCPH on ensuring sustainable mechanisms on vaccine procurement is under development (working group on legislative framework revision)
14. The existing communication plan/strategy on vaccine promotion, including crisis communication was adjusted
15. C4D strategy on promotion of immunization was drafted.

Sabin Vaccine Institute

16. Communication support on immunization sustainable financing: documenting immunization budget process and assess sustainability of immunization financing; mapping stakeholders and developing stakeholder-specific messages (2015)
17. Strengthening immunization legislation: reviewing literature on immunization regulations; developing minimum set of legislation provisions (in collaboration with WHO); reviewing immunization-related legislation of Moldova (2015)
18. Advocacy for the sustainable immunization financing at the level of Parliament, MoH and MoF (2015)

4.2 Future needs

The key future needs and priorities for Moldova, as reported by the country in the 2014 APR and re-confirmed during the Joint Appraisal, are:

1. Development of a Comprehensive Multi-Year Plan for the 2016-2020 period.
2. Development and approval of the National Immunisation Plan for the 2016-2020 period.
3. Introduction of a single-dose inactivated polio vaccine into the children's vaccination schedule.
4. Transition from the use of trivalent OPV to bivalent OPV as of April 2016.
5. Implementation of the transition plan to full self-procurement of vaccines once GAVI support ends.
6. Continuation of measures aimed at increasing immunisation coverage, maintaining the polio-free status, and eliminating measles and rubella.
7. Upgrade of refrigerating equipment based on needs assessment, enhancing control over storage conditions and vaccine administration.
8. Continuation of measures aimed at increasing the level of knowledge of medical staff in the area of immunisation and efficient vaccine management.
9. Capacity strengthening of National Immunization Technical Advisory Group and strengthening of the ICC
10. Strengthening ability to ensure new investment in immunization and long-term sustainable resources for immunization.
11. Resource mobilization and efficiency
12. Evidence-based decision on introduction of HPV vaccine, and in case this decision is positive – implementation of required preparatory activities prior to the development of application for support to Gavi.
13. Improving vaccine safety-related events resilience and communication response capacities communication.
14. Improving immunization communication for informing the population on the benefits and safety of vaccination.

15. Revise the legal framework on vaccine procurement in order to ensure application of different procurement mechanisms of vaccines
16. Conduct a cost-effective analysis on HPV introduction, especially for target groups
17. Strengthening and institutionalization of supportive supervision system, including in PHC

For the majority of these priority activities, technical assistance has already been secured through the Graduation Grants signed with the WHO and UNICEF in 2015 and scheduled to be implemented between 2015 and 2016. Some of these priorities, however, have not been covered in the Graduation Action Plan and will require additional technical assistance to be secured through the Joint Appraisal channel.

The key technical assistance activities that have been recommended to address priorities identified by the country are the following:

Short-term 2015-2016

- Assess existing legislative framework on vaccine procurement in order to identify and address gaps and bottlenecks in development of diverse procurement mechanisms that will ensure sustainable vaccine availability (UNICEF);
- Elaborate and propose recommendations on adjustments of existing legislation (based on the assessment findings) (Sabin & WHO);
- Evaluate NITAG performance and elaborate recommendations for NITAG capacity strengthening (2015);
- Conduct trainings for medical workers in sub-regions on vaccine safety and contraindications.

Medium- to long-term

- Collecting evidence for decision-making on HPV vaccination and potential introduction of HPV vaccine (2016);
- Continued capacity-strengthening of the NITAG (2015-2016);
- Increasing capacities of the national procurement agency to deal with vaccine products and vaccine markets and preparing efficient and sustainable procurement of new vaccines after GAVI support (2015-2016);
- Ensuring stability and predictability of domestic financing (2015-2016);
- Capacity building for resource mobilization advocacy and development of a resource mobilization action plan (2015-2016);
- Strengthening national regulatory capacities (on regulatory framework, market authorization and pharmacovigilance) (2015-2016);
- Increasing access to immunization services by improving quality of services (particularly in low performing districts) (2015-2016);
- Strengthening immunization legislation through facilitating country-level meetings and peer exchanges and conducting regional workshop on immunization legislation (Sabin and WHO, 2016);
- Strengthening vaccine safety-related events communications preparedness and response capacities through capacity building, planning and strategy development, spokesperson training and strengthening collaboration between AEFI investigation teams and communication (2015-16)
- Increasing demand for immunization services by assessing and changing behaviour of immunization providers and parents (including public).

Based on above (medium-to-long term) priorities and key recommendations, the technical assistance areas and activities listed below have been proposed. Detailed list of activities for the next year – 2016 – that require technical assistance, together with intended outcome/s, indication of the implementing agency (potential provider), modality and potential sources of funding, is provided in Annex D.

Immunization financing & resource mobilization	• Develop resource mobilization plan and advocacy materials for resource mobilization (WHO TA) • Conduct trainings in resource mobilization for relevant staff (WHO TA) • Conduct analysis of potential savings and efficiencies from using alternative procurement channels (e.g. UNICEF Supply Division) (UNICEF and WHO TA) • Develop parliamentary network for sharing best practices in immunization financing and legislation and providing joint effort for improvements (Sabin Institute) • Implementation of resource mobilization guidelines and immunization advocacy library (WHO); • Engagement of national institutional counterparts (Parliament, MoH and MoF) with local NGOs and think tanks in joint advocacy activities for immunization financing (Sabin)
Vaccine procurement	• Conduct a comprehensive review of vaccine procurement practices to identify existing bottlenecks and inefficiencies and propose solutions (UNICEF TA) • Continue building country's self-procurement capacities for vaccines purchased outside of UNICEF Supply Division by improving knowledge on vaccine market dynamics, on evolution of vaccine prices and measures to increase procurement efficiency (WHO and UNICEF TA) • Conduct procurement-related training workshops (UNICEF and WHO TA)

	• Provide support with preparing efficient and sustainable procurement of new vaccines after GAVI support (WHO and UNICEF TA)
Evidence-based decision-making	• Continue providing support to the NITAG (e.g. through disseminating guidance documents, providing trainings, facilitating participation in ETAGE, SAGE and other WHO meetings and visits to other NITAGs, organizing study tours, etc.) and review NITAG performance (WHO TA) • Develop SOPs for NITAG and define the process of declaration of conflict of interests (WHO TA) • Provide technical assistance to NITAG in collecting and evaluating quality of evidence to prepare topics for NITAG discussion (WHO TA) • HPV: Assess costs of HPV vaccine introduction; conduct cost-effectiveness evaluation; provide technical assistance in defining HPV delivery strategy and assessing school readiness for HPV introduction (if relevant); support development of national plan on comprehensive cervical cancer prevention and control (WHO TA) • Provide support in implementation of rotavirus surveillance and impact study in Moldova for 2016 (WHO TA) • Train and equip relevant bodies (NITAG, CNSP) with skills and methods to assess cost-effectiveness (WHO TA)
Programme performance	• Review and update immunization protocols and guidelines (WHO TA) • Technical support in addressing vaccine hesitancy (WHO TA) • Provide technical assistance with the tOPV – bOPV switch (WHO TA) • Review implications of public health reform on the National Immunization Program to ensure adequate opportunities for the NIP (WHO TA – check with Maria S.) • Conduct trainings for medical workers in sub-regions on vaccine safety and contraindications; continue such trainings on a central level (WHO TA) • Provide Mid-level Management training to rayon level immunization managers (WHO) • Provide Immunization in Practice training to district level trainers
Data quality	• Conduct a data quality audit (WHO TA) • Support the development and implementation of electronic immunization register, including a vaccine stock management module (WHO TA)
Communi-cation & social mobilization	• Provide technical assistance in development of a communication plan – WHO TA • Conduct further (in-country) trainings to key staff (including spokespersons) on communications (UNICEF) • Provide training to media staff (UNICEF) • Supporting the Programme in developing and printing key communication materials (UNICEF) • Support the Programme (financially) in conducting communication activities (UNICEF) • Develop communication strategy and messages for HPV introduction (prior to potential HPV application) (UNICEF) • Participation in sub-regional workshop on social media for relevant staff (WHO TA) • Tailor immunization practices for relevant groups and conduct communication activities to change behavior (WHO) • Develop a tailored communication C4D strategy that targets specific groups of population based on assessment of their attitude, misconceptions an fears related vaccination (UNICEF)
Vaccine management & logistics	• Based on a large part of cold chain equipment reaching the end of its useful life, conduct inventory and develop a renewal plan (WHO TA) • Develop a sustainable supportive supervision system that would cover public health and PHC systems and data collection and analysis tools to facilitate systematic identification of issues and follow up on improvement (WHO TA); • Conduct supportive supervision with special emphasis in low performing districts and facilities (WHO TA) • Develop integrated national regulations on storage of vaccines and cold chain requiring pharmaceuticals that would be applicable to all players, including customs, wholesalers, public health and primary health care facilities (WHO TA); • Establish a quality management system, including definition of roles and responsibilities and development of SOPs for each task to be performed at each level of the supply chain (WHO TA); • Improve the use of computerized data management systems (i.e. vaccine stock management, cold chain inventory) at national and sub-national levels; • Develop a national systematic training programme on immunization and vaccine management.
Vaccine regulations & AEFI surveillance system	• Develop comprehensive national AEFI surveillance policy, guidance and tools (defining scope of AEFI surveillance, organizational structure, roles & responsibilities, list of reported conditions and case definitions and standardized AEFI case notification and investigation forms); • Establish the national AEFI review committee and its terms of reference; • Causality assessment training (AEFI review committee, EPI, NRA); • Assessment of AEFI and revised guidelines

	• National training of trainers based on developed guidelines; • Establish an AEFI electronic database to facilitate notification, access to and use of case based data; • Train staff on market authorization and licensing and AEFI surveillance system (reporting, case investigation) (WHO) • Provide pharmacovigilance training (WHO) • Support a visit to another NRA with well-established QMS to understand the QMS implementation for a regulatory system (WHO) • Train key NRA staff on Good Regulatory Practice (WHO TA)
New Vaccine Support	• HPV: in case of positive decision on HPV introduction, provide support in preparing Gavi application and introduction of HPV vaccine (education of medical workers, development and implementation of communication strategy) (WHO TA) • Support with tOPV/bOPV switch • Support with Post-Introduction Evaluation for IPV vaccine • Continue implementation of rotavirus sentinel surveillance and case control study to monitor rotavirus vaccine impact • Conduct a study to evaluate impact of PCV

5. ENDORSEMENT BY ICC, HSCC OR EQUIVALENT & ADDITIONAL COMMENTS

The findings of the Joint Appraisal have been presented to the Deputy Minister of Health and in-country partners (UNICEF and WHO country offices) on July 10, 2015 during a meeting specifically called for this purpose.

Please find the full presentation in Annex E to this report.

***Issues raised during debrief of joint appraisal findings to national coordination mechanism*:**

The key issue raised during the debrief was the alternative options for procurement of vaccines to ensure sustainability and efficiency of vaccine procurement. The ICC chair expressed Moldova's strong interest in exploring various options for procuring traditional and routine vaccines, including through UNICEF Supply Division. This interest has been reconfirmed by the new Minister of Health of Moldova (who assumed this position in August 2015). The Minister will travel to Copenhagen in October 2015 to meet with the Supply Division and discuss available options and way forward.

Another issue brought forward during the ICC debrief was Moldova's interest for the HPV vaccine and access to Gavi's prices for HPV. However, according to the Deputy Minister of Health, the country may not be ready to introduce the vaccine until 2018 due to the current financial and political instability and a need for cost-effectiveness and readiness studies. Under Gavi policies, Moldova will need to apply in 2016 to benefit from the opportunity offered by Gavi.

6. ANNEXES

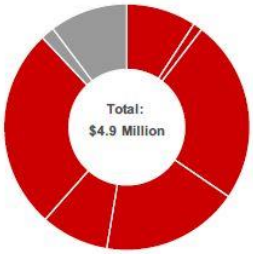
Annex A

KEY DATA

Republic of Moldova (the)

Total population (2015)	3,436,828
Birth cohort (2015)	40,749
Surviving Infants (surviving to 1 year per year, 2015)	40,209
Infant mortality rate (deaths < 1 year per 1000 births, 2013)	13/1000
Child mortality rate (deaths < 5 years per 1000 births, 2013)	15/1000
World Bank Index, IDA (2012)	3.73
Gross Nation Income (per capita US$, 2013)	2,470
Co-financing status (2015)	Graduating
No. of districts/territories (2013)	44

Non-vaccine support	Vaccine support
12%	88%
$587,000	$4,297,111



Data refers to disbursed values, date as per above chart

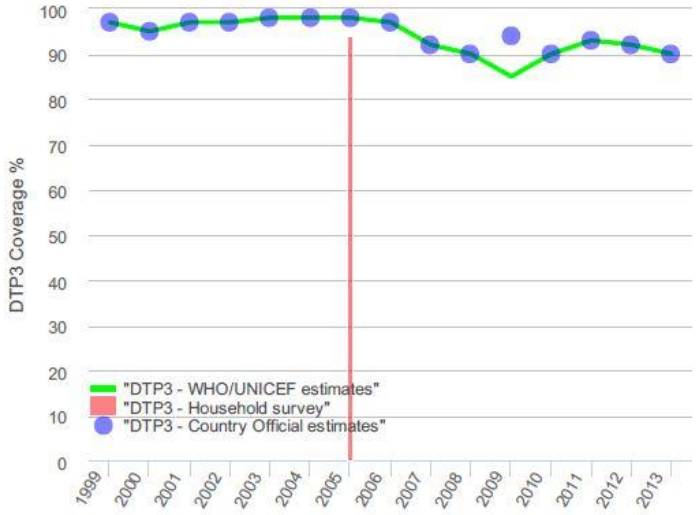
Gavi support for Moldova

Type of support	Approvals 2001-2020 (US$) (31 Mar 2015)	Commitments 2001-2020 (US$) (31 Mar 2015)	Disbursements 2000-2015 (US$) (31 Mar 2015)	% Disbursed (31 Mar 2015)	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Graduation grant (GG)	$523,457	$523,457																■	■	
HepB mono (NVS)	$449,174	$449,174	$449,174	100%	■	■	■	■	■	■	■									
Injection safety support (INS)	$87,000	$87,000	$87,000	100%				■	■	■										
IPV (NVS)	$171,000	$283,000	$58,919	34%														■	■	■
Penta (NVS)	$1,179,422	$1,179,422	$1,178,774	100%										■	■	■	■	■		
Pneumo (NVS)	$1,149,983	$1,149,983	$883,963	77%												■	■	■		
Rotavirus (NVS)	$431,301	$431,301	$434,713	101%											■	■	■	■		
Tetra DTP-Hib (NVS)	$1,272,629	$1,272,629	$1,291,571	101%							■	■	■							
Vaccine Introduction Grant (VIG)	$500,000	$500,000	$500,000	100%	■						■				■	■		■		
Total	**$5,763,966**	**$5,875,966**	**$4,884,113**																	

■ Red line on table indicates duration of support based on commitments.
Commitments: Multi-year programme budgets endorsed in principle by the Gavi Board. These become financial commitments upon approval each year for the following calendar year.
Approvals: Total Approved for funding

Moldova DTP3 / immunisation coverage

DTP3 - WHO/UNICEF estimates (2013)	
Grade of confidence	*N/A*
DTP3 - Official country estimates (2013)	90%
M:F sex ratio at birth (2015)	1.06
Household survey: DTP3 coverage for male (2005)	96.00%
Household survey: DTP3 coverage for female (2005)	91.20%
Household survey: Last DTP3 survey (2005)	94%
% districts achieving > 80% DTP3 coverage (2013)	93%
% districts achieving < 50% DTP3 coverage (2013)	0%
MCV WHO/UNICEF estimates (2013)	91%
Polio WHO/UNICEF estimates (2013)	92%



Annex B

Status of implementation of the key actions from the last joint appraisal and any additional High Level Review Panel (HLRP) recommendations

Key actions from the last appraisal or additional HLRP recommendations	Current status of implementation
Country urgently needs to re-evaluate the current strategy to tackle the issue of the vaccine hesitancy and safety. To continue through the UN organizations dialogue with the officials in the Transnistria Region, to follow-up on problems in this region. (May 2014 – a separate EPI review conducted to identify the problems and bottlenecks of the region.	**This activity needs to be reevaluated in the current context of economic and political crisis. Specific activities to address this issue have been proposed in the Graduation Action Plan and in additional TA to be provided through PEF.**
The Government is encouraged to consider including CSO representatives to ICC or provide clarifications why CSOs are not part of the ICC.	**Discussions on this issue will continue once the political situation in Moldova is stabilized – currently, the ICC membership and leadership has been subject to multiple modifications due to change in government.**
The country has submitted its plan and budget for graduation for 2,5 years totaling 488,500USD. The documentation is being processed to be submitted to GAVI CEO for approval.	**The Graduation Action plan was approved and Graduation Grants signed.**

Annex C

Description of joint appraisal process

Joint Appraisal was conducted from July 6 to July 10, 2015 and was built upon information submitted in 2014 APR, details provided in the 2012 Graduation Assessment and 2013 Internal Appraisal, 2013 post-introduction evaluation of rotavirus (2013) and PCV (2014) vaccines, 2014 Graduation Assessment, additionally covering programmatic and performance related challenges. In this perspective, the overarching objective was to assess the conditions of continuous performance of the Moldova immunization program, which up to now has been one of the strongest programs among the WHO EURO region.

Main institutions and persons visited:

- **Ministry of Health of Moldova** (Deputy Minister of Health, EPI Manager, Head of the MOH Financial Department, National Center of Public Health, National Medical Insurance Agency, NITAG);
- **Ministry of Finance of Moldova** (Head of Department of Finances Health Care and Social Protection);
- **UNICEF Country Office**
- **WHO Country Office**
- **National Immunization Technical Advisory Group (NITAG)**

Discussions and technical meeting with people and organisations listed above took place during the Joint Appraisal mission. The findings of these discussions, as well as the recommendations and proposed activities to be implemented in addition to the activities included in the framework of the Graduation Action Plan as additional technical assistance, have been presented to the MoH, WHO and UNICEF country representatives.

Annex D. Future technical assistance needs

Technical assistance for 2016					
Programme component (or strategy)	Activity (that requires TA)	Intended outcome/s	Provider (potential)	Modality	Source of funding
1. **Immunization financing & resource mobilization**	1.1 Develop resource mobilization plan and advocacy materials for resource mobilization	Road map for targeted resource mobilization efforts	WHO	In-country work with external technical assistance	PEF
	1.2 Conduct trainings in resource mobilization for relevant staff	Developed in-country capacity	WHO	Sub-regional and in-country workshop	Graduation Grants
	1.3 Conduct analysis of potential savings and efficiencies from using alternative procurement channels (e.g. UNICEF Supply Division)	More efficient and sustainable procurement mechanisms	UNICEF and WHO	In-country work with external technical assistance	Graduation Grants
	1.4 Develop parliamentary network for sharing best practices in immunization financing and legislation and providing joint effort for improvements	Increased awareness and involvement of stakeholders	Sabin Institute	In-country work	Gavi funds outside of PEF & Graduation
	1.5 Implementation of resource mobilization guidelines and immunization advocacy library	Developed in-country capacity	WHO	In-country work with external technical assistance	PEF
	1.6 Technical support to local NGOs and think tanks in advocacy for immunization financing	Increased awareness and involvement of stakeholders	Sabin Institute	In-country work	Gavi funds outside of PEF & Graduation
2. Vaccine procurement	2.1 Conduct a comprehensive review of vaccine procurement practices and assess existing legislative framework on vaccine procurement to identify existing bottlenecks and inefficiencies and propose solutions in development of diverse procurement mechanisms that will ensure sustainable vaccine availability	More efficient and sustainable procurement mechanisms	UNICEF	In-country work with external technical assistance	Graduation Grants
	2.2 Continue building country's self-procurement capacities for vaccines purchased outside of UNICEF Supply Division by improving knowledge on vaccine market dynamics, on evolution of vaccine prices and measures to increase procurement efficiency	More efficient and sustainable procurement mechanisms	WHO & UNICEF	In-country work with external technical assistance	Graduation Grants
	2.3 Conduct procurement-related training workshops	Developed in-country capacity	WHO & UNICEF	Workshops	PEF

	2.4 Provide support with preparing efficient and sustainable procurement of new vaccines after GAVI support	Developed in-country capacity	WHO & UNICEF	In-country work with external technical assistance	Graduation Grants
	2.5 Conduct a price analysis over the last 5 years of non-GAVI vaccines; analyse local suppliers performance (as per WHO check list); use UNICEF SD price as a benchmark to negotiate with local suppliers and work with UNICEF SD to explore supply options.	More efficient and sustainable procurement mechanisms	WHO & UNICEF	In-country work with external technical assistance	Graduation Grants
3. Evidence-based decision-making	3.1 Continue providing support to the NITAG: - Disseminate guidance documents - Provide trainings - Facilitating participation in ETAGE, SAGE and other WHO meetings - Facilitate visits to other NITAGs and organizing study tours	Improved strategic guidance to the Programme	WHO	Sub-regional workshop, study tours, in-country TA	Graduation Grants
	3.2 Develop SOPs for NITAG and define the process of declaration of conflict of interests	Improved strategic guidance to the Programme	WHO	In-country TA	Graduation Grants
	3.3 Provide technical assistance to NITAG in collecting and evaluating quality of evidence to prepare topics for NITAG discussion	Improved strategic guidance to the Programme	WHO	Sub-regional workshop, in-country TA	Graduation Grants
	3.4 HPV: Assess costs of HPV vaccine introduction; conduct cost-effectiveness evaluation; provide technical assistance in defining HPV delivery strategy and assessing school readiness for HPV introduction (if relevant); support development of national plan on comprehensive cervical cancer prevention and control	In-country data and evidence on effectiveness of HPV vaccine introduction	WHO	In-country TA	PEF
	3.5 Provide support in implementation of rotavirus surveillance and impact study in Moldova for 2016	Advocacy support for continuation of rotavirus and PCV vaccinations	WHO	In-country work with external technical assistance	PEF
	3.6 Train and equip relevant bodies (NITAG, CNSP) with skills and methods to assess cost-effectiveness	Improved strategic guidance to the Programme	WHO	in-country TA	Graduation Grants
4. Programme performance	4.1 Review and update immunization protocols and guidelines	Developed in-country capacity	WHO	In-country TA, in-country training	PEF
	4.2 Technical support in addressing vaccine hesitancy	Improved access to unreached and increased vaccination coverage	WHO & UNICEF	In-country TA, in-country training	Graduation Grants
	4.3 Review implications of public health reform on the National Immunization Program to ensure adequate opportunities for the NIP	Optimization of ongoing health reform for the needs of EPI program	WHO	In-country TA	PEF

	4.4 Conduct trainings for medical workers in sub-regions on vaccine safety and contraindications; continue such trainings on a central level	Improved access to unreached and increased vaccination coverage	WHO	In-country trainings	PEF
	4.5 Provide Mid-level Management training to rayon level immunization managers, including in Transnistrian region	Improved in-country capacity	WHO & UNICEF	In-country TA and training	Graduation Grants
	4.6 Provide Immunization in Practice training to district level trainers	Improved in-country capacity	WHO	In-country TA and training	Graduation Grants
	4.7 Develop and provide training on protection of medical workers from potential legal action in the event of AEFI	Increased protection of medical workers leading to lower contraindications and refusals		In-country TA and training	PEF
	4.8 Revise the curricula for PHC in- services training in interpersonal communication for promotion of immunization and equip PHC and other medical professional staff with correct messages	Better knowledge among medical workers	UNICEF	In-country TA	PEF
5. Data quality	5.1 Conduct a data quality review	Data quality improvement plan developed to address weaknesses	WHO	In-country TA	Graduation Grants
	5.2 Support the development and implementation of electronic immunization register, including a vaccine stock management module	Increased in-country capacity in immunization information systems	WHO	In-country TA	PEF
	5.3. Continue strengthening management information system, data collection and surveillance systems	Increased in-country capacity in immunization information systems	MoH	In-country TA	PEF
6. Communication & social mobilization	6.1 Tailor immunization practices for relevant groups and conduct communication activities to change behavior	Intensified and targeted communication activities	WHO/UNICEF	In-country TA	PEF
	6.2 Provide technical assistance in adjusting the Communication Strategy, including Crisis Communication Strategy and development of a communication plan	Intensified and targeted communication activities	WHO & UNICEF	In-country TA	Graduation Grants
	6.3 Provide technical assistance in C4D strategy targeting specific group of population in promotion of vaccination	Intensified and targeted communication activities	UNICEF	In-country TA	PEF
	6.4 Conduct further (in-country) trainings to key staff (including spokespersons) on communications, including in crisis communication	Intensified and targeted communication activities	UNICEF	In-country work with external technical assistance	Graduation Grants
	6.5 Conduct further (in-country) trainings to PHC staff on interpersonal communication with caregivers on promotion of immunization	Improved communication on immunization to parents	UNICEF	In-country work with external technical assistance	Graduation Grants

	6.6 Develop communication strategy and messages for HPV introduction (prior to potential HPV application)	Ensured high coverage with HPV vaccines	UNICEF	In-country work with external technical assistance	PEF
	6.7 Provide training to media staff	Reduced negative media influence	UNICEF	In-country TA and training	PEF
	6.8 Supporting the NIP in developing and printing key communication materials	Improved knowledge of parents and increased demand for vaccines	UNICEF	In-country TA, procurement	Graduation Grants
	6.9 Participation in sub-regional workshop on social media for relevant staff	Increased use of social media in promoting vaccination and addressing negative messages	WHO	Sub-regional workshop	PEF
	6.8 Support the NIP (financially) in conducting communication activities	Intensified and targeted communication activities	WHO	In-country TA	Graduation Grants
7. Vaccine management & logistics	7.1 Conduct cold chain inventory and develop a renewal plan for equipment reaching the end of its life or requiring repairs	Improved supply chain	WHO	In-country TA	PEF
	7.2 Develop a sustainable supportive supervision guidance and data collection and analysis tools to facilitate systematic identification of issues and follow up on improvement	Improved vaccine management	WHO	In-country TA	PEF
	7.3 Conduct supportive supervision with special emphasis in low performing districts and facilities	Improved vaccine management	WHO	In-country TA	Graduation Grants
	7.4 Develop integrated national regulations on storage of vaccines and cold chain requiring pharmaceuticals that would be applicable to all players, including customs, wholesalers, public health and primary health care facilities	Improved supply chain	WHO	In-country TA	PEF
	7.5 Establish a sustainable quality management system, including definition of roles and responsibilities and development of SOPs for each task to be performed at each level of the supply chain	Improved vaccine management	WHO & UNICEF	In-country TA	Graduation Grants
	7.6 Conduct (in-country) trainings to key staff on SOP for EVM	Improved vaccine management	UNICEF	In-country work with external technical assistance	PEF
	7.7 Improve the use of computerized data management systems (i.e. vaccine stock management, cold chain inventory) at national and sub-national levels;	Improved vaccine management	WHO	In-country TA	PEF
	7.8 Develop a national systematic training programme on immunization and vaccine management.	Improved vaccine management	WHO	In-country TA	PEF
	8.1 Develop comprehensive national AEFI surveillance policy, guidance and tools (defining scope of AEFI surveillance,	Improved safety of immunizations	WHO	In-country TA	PEF

8. Vaccine regulations & AEFI surveillance system	organizational structure, roles & responsibilities, list of reported conditions and case definitions and standardized AEFI case notification and investigation forms);				
	8.2 Establish the national AEFI review committee and its terms of reference	Improved safety of immunizations	WHO	In-country TA	PEF
	8.3 Assessment of AEFI and revised guidelines	Improved safety of immunizations	WHO	In-country TA	
	8.4 Causality assessment training (AEFI review committee, EPI, NRA)	Improved safety of immunizations	WHO	In-country TA	PEF
	8.5 National training of trainers based on developed guidelines	Improved safety of immunizations	MoH	In-country TA	Graduation Grants
	8.6 Establish an AEFI electronic database to facilitate notification, access to and use of case based data;	Improved safety of immunizations	WHO	In-country TA	PEF
	8.7 Train staff on market authorization and licensing and AEFI surveillance system (reporting, case investigation)	Improved safety of immunizations	WHO	In-country TA	Graduation Grants
	8.8 Provide pharmacovigilance training	Improved safety of immunizations	WHO	In-country TA	Graduation Grants
	8.9 Support a visit to another NRA with well-established QMS to understand the QMS implementation for a regulatory system	Improved Regulatory Practices	WHO	Visit to another country's NRA	Graduation Grants
	8.10 Train key NRA staff on Good Regulatory Practice	Improved Regulatory Practices	WHO	In-country TA	PEF
9. New Vaccine Support	9.1 HPV: in case of positive decision on HPV introduction, provide support in preparing Gavi application and introduction of HPV vaccine (education of medical workers, development and implementation of communication strategy)	Successful HPV application	WHO & UNICEF	In-country work with external technical assistance	PEF
	9.2 Support with tOPV/bOPV switch	Smooth switch	WHO	In-country work with external technical assistance	PEF
	9.3 Support with Post-Introduction Evaluation for IPV vaccine	Sustainable introduction of IPV	WHO	In-country work with external technical assistance	PEF
	9.4 Continue implementation of rotavirus sentinel surveillance and case control study to monitor rotavirus vaccine impact	Advocacy support for continuation of rotavirus and PCV vaccinations	WHO	In-country work with external technical assistance	PEF
	9.5 Assist with collection of local evidence on PCV and conduct a study to evaluate impact of PCV in Moldova	Advocacy support for continuation of rota & PCV vaccinations	WHO	In-country work with external technical assistance	PEF

Annex E. Presentation to the Deputy Minister of Health

Joint Appraisal of Gavi vaccine and cash support to the Republic of Moldova

Chisinau, Moldova
7-10 July 2015

GAVI Secretariat
WHO Regional Office for Europe
UNICEF Regional Office for CEE/CIS
Sabin Vaccine Institute

www.gavi.org

Mission Members

- Ekaterina Rykovanova (GAVI Secretariat)
- Liudmila Mosina (WHO Regional Office for Europe)
- Oya Zeren Afşar (UNICEF Regional Office for CEE/CIS)
- Eka Paatashvilli (Sabin Vaccine Institute)
- David Sulaberidze (WHO Europe – Consultant)

Meetings Held

- Ministry of Health
- National Center of Public Health
- Department of Economics and Finance, MoH
- National Health Insurance Company
- Department of Finance, Health Care and Social Protection, MoF
- National Immunization Technical Advisory Group
- WHO Country Office
- UNICEF Country Office

Strengths and Successes (1/2)

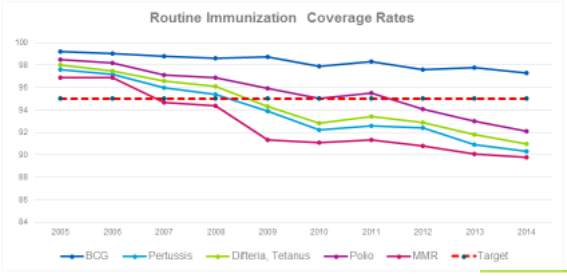
- Immunization program is a priority, government commitments consistently fulfilled
- One of the strongest immunization programs in the European region
- Devoted, highly professional and motivated staff
- Making use of innovations and new technologies
- First in the region among middle-income countries to introduce PCV ant rotavirus vaccines

Strengths and Successes (2/2)

- National Immunization Technical Advisory Group established in 2013
- Good planning through the cMYP and the National immunization plan
- Good collaboration with WHO, UNICEF and other partners
- Strong participation in international fora

Challenges (1/2)

- Slowly but steadily declining coverage for all routine and new vaccines



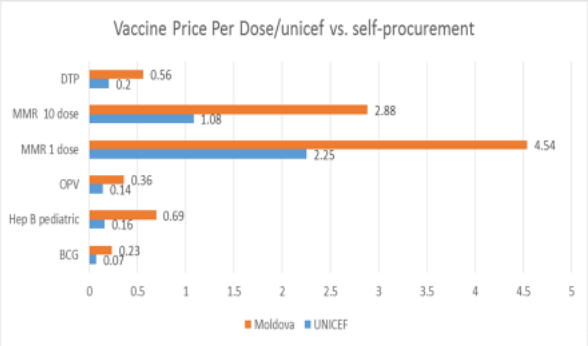
CHALLENGES (2/2)

- Financial sustainability of the program
- National vaccine supply security – challenges in ensuring sustainable vaccine procurement
- New vaccines not implemented in all regions; coverage with routine vaccines lower in the Transnistria Region
- HR challenges

KEY PRIORITY ACTIONS (1/3)

- Maintaining immunization as a priority
- Securing sufficient financial resources for the Immunization Program
- Working on further advocacy and resource mobilization
- Strengthening the efficiency of the vaccine procurement system

KEY PRIORITY ACTIONS (2/3)



KEY PRIORITY ACTIONS (3/3)

- Continuing to educate medical workers
- Implementing a comprehensive behaviour change communication strategy to improve public trust and create demand
- Addressing the challenges with implementation of new vaccines in the Transnistria region
- Introducing measures for attracting and retaining health care professionals working in primary care and immunization

NEXT STEPS

Step	Timelines
Joint Appraisal report to be finalized and circulated for comments	By 25 July 2015
Findings and recommendations of the JA report to be endorsed by the ICC	By 30 August 2015
JA report submitted to the High Level Review Panel	15 September 2015
HLRP review and decision on renewal of support for 2016	October 2015
Implementation of support approved through the JA	2016

THANK YOU!

We would like to extend our appreciation and gratitude to all those who have dedicated their time to meet and work with us.

The discussions we had have been very informative and we hope to have reflected today the views and opinions expressed by your colleagues.

We all look forward to working with you in the future to achieving our mutual goals.

ANNEX F:

Recommendations to the country:

1. Maintain immunization as a priority from both the public health and financial points of view after the end of support from international donors
2. Secure sufficient financial resources for the Immunization Program from the general budget and other sources, work on further advocacy and resource mobilization
3. Continue to educate medical workers (including PHC professionals, paediatricians, neurologists etc) to build trust and ensure compliance with WHO-recommended contraindications against vaccinations
4. In addition to ongoing efforts on communication, implement a comprehensive behaviour change communication strategy to improve public trust and create demand
5. Address the challenges with the low coverage of routine vaccines and potential re-introduction of new vaccines in Transnistria working in collaboration with international partners
6. Within the ongoing health reform process, introduce incentives for health care professionals working in primary care and immunization
7. Strengthen the efficiency of the vaccine procurement system
8. Develop comprehensive national AEFI surveillance policy, guideline and tools (defining scope of AEFI surveillance, organizational structure, roles & responsibilities, list of reported conditions and case definitions and standardized AEFI case notification and investigation forms)
9. Establish the national AEFI review committee and its terms of reference
10. Conduct causality assessment training (AEFI review committee, EPI, NRA)
11. Conduct national training of trainers on AEFI surveillance based on developed guidelines
12. Establish an AEFI electronic database to facilitate notification, access to and use of case based data;
13. Update comprehensive multi-year plan on immunization for the period 2016 onwards
14. Consider introduction of HPV vaccine at NITAG meeting and develop evidence-based recommendations to the MoH
15. Consider implementation of comprehensive cervical cancer prevention and control approach
16. Consider including CSO representatives in ICC and/or provide clarifications about exclusion of CSOs from the Committee.
17. Clarify the relationships, functions and mandate of various players officially involved in communication and promotion of NIP (NCPH, NITAG, Medicine Agency, ICC, Health Management Center, Scientific Practical Centre of Management in Health)
18. Implement outstanding EVM and PCV PIE recommendations
19. Continue advocating on benefits of procuring EPI vaccines through UNICEF to sustain the government commitment
20. Develop and/or guidelines on immunization of children with interrupted and delayed vaccinations using WHO materials
21. Explore the policy and legal opportunities to grant longer term Government commitment to pooled vaccine procurement trough UNICEF SD;
22. Continue to participate in WHO/UNICEF initiatives to improve knowledge on the vaccine market, vaccine prices and complexity of vaccine supply and share information with key decision makers to advocate for procurement efficiency and mitigate risks;
23. Develop integrated national regulations on storage of vaccines and cold chain requiring pharmaceuticals that would be applicable to all players, including customs, wholesalers, public health and primary health care facilities;
24. Establish a quality management system, including definition of roles and responsibilities and development of SOPs for each task to be performed at each level of the supply chain.
25. Allocation and capacity building of human resources for managing the programme at national, sub-national and district level shall be a key priority during the forthcoming public health service reform;
26. Develop supportive supervision guidance and data collection and analysis tools to facilitate systematic identification of issues and follow up on improvement;
27. Improve the use of computerized data management systems (i.e. vaccine stock management, cold chain inventory) at national and sub-national levels;
28. Develop a national systematic training programme on immunization and vaccine management
29. Strengthen supportive supervision through introduction of SOPs and improved guidance
30. Continue quarterly supportive supervision with particular emphasis on lower performing districts