EVALUATION REPORT FORWARD-LOOKING EVALUATION OF UNDP PROCUREMENT SUPPORT SERVICES TO THE MOH PROJECT

FOR: UNDP UKRAINE, GOVERNMENT OF UKRAINE, AND DEVELOPMENT PARTNERS

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Table of Contents

| Lis | st of acronyms | 3 |
|------|--|---------------|
| Ex | ecutive summary | 6 |
| I. | Background | 9 |
| I | .I. Country context | 9 |
| I | .II. Organisational context | 9 |
| I | .III. Project background | 11 |
| II. | Objective, purpose and scope of the evaluation | 12 |
| III. | Limitations of the evaluation | 14 |
| IV. | Evaluation approach and methodology | 15 |
| | V.I. Efficiency assessment of medical procurement | 17 |
| | General approach to assessment, assumptions and baselines | |
| E | Efficiency calculation | 20 |
| | V.II. Evaluation of the development/programme component of the MoH | PSS Project23 |
| F | Relevance | 23 |
| E | Effectiveness | 24 |
| E | Efficiency | 25 |
| 9 | Sustainability | 25 |
| I | mpact | 26 |
| F | Future outlook on UNDP health activities | 26 |
| V. | Evaluation findings, lessons learnt and recommendations | 26 |
| 1 | V.I. Procurement efficiency overview | 26 |
| (| Changes in price | 27 |
| (| Changes in quantity | |
| (| Changes in delivery lead times | 41 |
| 1 | V.II. Overview of procurement process within the MoH PSS Project | 44 |
| 1 | V.III. Development/programme component of the MoH PSS Project | 51 |
| I | Relevance | 51 |
| E | Effectiveness | 60 |
| E | Efficiency | 67 |
| 9 | Sustainability | 72 |
| I | mpact | 75 |
| I | Future outlook | 78 |
| 1 | V.IV. Lessons learnt | 81 |
| 1 | V.V. Recommendations | 83 |
| An | nexes | 86 |

List of acronyms

| ΑΤΟ | Anti-Terrorist Operation |
|-----------------|---|
| AWP | Annual Work Plan |
| BMS | Bureau of Management Services |
| СВ | Capacity Building |
| СВА | Community-Based Approach |
| ССМ | Country Coordination Mechanism |
| CEDAW | Convention on the Elimination of all Forms of Discrimination Against Women |
| CIPS | Chartered Institute of Procurement & Supply |
| CO | Country Office |
| СоМ | Cabinet of Ministers |
| CPD | Country Programme Document |
| CPGs | Clinical Practice Guidelines |
| CSAs | Cost-Sharing Agreements |
| CSO | Civil Society Organisation |
| EECA | Eastern Europe and Central Asia |
| EMS | Emergency Medical Services |
| EU | European Union |
| Evaluation team | KPMG evaluation team |
| FAO | Food and Agriculture Organisation of the United Nations |
| FTCI | Fast-Track City Initiative |
| GBV | Gender-Based Violence |
| GF HIST | Global Fund – Health Implementation Support Team |
| GFATM (GF) | Global Fund to Fight AIDS, Tuberculosis and Malaria (the Global Fund) |
| GoU | Government of Ukraine |
| H&T Programme | Health & Transparency Programme |
| HCWH | Health Care Without Harm |
| HD | Hospital District |
| HHD | HIV, Health and Development |
| HIV/AIDS | Human Immunodeficiency Virus / Acquired Immune Deficiency Syndrome |
| HQ | Headquarters |
| ICs | Individual consultants |
| IDPs | Internally Displaced Persons |
| INN | International Non-proprietary Name |

| IP | Intellectual Property | | | | | |
|---|---|--|--|--|--|--|
| IRH | Istanbul Regional Hub | | | | | |
| ITA | International Technical Assistance | | | | | |
| LEA | Legal Environment Assessment | | | | | |
| LEA TB | Legal Environment Assessment for Tuberculosis | | | | | |
| LGBTI | Lesbian, Gay, Bisexual, Trans and Intersex | | | | | |
| LTA | Long-Term Agreement | | | | | |
| M&E | Monitoring and Evaluation | | | | | |
| MDR-TB | Multi-drug-resistant Tuberculosis | | | | | |
| MEA | Market Entry Agreements | | | | | |
| MERT | Ministry of Economic Development and Trade | | | | | |
| МКН | Medical Knowledge Hub | | | | | |
| МоН | Ministry of Health (of Ukraine) | | | | | |
| MSM/TG | Men who have Sex with Men/ Transgender People | | | | | |
| MoH PSS Project | Procurement Support Services to the Ministry of Health of Ukraine Project | | | | | |
| MSMEs | Micro, Small and Medium-Size Enterprises | | | | | |
| NGO | Non-Governmental Organisation | | | | | |
| NTHC | National Council on TB and HIV/AIDS | | | | | |
| OECD – DAC | Organisation for Economic Co-operation and Development – Development and Assistance Committee | | | | | |
| PETS | Public Expenditure Tracking Survey | | | | | |
| PO | Purchase Order | | | | | |
| POPPs | Programme and Operations Policies and Procedures | | | | | |
| ProDoc | Project Document formulating key strategic objectives, outputs and activities of the MoH PSS project | | | | | |
| Project team | MoH PSS Project team | | | | | |
| PSM | Procurement and Supply Chain Management | | | | | |
| QA | Quality Assurance | | | | | |
| RBEC | Regional Bureau for Europe and the CIS | | | | | |
| ROAR | Results-Oriented Annual Reporting | | | | | |
| RPP | Recovery and Peacebuilding Programme | | | | | |
| SAVE approach Safe Practices, Access to Treatment, Voluntary Tes Empowerment of People | | | | | | |
| SDGs | Sustainable Development Goals | | | | | |
| SHipp | Sustainable Health in Procurement Project | | | | | |
| SIVA Sector Integrity Vulnerability Assessment | | | | | | |

| SMART indicators | Specific, Measurable, Achievable, Relevant and Time-bound indicators | | | | | | | |
|------------------|---|--|--|--|--|--|--|--|
| SoE MPU | State-Owned Enterprise, Medical Procurement of Ukraine | | | | | | | |
| SOPs | Standard Operating Procedures | | | | | | | |
| SP | Strategic Plan | | | | | | | |
| ТА | Technical Assistance | | | | | | | |
| TAPAS | Transparency and Accountability in Public Administration and Services | | | | | | | |
| ТВ | Tuberculosis | | | | | | | |
| TOR | Terms of Reference | | | | | | | |
| ТоТ | Training of Trainers | | | | | | | |
| TRIPS | Trade-Related Aspects of Intellectual Property Rights | | | | | | | |
| TsNAPs | Centres for Administrative Services | | | | | | | |
| UAH | Ukrainian Hryvnia | | | | | | | |
| UBRAF | Unified Budget, Results and Accountability Framework | | | | | | | |
| UN | United Nations | | | | | | | |
| UNAIDS | Joint United Nations Programme on HIV and AIDS | | | | | | | |
| UNDAF | The United Nations Development Assistance Framework | | | | | | | |
| UNDP | United Nations Development Programme | | | | | | | |
| UNDP CO | United Nations Development Programme Country Office in Ukraine | | | | | | | |
| UNFPA | United Nations Population Fund | | | | | | | |
| UNICEF | United Nations Children's Fund | | | | | | | |
| UNV | United Nations Volunteers programme | | | | | | | |
| USAID | United States Agency for International Development | | | | | | | |
| USD | United States Dollar | | | | | | | |
| VAT | Value-Added Tax | | | | | | | |
| WG | Working Group | | | | | | | |
| WHO | World Health Organization | | | | | | | |

Executive summary

This report provides the results of the Forward-looking Evaluation of the Procurement Support Services to the MoH Project (hereinafter, – the Project), implemented by UNDP Ukraine between November 2015 and March 2019. The Project has been extended until the end of 2021 and is currently ongoing.

Both medical procurement and development/programme components of the Project were assessed, to identify lessons learnt and to provide recommendations on the future development of UNDP's health activities in Ukraine.

The assessment of **the medical procurement component considered 5 disease programmes**, for which UNDP procured medicines and medical devices in 2015-2018 budget years (Adult Cancer, Tuberculosis medicines, Childhood Haemophilia, Adult Hepatitis B and C and Childhood Cystic Fibrosis) and analysed them for **changes in price, changes in quantity and changes in delivery timings**. The assessment showed that:

- Procurement by UNDP was more cost efficient in the 2015 budget year than procurement by MoH in 2014;
- UNDP procurement in the 2016-2018 budget years was mostly more cost efficient than regional procurement through ProZorro;
- Savings against allocated programme budgets were delivered year-on-year;
- UNDP prices improved year-on-year for most items procured;
- The savings delivered provided for the procurement of additional quantities, allowing to near the coverage of 100% need in 2018;
- The share of on-time deliveries was 25% in 2015 and remained around 70% in 2016-2018 never having reached the target of 95%;
- Supplier performance by disease programme was inconsistent with no visible improvement on delayed deliveries.

The assessment of the procurement component also **analysed the UNDP procurement process and identified its strengths and weaknesses.** The key strengths recognised were UNDP's worldwide brand-awareness and its well-established procurement process regulated with detailed and clear procurement policies and procedures in line with UN and international procurement standards. UNDP has applied global Quality Assurance System for Health Products procedure adjusted to MoH PSS Project needs and progressively increased the share of Long-Term Agreements with manufacturers. The key weaknesses were mainly related to the lack of process ownership, i.e. as a procurement agent, UNDP needed to seek MoH approvals and decisions, and this often delayed the procurement process. This has to some extent also led to overlaps in procurement and deliveries across several budget years for the same disease programmes. Finally, there were insufficient levers available to manage bidder discipline and those that were available, were applied on case-by-case basis.

The assessment of the development/programme component against OECD - Development Assistance Committee (DAC) review criteria concluded the following:

• **Relevance** – the evaluation concludes that overall UNDP's Health and Transparency Programme health interventions (including those provided under CCM and the support provided to RPP) have been highly relevant to national and local policies and priorities and the needs of Ukrainian society, the Government, and vulnerable groups (HIV, TB, orphan diseases, etc.). Interventions have been consistent with the UNDP/UNDAF country programme strategy and have appropriately considered gender and human rights' issues. The Project remained relevant throughout the period of its implementation and was adapted to the changing environment using appropriate risk assessments and risk mitigation strategies.

• **Effectiveness** – the Project has, in many aspects, achieved its objectives as set forth in the project documents/cost-sharing agreements, strategies, objectives and indicators. UNDP's procurement of medicines and related medical products had a positive impact on saving lives of Ukrainian patients and is believed to have helped reduce corrupt practice in public procurement in healthcare. However, significant delays by the MoH in starting annual procurement cycles led to delays in UNDP's tender process and hence supplies, adversely affecting feedback on overall Project performance.

• **Efficiency** – whilst there were some issues with individual projects, the majority of outputs were efficiently managed with regard to cost and timelines. The procurement efficiency assessment noted that UNDP continuously delivered savings against allocated programme budgets with reported savings reaching USD 66 million from the beginning of the Project.

• **Sustainability** – the evaluation revealed certain items that may potentially jeopardise or significantly diminish the sustainability of the interventions. Chief among these is a lack of national ownership and partial 'loss of institutional memory' at the MoH with regard to the benefits obtained through technical assistance and capacity development activity (due to objective factors such as lack of institutional mechanisms created by the MoH to date; political instability and frequent changes of senior management at the MoH and potential weaknesses associated with structuring of assistance via ICs).

• **Impact** – without exception, stakeholders recognised the impact of UNDP in the area of anti-corruption in public health procurement. There was a high level of awareness and positive feedback from patients on the impact of UNDP's interventions, that recognised improvements in transparency, accountability and effectiveness of the public procurement of medicines and other medical products.

• **Future outlook** – although not an OECD criterion the report considers several areas where UNDP may best capitalise on the unique knowledge and expertise gained through the implementation of this Project and related projects implemented jointly with other partners. Overall, with gradual transition of the medical procurement portfolio to the SoE MPU and full transfer expected in March 2022, UNDP may consider gradual transition from health-related procurement to a more diversified package of support and developmental assistance in the area of democratic governance by promoting rule of law, gender and human rights and the 'leave no one behind' agenda, and to continue providing support in conflict-affected areas by capitalising on its expertise in the East. These activities should form part of a coherent and well-integrated Health & Transparency Programme which should be the nexus between healthcare, environment, human rights, anti-corruption and transparency.

Based on the findings of the evaluation and taking into account the assessment of the future outlook, the report makes the following recommendations:

- 1. Publishing of extensive contemporaneous information on the progress of procurement and deliveries should become regular practice for UNDP.
- 2. UNDP could offer its procurement and supply chain expertise to the MoH to improve quantification, budgeting and delivery planning.

- 3. Once agreements are concluded with suppliers, ongoing management of supplier performance should be a priority.
- 4. Non-price evaluation criteria may be introduced to strengthen decision-making on bid evaluation and contract award.
- 5. Supply security should be a focus both for MoH and UNDP.
- 6. The MoH PSS Project Document should be updated and submitted to the Board Meeting.
- 7. Results-based management should be strengthened.
- 8. UNDP's positioning as a developmental technical adviser (as opposed to its current perception as a procurement agency) should be continuously promoted.
- 9. UNDP should capitalise on the expertise gained in medical procurement to build up a development service offering.
- 10. UNDP should continue providing support for local reform and de-centralisation.

I.Background

I.I. Country context

The Ukrainian healthcare system has been highly decentralised and inefficient since the disintegration of the Soviet Union. Decision-making processes related to medical services and supplies of medicines to Ukrainian patients have lacked transparency and control. Following the Revolution of Dignity in 2014, radical solutions were proposed for policymaking and governance of key state services, including healthcare. In 2014, The Ministry of Health of Ukraine launched the National Healthcare Reform Strategy for 2015-2020 to develop strategic approaches to secure high quality and accessible health care. In 2016, the Cabinet of Ministries of Ukraine adopted the Programme for Reforming of the Health Care Financing. The programme envisaged government guarantees on healthcare, more reliable financial protection for patients in the event of illness, transparent and fair allocation of public resources and elimination of out-of-pocket payments. New approaches to budgeting and financing of medical institutions were designed in a series of legislative documents adopted by the Verkhovna Rada (Parliament) of Ukraine and the orders of the Cabinet of Ministries of Ukraine. In 2018 the National Health Service of Ukraine, as the central executive body, was established to serve as single national purchaser under the control of the Ministry of Health of Ukraine.

The issue of procurement in the healthcare sector required special attention, as the previous procurement and medical supply programmes conducted by the Ministry of Health of Ukraine were deemed inefficient and allegedly corrupt, resulting into shortages of medicines for patients. A number of international organisations responded to the Ukrainian government's request and offered their assistance to help increase transparency and efficiency in the healthcare sector. Consequently, the Ministry of Health outsourced healthcare procurement to three international agencies (UNDP, UNICEF and Crown Agents) following necessary modifications to Ukrainian legislation.

The assistance from international organisations aimed at increasing both the efficiency of state healthcare procurement and transparency and accountability in the medical procurement process. Cooperation between the Ukrainian government, the Ministry of Health and international organisations in the field of medical procurement was favourably received by public, who supported reform of the state healthcare system.

I.II. Organisational context

The overall objective of UNDP in the field of healthcare is to ensure common and equitable access to vital health services, medicines and medical devices for every citizen. UNDP provides support to governments in building sustainable healthcare systems through development of policy, strategy and capacity.

UNDP supported the Ukrainian government in launching transformation processes and in 2015 was one of three international agencies that started procuring medicines and medical devices on behalf of the Ministry of Health of Ukraine. In November 2015, UNDP and the Ministry of Health of Ukraine signed a Cost-Sharing Agreement and a bilateral Project Document defining specific objectives, overall strategy, scope of work and expected results for their collaboration on medical procurement, covering the period of 2015-2019, namely:

- To assist the MoH in the cost-efficient, transparent and timely procurement of medicines and other medical devices for selected State Health Programmes;
- To build structural and human resource capacity for supply planning, forecasting, monitoring and evaluation ensuring transparent and cost-efficient procurement of medicines and medical products at the MoH and/or through the National Health Product Procurement Agency (designated agency);
- To enable transfer of procurement activities back to the MoH or designated agency;
- To support the MoH in further reform of the national procurement and quality assurance system and capacity development processes;
- To use the technical expertise of WHO, support capacity building of the procurement and supply chain management system in the context of a wider initiative aiming at strengthening the Ukrainian healthcare system, and improving the list of the medicines;
- To provide strategic communication for sustainable procurement, capacity building and reform initiatives, empower patients and CSOs to publicly monitor the accessibility and availability of medicines at local levels.

In addition to health reform issues, Ukraine continues to have a significant HIV epidemic among key populations (including drug users, sex workers, men who have sex with men, transgender people and prisoners). The HIV epidemic is characterised by a growing number of registered HIV cases in most regions of the country. The rapid assessment data collected by HIV service organisations indicates growth in risk behaviour (especially in centres for internally displaced persons), losses of prevention networks and increased use of drugs (including injecting). Under UNAIDS division of labour, UNDP addresses dimensions of HIV response that relate to HIV prevention among key populations, promoting human rights and fighting stigma and discrimination. Consequently, the UNDP Health and Transparency Programme also contains a component related to HIV response in Ukraine.

Along with HIV, Ukrainian policymakers prioritise fighting tuberculosis (TB). According to WHO Europe, in 2014, Ukraine was listed as one of the five countries with the highest MDR-TB burden globally. The situation in Ukraine was particularly aggravated by widespread drug resistant TB and a relatively high mortality rate as a result of untreated or inappropriately treated TB, and increasing TB/HIV co-infection rates¹. In 2017, approximately 22,000 new TB patients were registered, ranking Ukraine second among countries in the WHO European Region for the prevalence of MDR-TB for both repeated and new cases.² Addressing the country's immediate needs in medicines and TB diagnosis, UNDP has procured for relevant disease programmes since the 2015 budget year and has committed to strengthen the National Council on TB and HIV/AIDS in Ukraine, in partnership with other UN agencies, WHO and Global Fund.

Since January 2013 UNDP has been helping to strengthen the capacity of the National Council on TB and HIV/AIDS (NTHC) in fulfilling its function as the Country Coordination Mechanism, in line with the requirements and recommendations of the Global Fund to Fight AIDS, TB and Malaria. These include an oversight function, involvement of all stakeholders, and ensuring

² <u>https://www.euro.who.int/en/health-topics/communicable-diseases/tuberculosis/news/news/2018/5/ukraine-to-implement-a-new-integrated-approach-to-tb-prevention-and-care</u>

¹ <u>https://www.euro.who.int/en/countries/ukraine/news/news/2015/12/fighting-tuberculosis-ukraine-develops-new-national-tb-programme-for-2017-2021</u>

consistency of response with the National Programmes on TB and HIV/AIDS and the Global Fund grants.

In 2018 UNDP began implementation of the Sustainable Health in Procurement Project (SHiPP) in collaboration with Health Care Without Harm (HCWH), an NGO funded by the Swedish International Development Agency, that aims to reduce the harm to people and the environment caused by the manufacture, use and disposal of medical products and by the implementation of health programmes. SHiPP is a four-year project aiming to promote sustainable procurement in the health sector, in the United Nations (UN) Agencies, and in key project countries through the reduction of the toxicity of chemicals and materials in health products, the reduction of greenhouse gases in the supply chain and the conservation of resources. UNDP led project countries include Argentina, Moldova, Ukraine, Tanzania, Vietnam, and Zambia, while Brazil, China, India and South Africa are led by HCWH.

As a part of a new four-year funding agreement with the EU, Support to the East of Ukraine – Recovery, Peacebuilding and Governance, which is implemented by UNDP through a partnership with UNFPA, FAO and UN Women, UNDP works with stakeholders in the crisis-affected regions of Ukraine to support decentralisation reforms and good governance, economic recovery and development of MSMEs, community security and social cohesion, as well as health reform promotion. As a part of the Health Component, the H&T Programme supports technically the RPP with the roll-out of health reforms by capacity building with local stakeholders in strategic planning, promoting transparency, integrity, anticorruption and best procurement practice, ensuring patient oversight and monitoring, health promotion, awareness raising, and behavioural change and support for primary health care reform at the local level in the East of Ukraine.

I.III. Project background

The Procurement Support Services to the Ministry of Health of Ukraine Project (MoH PSS Project) is the core and forms the largest element of the UNDP Health & Transparency Programme. The MoH PSS Project goals are aligned with the national priorities of the Ukrainian healthcare reform agenda and aim to strengthen the national healthcare procurement system and thus improve the effectiveness of diagnosis and treatment of patients in Ukraine. Within the scope of the Project, UNDP supports the operational performance of the Ministry of Health of Ukraine by providing cost-effective and timely medical procurement services. In the long term, UNDP aims to help the Ministry of Health to grow the professional capacity and procurement expertise of the assigned state-owned agency and gradually hand-over its functions to it (SoE MPU, officially established in October, 2018) as soon as it reaches the required capacity level to manage a fully functioning national procurement system. Such a system is expected to include effective supply chain management, with properly trained personnel and efficient management processes conforming to international standards, alongside the principles of integrity, transparency and accountability, to enable it to meet the healthcare needs of all Ukrainians.

The procurement of medicines and medical devices by international agencies was initially legally mandated until the end of March 2019 and then prolonged first until March 2020 and eventually until March 2022. It is important to understand how the procurement of medicines and medical products will be managed during the transition period between March 2020 and March 2022 and thereafter, and how UNDP can contribute to healthcare improvement initiatives. Mindful of this, UNDP strives to assess its MoH PSS Project performance in terms of its meeting initial plans,

project documents and cost-sharing agreements, as well as shape the future vision of its work in the health area.

Joint efforts by UNDP and the Ukrainian government in the area of medical procurement play an important role in the supply of medicines to strategic medical institutions and patients, thus the evaluation of UNDP's efficiency within MoH PSS Project targets to provide a better understanding of what has proved to work well and areas for improvement within the programme.

This assignment provides the Government of Ukraine, the UNDP Project team and country office, and key stakeholders with an overview of the Project's planned and achieved results, key metrics of Project's efficiency and assumptions on potential performance of the Project in the future. Based on the evaluation findings, the evaluation team has developed recommendations on the follow-up phase of the MoH PSS Project and on the development of a more consistent and result-orientated UNDP Health & Transparency Programme implementation approach.

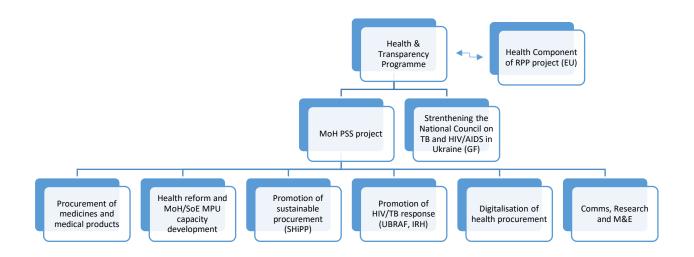
II. Objective, purpose and scope of the evaluation

The main **objective** of the assignment was to conduct a forward-looking evaluation of the Procurement Support Services to the MOH Project.

The overall **purpose** of the evaluation exercise was two-fold:

- 1. To assess the implementation of the MoH PSS Project, both its medical procurement component (within 5 disease areas where UNDP handled procurement in 2015-2018 budget years) and its development/programme component;
- 2. To provide recommendations on the future development of UNDP health activities in Ukraine.

The graph below outlines the structure of the UNDP Health & Transparency Programme and the place of the MoH PSS project and procurement of medicines and medical products therein.



The **scope of the assessment of medical procurement efficiency** covered five disease programmes. The disease programmes were selected jointly by the evaluation team and the UNDP Project team. The criteria for selection were:

- Priorities of the EU-Ukraine Association Agreement (Chapter 22 Public Health)
- Programme length and scope (preferably recurrent for 2015-2018)
- Coverage as part of public monitoring of medicine availability
- Budget

The final list of agreed disease programmes included:

- 1. Procurement of chemotherapeutic agents, radiopharmaceuticals and support drugs for treatment of cancer patients (Adult Cancer)
- 2. Procurement of medicines for treatment of tuberculosis (TB medicines)
- 3. Procurement of medicines for the provision of children with haemophilia A or B or von Willebrand disease (Childhood Haemophilia)
- 4. Procurement of medicines for patients with viral hepatitis B and C (Adult Hepatitis B and C)
- 5. Procurement of medicines for treatment of children with cystic fibrosis (Childhood Cystic Fibrosis)

The procurement assessment exercise was based on the outcomes of tenders conducted by the UNDP procurement team for the above disease programmes for the 2015-2018 budget years. All tenders falling within the scope of the assignment were considered by the evaluation team to have met UNDP procurement and quality assurance procedures. Tender results were not subject to challenge or reconsideration.

The scope of the forward-looking evaluation of the MoH PSS Project covered:

- 1. Comparison of planned and actual outputs of individual activities and evaluation of the actual outcomes to determine their contribution to the achievement of the Project's objectives;
- 2. Development of recommendations for the follow-up phase of the Project, the Health & Transparency Programme on the whole and the procurement component in particular, based on lessons learnt in key areas. The recommendations are expected to contribute to the development of the follow-up phase of the MoH PSS project and the consolidation of the UNDP Health & Transparency Programme in general.

The forward-looking evaluation assessed the Project's performance against the generally accepted OECD-DAC criteria: **relevance**, **effectiveness**, **efficiency**, **sustainability and impact**, in line with the TOR's questions, given in the Annexes (the **coherence** criterion was not covered since it was beyond the initial scope of work). Additionally, the evaluation considered the **future outlook** criterion which is not an OECD-DAC criterion but was included in the TOR. The evaluation specifically explored the issues of the Project's effectiveness, linkage with other UNDP initiatives stated above (including anti-corruption and climate change), and initial impact referring to the project documents and the current legislation.

Cross-cutting issues such as gender and human rights and other UNDP programme principles were given additional consideration in line with UNDP's evaluation guidelines in terms of programme component evaluation. The evaluation of the Project also covered its contribution to the achievement of the SDGs (particularly SDG 3 'Good health and wellbeing').

Finally, the evaluation proposes options for using UNDP expertise and approaches to reform the health sector and the system of public procurement in Ukraine for possible new interventions in this area.

III. Limitations of the evaluation

The evaluation team faced the following limitations while conducting the evaluation:

- Limited timeframe to collect data and conduct the evaluation. The number of working days to develop an evaluation methodology and the tools for evaluation, and to collect the data necessary to carry out the assessment constituted a challenge for the evaluation team. The designated time frame of the evaluation exercise lacked consistency with the complexity of the assignment in terms of consolidating, comparing and verifying the data from different sources.

Due to time limitations, the evaluation team did not perform site visits to the regions where UNDP implements some of its health interventions (sustainability/ gender/ human rights focused activities, FCTI, etc.).

- Partial availability of baseline data on price, quantity and delivery of medicines within evaluated disease programmes. Given the evaluation scope and number of procured items subject to analysis, the baseline data on prices, quantity and delivery of medicines procured in 2014 and during the 2015-2018 budget years were not fully available.

To be more specific, there is a lack of data on Ministry of Health centralised procurement for the 2014 budget year. The Ministry of Health website was relaunched and no data on public procurement of medicines, or orders for distribution of medicines to regions that could give specific price references have been kept from before the 2016 budget year. Thus, to compare data and to ensure their reliability, the evaluation team had to cross-check with third party sources and verify the information provided for analysis.

Another example is data on regional procurement in 2015, which are limited in their range due to low usage of the ProZorro platform at that time. The ProZorro platform was launched in 2015 but was not widely used by regional medical institutions until 2016 and therefore only very limited data on regional procurement were available.

In addition, there is a gap in procurement for Adult Cancer for the 2015 budget year as centralised procurement for this disease programme was managed by a different procurement agency. Consequently, the assignment team considered 2016 UNDP prices against 2014 MoH procurement as the first stage of price assessment and against 2016 ProZorro prices as the second stage, leaving the 2015 budget year procurement out of scope.

There was a similar gap for Adult Hepatitis B and C as UNDP did not procure for this programme throughout the 2015-2018 budget years in a row, as the programme was handled by a different procurement agency in the 2016 budget year.

Childhood Cystic Fibrosis did not exist as a separate disease programme until the 2016 budget year and medicines for this disease were procured as part of other disease programmes. Thus, this programme was analysed starting from 2016 budget year.

In addition to the above, the evaluation was limited by UNDP source procurement data available as of January 21, 2020 and did not consider procurement operations after that date (procurement for 2017-2018 budget year was not fully completed and was still ongoing at the time of evaluation).

Please, refer to the General approach to assessment, assumptions and baselines, and Evaluation calculation sections for more details on baseline data limitations.

- A limited number of disease programmes were used to estimate the efficiency of the whole programme. However, the scope of selected programmes and their share in the budget of overall medical procurement made the sampling representative for the evaluation.
- Limited availability of interviewees from some key stakeholders during the evaluation. Information planned to be obtained from key informant interviews might be incomplete due to the limited availability of interviewees given the assignment's timeframes.
- Insufficient evidence-based data to measure the future impact of the Project. Due to the designated timeframe of the assignment, it was difficult for the evaluation team to estimate Project impact from both a short- and long-term perspective, as precise impact can only be measured after project completion. Accordingly, the impact of the Project was evaluated by its outcomes and the extent to which the results achieved as of the time of the evaluation contributed to the Project's long-term goals.

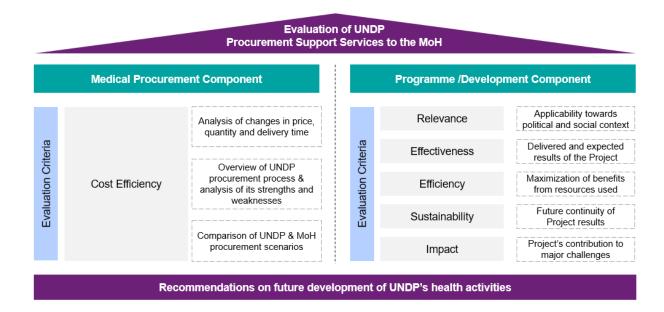
IV. Evaluation approach and methodology

The assignment was split into two streams:

- (i) Assessment of efficiency of medical procurement
- (ii) Evaluation of the programme component of the MoH PSS Project

The two streams had different evaluation criteria and required different approaches. When combined, they provided a comprehensive picture and allowed the development of tailored recommendations to UNDP on health-related activities.

The overall evaluation approach was as given below:



The evaluation team used a mix of quantitative and qualitative information sources. The data sources that were processed within both streams of the assignment included:

- Documents and procedures, giving a deeper overview of the MoH PSS Project, including but not limited to:
 - UNDP strategic documents related to the organisation's mission in Ukraine, project documents, annual work plans, M&E plans, cost-sharing agreements with the MoH, etc. covering the whole period of 2015 early 2020;
 - Standard operating procedures & quality assurance policies regulating medical procurement matters;
 - Third-party reports on medical procurement, relevant to the assessment.

Most of the documents were provided by UNDP following an information request from the evaluation team.

- *Publicly available data* on the Project components under evaluation. Use of public information helped the evaluation team to provide a more impartial view on project-related activities. In particular, open web sources were analysed in terms of media monitoring of the programme component.
- Interview responses from key stakeholders, including the UNDP Country Office, project management and staff, government officials (Ministry of Health), MoH designated logistics agents, international organisations, professional associations, patient organisations, and law firms. Openended questions were used to enable interviewees to express their views freely and raise issues they considered most important.

The **data collection methods** applied in the forward-looking evaluation were selected from a range presented in UNDP Guidelines and are explained below:

Primary data collection methods:

- Qualitative key informant interviews with key programme partners and stakeholders. Interviews with key stakeholders may be divided into two streams:
- Interviews with the relevant UNDP Country Office and the Project management and staff, the MoH to provide in-depth briefing on the interventions, their results, the context of the partnerships with different stakeholders and their vision for the future;
- Interviews with partners and beneficiaries. Partners and beneficiaries included:
 - a) Patients organisations and other civil society organisations and associations
 - b) Government institutions (including the MoH, state-owned logistic entities, State expert centre)
 - c) International development actors active in the field of intervention (EU Delegation to Ukraine, UNICEF, WHO, World Bank)

Please, refer to the Annexes for the list of stakeholders interviewed and interview questions.

Secondary data collection methods:

- Desk review of Project-related documentation and procedures. The review examined existing documentation containing qualitative and quantitative information on the Project's initial and final objectives, outputs and outcomes, as provided by UNDP. The preliminary range of documents included in the review covered but was not limited to Project documents, monitoring reports, financial documents, Project's board meeting minutes, cost-sharing agreements with the MoH, strategic agreements between UNDP and the MoH, UNDP and the Government of Ukraine, UNDP strategic documents in Ukraine, media screening reports and other public sources of information.
- Performance evaluation indicators developed by the evaluation team to assess procurement performance. The performance indicators were used to analyse data on medical procurement and assess procurement efficiency, considering quantity, price and delivery time of medicines procured within five disease programmes.

IV.I. Efficiency assessment of medical procurement

General approach to assessment, assumptions and baselines

Each of the selected disease programmes was analysed for changes in **price**, **quantity and delivery time** of procured items against comparison baselines. There were several baselines for comparison depending on the criterion analysed, as detailed further.

Prices were assessed against:

- MoH procurement for the 2014 budget year as a primary baseline
- · Prices for regional procurement in ProZorro in the 2016-2018 budget years
- UNDP prices year-on-year

Given the lack of data on Ministry of Health centralised procurement in the 2014 budget year, the following sources were used in order to obtain 2014 MoH procurement prices (sources are listed in priority order):

- (i) Orders for regional distribution of medicines and medical products procured for the 2014 budget published at <u>https://ligazakon.net/</u>
- (ii) Public tender announcements for the 2014-2015 calendar years, available at <u>https://ips.vdz.ua/</u> (this platform was used before centralised public procurement of medicines and medical products was outsourced to international organisations)
- (iii) The Ministry of Health's Register of Wholesale Prices for Medical Products at http://old.moz.gov.ua/docfiles/Reestr_lz_stanom_na_23.11.2017.pdf

The Register of Wholesale Prices for Medical Products is maintained by the Ministry of Health of Ukraine, in accordance with Cabinet of Ministers Resolution No. 240, On Reference Pricing for Medical Products and Medical Supplies Procured for State and Local Budgets, dated July 2, 2014 and the Ministry of Health of Ukraine Order No. 574, On Approval of the Regulation on the Register of Wholesale Prices for Medicines and Medical Products, the Procedure for Making Changes and the Form for the Declaration of Change in the Wholesale and Retail Price of Medicinal Products, dated August 18, 2014, and does not list prices for medicines and medical products procured by international organisations.

Prices for regional procurement in ProZorro were taken as a baseline starting from the 2016 budget year, because of the very low usage of the ProZorro platform for regional procurement during the period corresponding to UNDP procurement for the 2015 budget year.

Since the lists of items (INNs) procured under the assessed disease programmes were not fixed throughout the budget years 2015-2018 and were subject to modification, UNDP year-on-year prices were assessed only for items procured in the maximum possible number of subsequent budget years.

To assess the efficiency of how the budget for each disease programme was used, the evaluation team analysed actual spending against budgeted amounts. The evaluation team compared the final price per item versus the budgeted price, calculating actual spending for the budgeted quantities and comparing it to the expected, i.e. budgeted, spend.

Quantities were assessed against budgeted quantity, i.e. actual quantity procured against that initially budgeted where applicable.

Delivery time was assessed against contracted lead times, i.e. supplier's commitment on delivery lead time against actual delivery lead time.

However, the delivery timings did not consider delivery to end recipients. Once medicines arrived at the MoH warehouse their allocation and further distribution to regional hospitals were managed by the MoH and were beyond the responsibility of UNDP as a procurement agent.

The base currency for the assessment was the United States Dollar. As the Ukrainian national currency proved unstable during the analysed period, the assignment took the arithmetic average of the interbank US dollar buying & selling rate published on the website <u>https://minfin.com.ua</u> as a reference for converting prices from Ukrainian hryvnia to US dollars.

UNDP contract prices were provided in the base currency. UNDP prices considered as a part of the price comparison included a UNDP fee for managing the procurement process and fees paid to logistics agents, and were calculated as follows:

For cases where several batches of the same item (INN) were procured as part of the main procurement at different prices, the UNDP price was calculated as a weighted average price of the procured batches.

In addition, in cases where identical INNs were listed in several subsections of the final INN list for a disease programme placed in the Terms of Reference, they were considered as one INN with the price calculated as a weighted average.

2014 MoH prices were calculated as follows:

MoH price, USD =
$$\frac{\text{MoH price, UAH (without VAT)}}{\text{USD/UAH rate }*}$$

* monthly average of interbank buying & selling USD/UAH rate as of MoH Distribution Order / contract signing date / price registration in the Register of Wholesale Prices for Medical Products

MoH regional procurement prices in ProZorro were calculated as follows:

 $ProZorro price, USD = \frac{ProZorro price, UAH (without VAT)}{USD/UAH rate *}$

* monthly average of interbank buying & selling USD/UAH rate as of contract signing date

* in the event that there was more than one reference price in ProZorro, a weighted average price in USD was calculated for further comparison

Prices for medicines budgeted by the Ministry of Health were calculated as follows:

MoH budgeted price, USD = $\frac{\text{MoH budgeted price, UAH (without VAT)}}{\text{USD/UAH rate as of money transfer date *}}$

* USD/UAH rate as of money transfer date is the USD/UAH rate that was applied to convert the allocated budget for a specific disease programme from UAH into USD and transfer the resulting amount in USD to UNDP. In case there were several money transfers average weighted exchange rate was calculated.

In order to ensure correct like-to-like comparison, the assessment was undertaken for items having the same:

- international nonproprietary name (INN)
- dosage / strength
- pharmaceutical presentation
- unit of measurement

It should be stressed that the assignment neither analysed any brand names procured for specific INNs by UNDP or other procurement agents, (i.e. the MoH and regional hospitals), or their efficacy, nor did it compare countries of origin or manufacturers or analyse the split between manufacturers and distributors.

In the event that prices for equivalent medicines were specified for different units of measurement in terms of MoH procurement, regional procurement in ProZorro or the Wholesale Register of Prices for Medical Products, all prices were converted into a price for the same unit of measurement for the sake of like-to-like comparison.

In order to exclude the impact of price fluctuations in global raw material markets, and changes to the pricing and marketing policies of manufacturers and distributors, the reference period for regional procurement through ProZorro was three months - starting from a month before the UNDP tender closing date (the signing date of the cost estimate, in the case of a long-term agreement with a specific supplier) and finishing a month after the tender closing date. For example, if the tender closing date was June 18, 2017, a ProZorro check was made for the same item (by INN), for the period, May – July 2017. In the absence of comparable procurement within the specified three-month period, the reference period was extended first to six months and, if necessary, to twelve.

The primary search for reference procurement prices in ProZorro was made for completed open biddings and open biddings published in English, for the relevant reference period. However, other bidding procedures (including but not limited to below-threshold procurement, negotiation procedure etc.) were also taken into account for items with limited competition on the market (e.g. where there were no results for open biddings or cancellation of bidding results because fewer than two bids were received).

A separate part of the assessment focused on **analysing the overall UNDP procurement process with the purpose of identifying potential strengths and weaknesses.**

The aspects of the procurement process that were given extra attention include:

- bidding process
- tender evaluation
- ensuring value-for-money
- quality assurance
- registration of new items
- main contract terms and conditions
- contract implementation management

Considering the planned handover of medical procurement to the SoE MPU, the evaluation team also compared UNDP procurement processes with those declared to have been implemented by the SoE MPU.

Efficiency calculation

Procurement efficiency was assessed both separately for each disease programme and for all programmes combined.

The primary comparison was made for each item procured by UNDP for the 2015 budget year and the MoH price for 2014 by dividing the price difference (the MoH price minus the UNDP price) by the MoH price (the MoH price, or the Register of Wholesale Prices in the absence of information on MoH prices).

For Adult Cancer, the primary comparison was made for each item procured by UNDP for the 2016 budget year and the MoH price for 2014, as procurement for this disease programme was only handed over to UNDP from the 2016 budget year.

Thus, the **relative price change** for each item was obtained as a percentage, with a negative value meaning an increase in price:

Relative price change = $\frac{\text{MoH Price} - \text{UNDP Price}}{\text{MoH Price}} * 100\%$

To get the **absolute sum of savings / increased spending** for each item, the quantity of medicines procured in the 2015 budget was multiplied by the difference between the MoH price and the UNDP price, with a negative value meaning increased spending:

Absolute sum of saving = quantity of medicines * (MoH Price – UNDP Price)

To calculate the **absolute saving amount / increased spending per disease programme**, the sums of savings for each item were added:

Absolute programme savings = $\sum_{i=1}^{n}$ absolute sum of savings by i position

where n = number of items in the disease programme

Accordingly, in order to calculate overall efficiency, the savings / overspending were added for all disease programmes.

To calculate the **average percentage of savings / increased spending** for a specific disease programme, the absolute amount of savings / increased spending by programme was divided by the total sum of procurement at the programme's MoH prices, with a resulting negative value meaning a price increase:

Average % of savings = $\frac{\text{absolute sum of savings by programme}}{\text{total sum of purchase at the MoH price}} * 100\%$

In order to assess total relative efficiency, the absolute savings for all programmes were divided by the total sum of all procurement at the MoH prices i.e. the prices of the Ministry of Health according to Distribution Orders and tender announcements or the Register of Wholesale Prices in the absence of information on MoH prices.

In addition, in order to assess the efficiency with which the budget for each disease programme was used, the assignment analysed actual spending against budgeted amounts. The assessment used final UNDP price per item to calculate actual spending for the budgeted quantities and compared it to the expected, (i.e. budgeted), programme spend:

Absolute sum of saving = programme budget – quantity of medicines * UNDP price

where quantity means budgeted quantity defined in the Terms of Reference

Meanwhile, the average percentage of savings for a specific disease programme against budget was calculated by dividing the absolute amount of savings by programme budget:

Average % of savings = $\frac{\text{absolute sum of savings by programme}}{\text{programme budget}} * 100\%$

The same approach and sequence of calculations was applied to calculating UNDP procurement efficiency in terms of **price comparison with regional procurement in ProZorro in the 2016-2018 budget years**, with the only difference being that the base price was the price of the winning bid in ProZorro fixed in the contract signed with the winning bidder (please, refer to the General approach to assessment, assumptions and baselines section for more details on the ProZorro reference prices).

The price comparison with regional procurement in ProZorro was primarily focused on analysing whether centralised UNDP procurement was more efficient than regional procurement and considered relative price change between UNDP procurement and regional procurement in ProZorro as a percentage, calculated by dividing the price difference (the ProZorro price minus the UNDP price) by the ProZorro price, with a negative value meaning UNDP prices were higher:

Relative price change =
$$\frac{\text{ProZorro Price} - \text{UNDP Price}}{\text{ProZorro Price}} * 100\%$$

Another approach necessary to assess **how efficiently the allocated budget was used in each disease programme,** compared the budgeted price per item according to the Terms of Reference provided as an Annex to the cost-sharing Agreement between the MoH and UNDP for a specific budget year with the actual UNDP price. Thus, the budgeted price according to the Terms of Reference (MoH TOR price) was used as a base price for the same sequence of efficiency calculations as suggested above:

Relative price change =
$$\frac{\text{MoH budgeted price} - \text{UNDP price}}{\text{MoH budgeted price}} * 100\%$$

One further indicator used to analyse changes in price was year-on-year UNDP price change that was calculated by dividing prices in n year by prices in n-1 year:

Relative price change =
$$(1 - \frac{\text{UNDP price in year n}}{\text{UNDP price in year n} - 1}) * 100\%$$

Relative y-o-y price change for a specific disease programme was calculated as an arithmetic average of the relative price change of all items procured within a disease programme and included in the scope of the comparison.

Procurement efficiency in terms of quantity was calculated as a percentage resulting from the difference between actual quantity procured and budgeted quantity divided by budgeted quantity:

$Quantity change = \frac{actual quantity procured by UNDP - budgeted quantity}{budgeted quantity} * 100\%$

where actual quantity procured means the sum of main and additional procurement quantities and budgeted quantity implies initially budgeted quantity, i.e. main procurement

However, it should be noted that quantity change is not an absolute measure of UNDP procurement efficiency as the MoH decides how to allocate savings made against the budget and for which items additional quantities may be procured.

The assessment also analysed whether additional procurement had improved the overall disease programme coverage and whether actual procured quantity helped near 100% need.

Procurement efficiency in terms of delivery lead time was assessed by noting changes in actual delivery lead times compared to those contracted and was calculated as an absolute value in days, obtained as follows:

Delivery lead time change = actual delivery date – contracted delivery date

In addition, the assignment determined the percentage of deliveries for each disease programme that were delayed. This value was calculated by dividing the number of delayed deliveries by the total number of deliveries per programme (all deliveries for each item were taken into account where relevant):

% of delayed deliveries = $\frac{\text{number of delayed deliveries per programme}}{\text{total number of deliveries per programme}} * 100\%$

The percentage of total delivery delays was calculated by dividing the total number of delayed deliveries under disease programmes assessed by the total number of deliveries for these disease programmes:

% of delayed deliveries $=\frac{\text{total number of delayed deliveries}}{\text{total number of deliveries}} * 100\%$

IV.II. Evaluation of the development/programme component of the MoH PSS Project

The health interventions of UNDP were assessed by specific OECD-DAC evaluation criteria. Each criterion contained specific tasks and areas, which were reviewed during the evaluation process.

Relevance

The relevance of UNDP's health interventions to Ukrainian society and to the Government's needs and priorities in 2015-2019 was analysed in terms of:

- Purpose and scope of UNDP's health interventions in Ukraine in the period 2015-2019, specifically the MoH PSS Project and other interlinked UNDP initiatives (e.g. SHiPP, UBRAF);
- Ukrainian laws, regulations, government policies and strategies in the healthcare system and the specific needs and priorities in 2015-2019;
- Vulnerable groups (HIV, TB, orphan diseases, autism); gender and human rights issues;
- How well UNDP's health interventions were aligned with Ukrainian laws, regulations, government policies and strategies, SDGs, UNDP's Strategic Plan and the UNDP/UNDAF Country Programme strategy;
- The extent of interventions, their impact, challenges and lessons learnt, areas for development.

Tools applied in the analysis:

- Review of UNDP methodology documents, M&E and evaluation guidelines;
- Desktop review of the project related core documentation, public procurement legislation, regulations, national health reform policy documents, etc.;
- Interviews with relevant UNDP Country Office and the Project's management and staff and with the MoH and other national and sub-regional authorities dealing with the Project activities;
- Interviews with partners and beneficiaries: (a) patients organisations and other civil society organisations and associations; (b) government institutions (MoH) and state-owned logistic entities (c) international organisations (EU Delegation to Ukraine, UNICEF, WHO, World Bank) and businesses.

Effectiveness

This criterion required the assessment of the overall performance of the MoH PSS Project, focusing on key issues and constraints that impacted upon the achievement of the Project's objectives.

Areas that were assessed:

- The extent to which the MoH PSS Project has achieved its objectives as set forth in the project documents/cost-sharing agreements, strategies, objectives and indicators and consideration of key issues and constraints that affected the achievement of the project objectives;
- Achievements beyond the logical frameworks, including contribution to new legislation on public procurement and expected improvements in terms of delivery time and cost reduction, as well as quality improvement of procured medicines, vaccines and medical products;
- Lessons learnt, areas where UNDP could have implemented the project more effectively (from a methodology and/or activity, resource usage point of view);
- Stakeholders' involvement in project implementation;
- Progress with capacity building of the SoE MPU;
- Compliance with environmental and social sustainability policies and practices. Achievement of goals, contribution to the development of a more sustainable health sector.

Tools applied in the analysis:

- Review of UNDP methodology documents, M&E and evaluation guidelines;
- Desk review of project related core documents;
- Legislation and regulation review;

 Interviews with relevant UNDP Country Office and the Project's management and staff and other stakeholders (where appropriate).

Efficiency

The efficiency assessment considered to what extent the Project's outputs were efficient with respect to cost and timeliness:

- The extent to which the Project was cost-effective, including changes in price, quantity and delivery lead times for the procured medicines and medical products;
- Comparison of the cost of medicines and medical products procured by UNDP with the same items procured by the MoH and regional entities;
- Resource allocation (funds, human resources, time, expertise, etc.) and its alignment with the relevant outputs and outcomes;
- Results achieved (outputs and outcomes) against the expected timeframe, main reasons for delays and their impact on project implementation;
- Overview of the efficiency of the project's management, coordination and controlling functions.

Tools applied in the analysis:

- Review of UNDP methodology documents, M&E and evaluation guidelines;
- Desk review of project related core documents;
- Legislative and regulatory review;
- Interviews with relevant UNDP Country Office and the Project's management and staff and with other stakeholders (where appropriate).

Sustainability

The overview of Project's sustainability included:

- Analysis of the impact and outcomes of the Project that produce sustainable results;
- Assessment of public/stakeholder awareness in support of the long-term objectives of the Project;
- Analysis of the issues and constraints to the Project's sustainability, impact of health reform and the changes in the political/economic environment;
- Estimate of the likelihood of the Project's extension, scaling-up or replication and its future contribution to health reform and sustainable public procurement after the end of UNDP interventions;
- Analysis of whether UNDP had defined the platforms and communication networks which had the highest potential for further scaling up and/or replication.

Tools applied in the analysis:

- Review of UNDP methodology documents, M&E and evaluation guidelines;
- Desk review of project related core documents;
- Legislation and regulation review;
- Interviews with relevant UNDP Country Office and the Project's management and staff and with other stakeholders (where appropriate).

Impact

Analysis of the Project's contribution to long-term changes for the national health care procurement system covered:

- Impact of the Project on the institutional national health care public procurement system;
- Impact of the Project on the effectiveness of diagnosis and treatment of patients in Ukraine (change in behaviour and practices);
- Impact on corruption risks in the area of public procurement;
- Contribution to the effective response to HIV/TB and other health-related vulnerable groups;
- Global and regional impact of the Project, replication of the Ukrainian MoH PSS Project in other countries.

Tools applied for the analysis:

- Review of UNDP methodology documents, M&E and evaluation guidelines;
- Desk review of project related core documents;
- Legislative and regulatory review;
- Interviews with relevant UNDP Country Office and the Project's management and staff and with other stakeholders (where appropriate);
- Review of social media reports.

Future outlook on UNDP health activities

The analysis of possible ways to develop the programme in future was based on:

- Definition of actions to be taken by UNDP to ensure the sustainability of procurement;
- Overview of the exit strategies, new development actions;
- Overview of future options for UNDP to support the reform of the public health system and health procurement in Ukraine;
- Listing of priorities and focus areas for future interventions;
- Capacity assessment of UNDP's partners in the follow-up period;
- Consideration of new indicators to assess the progress of healthcare interventions.

V. Evaluation findings, lessons learnt and recommendations

V.I. Procurement efficiency overview

An assessment of procurement efficiency was made for five disease programmes:

- 1. Procurement of chemotherapeutic agents, radiopharmaceuticals and support drugs for treatment of cancer patients (Adult Cancer)
- 2. Procurement of medicines for treatment of tuberculosis (TB medicines)
- 3. Procurement of medicines for the provision of children with haemophilia A or B or von Willebrand disease (Childhood Haemophilia)

- Procurement of medicines for patients with viral hepatitis B and C (Adult Hepatitis B and C)
- 5. Procurement of medicines for treatment of children with cystic fibrosis (Childhood Cystic Fibrosis).

The tables below provide more detail on the procurement scope in terms of the number of items procured (INNs) and the value of programme budgets, by budget years.

The total number of items increased each year reaching 180 INNs in the 2018 budget year. Programme budgets also increased annually with the total value in 2018 (USD 91.3 million) more than four times higher than in 2015. The Adult Cancer and TB medicine programmes had the largest number of items and the highest budgets which grew annually.

| Budget year / | Number of INNs* | | | | | |
|---------------------------|-----------------|------|------|------|--|--|
| Disease programme | 2015 | 2016 | 2017 | 2018 | | |
| Adult Cancer | - | 94 | 101 | 106 | | |
| TB medicines | 19 | 28 | 33 | 40 | | |
| Childhood Haemophilia | 15 | 15 | 18 | 19 | | |
| Adult Hepatitis B and C | 14 | - | 10 | 10 | | |
| Childhood Cystic Fibrosis | - | 3 | 5 | 5 | | |
| TOTAL | 48 | 140 | 167 | 180 | | |

* Number of items in line with the Terms of Reference to cost-sharing agreements between UNDP and MoH

| Budget year / | Programme budgets, USD | | | | | | |
|---------------------------|------------------------|---------------|---------------|---------------|--|--|--|
| Disease programme | 2015 | 2016 | 2017 | 2018 | | | |
| Adult Cancer | - | 15,516,440.01 | 33,710,890.36 | 58,758,515.40 | | | |
| TB medicines | 9,017,693.70 | 8,027,128.39 | 11,845,618.22 | 16,172,081.51 | | | |
| Children Haemophilia | 7,310,450.00 | 6,443,435.22 | 10,459,508.75 | 9,176,125.34 | | | |
| Adult Hepatitis B and C | 5,571,277.76 | - | 4,867,895.81 | 4,898,843.77 | | | |
| Childhood Cystic Fibrosis | - | 1,259,386.48 | 2,449,203.57 | 2,341,859.41 | | | |
| TOTAL | 21,899,421.46 | 31,246,390.10 | 63,333,116.71 | 91,347,425.43 | | | |

Procurement efficiency was assessed against three performance indicators. They are:

- changes in price
- changes in quantity
- changes in delivery timings

Changes in price

Changes in price were analysed in line with the following approach:

| UNDP procurement in the 2015 budget year: Relative price change per item and average price change by disease programmes against 2014 MoH prices Savings in value against 2014 MoH prices Actual savings against 2015 programme budgets | |
|---|--|
| 2 UNDP procurement in the 2016-2018 budget years against regional procurement using ProZorro: | |
| - Relative price change per item and average price change by disease programmes | |
| - Savings in value against ProZorro prices by budget years and disease programmes | |
| 3 UNDP procurement in the 2016-2018 budget years against MoH programme budgets: | |
| - Actual savings against programme budgets | |
| - Average price change against budgeted prices (hereinafter MoH TOR prices) | |
| 4 Year-on-year change of UNDP prices: | |
| - Average year-on-year price change by disease programmes over the 2016-2018 budget years | |

The primary baseline for analysing price change in the 2015 budget year was defined as 2014 MoH prices i.e. prices at which Ministry of Health procured medicines and medical devices in the 2014 budget year.

The following sources were used to obtain 2014 MoH reference prices (in priority order): orders for distribution of procured medicines to the regions, public tender website and wholesale register (please, refer to the General approach to assessment, assumptions and baselines section for more details on sources). If several reference prices for one item were available, a price from a priority source was used.

The resulting reference price coverage is presented in the table below:

| Disease | 2015 | 2014 references | | | 2014 | Coverage | Coverage by |
|--------------------------|---------------|------------------------|-----------------------------|-----------------------|---------------------|-------------------------|------------------------|
| programme* | TOTAL INNs | Distribution orders | Public tender website | Wholesale register | TOTAL references | by number of INNs, % | programme budget, % |
| Adult Hepatitis | 8** | 7 | - | - | 7 | 88% | 54% |
| Childhood Haemophilia | 13 | 12 | - | - | 12 | 92% | 99.9% |

| TB medicines | 19 | 10 | 4 | 3 | 17 | 90% | 92% |
|-----------------|----|----|----|----|----|-----|-----|
| Adult Cancer*** | 83 | 2 | 60 | 61 | 61 | 74% | 85% |

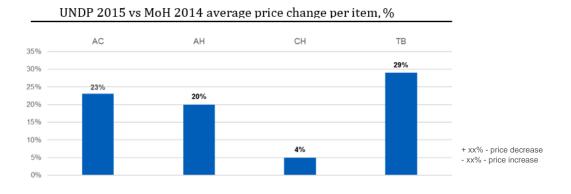
Childhood Cystic Fibrosis is not considered as it was only included in centralised procurement in the 2016 budget year
 Ribavirin excluded due to the unrealistic price declared by the MoH in 2014

*** For Adult Cancer, UNDP prices for the 2016 budget year are taken for comparison as UNDP did not procure for this disease programme in the 2015 budget year

There were several iterations of procurement in 2015 budget year with a considerable gap in time between them (up to 12 months), so UNDP prices for the main procurement³, i.e. procurement of the quantities initially budgeted for, were used for comparison. In cases when several batches of the same INN were procured as part of the main procurement at different prices, the UNDP price was calculated as the weighted average price of the procured batches.

The comparison shows that in 2015 UNPD was already procuring products more costefficiently than MoH had in the 2014 budget year and had delivered savings in average price per item and in value against the Last Purchasing Price (LPP), and against the allocated 2015 programme budgets.

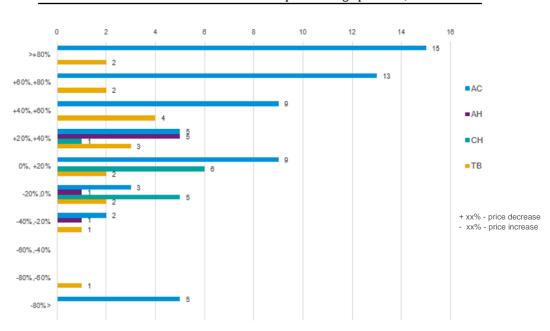
The most outstanding result in terms of average price change per item was delivered for TB medicines where savings reached an average of 29%. It is followed by Adult Cancer and Adult Hepatitis where savings in average price per item were still significant and made up 23% and 20% respectively. Average price decrease per item was the lowest for Childhood Haemophilia and made up 4%⁴.



However, a closer look at relative price change per item shows variation within disease programmes. While around one third of the 97 INNs selected for comparison were procured at prices of up to 40% lower than 2014 MoH prices, nearly one fifth of all items were procured at prices higher than the 2014 baseline. At the same time some of the items were procured at prices up to 80% either lower, or higher than those of the MoH. For more details on relative price change per INN, please, refer to the Annexes.

³ Main procurement implies procurement of main quantity, which was initially quoted in the Terms of Reference to costsharing agreements between UNDP and MoH

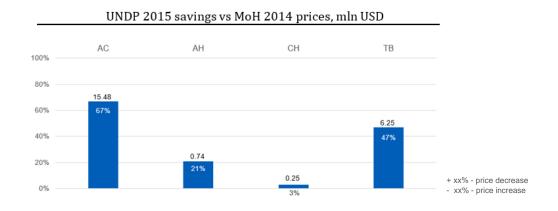
⁴ For ease of presentation, the following abbreviations standing for disease programmes will be used hereafter in graphs: AC - for Adult Cancer, TB - for Tuberculosis medicines, CH - for Childhood Haemophilia, AH - for Adult Hepatitis B and C, and CCF - for Childhood Cystic Fibrosis



UNDP 2015 vs MoH 2014 relative price change per item,%

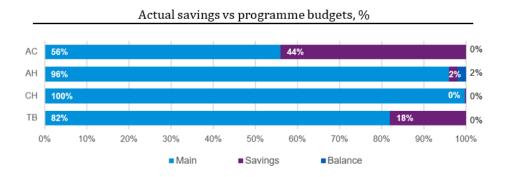
In the meantime, savings in value against 2014 MoH prices i.e. the Last Purchasing Price (LPP)⁵, delivered by UNDP in the 2015 budget year show a different split by disease programmes than average price change.

Total savings against 2014 MoH prices were USD 22.72 million or 48%, out of which the highest savings both in value and in percentage were delivered for Adult Cancer amounting to USD 15.48 million or 67%. Savings for TB medicines were USD 6.25 million or 47% and for Adult Hepatitis USD 741,870 or 21%. Childhood Haemophilia was the disease programme with the lowest savings in value and percentage – USD 251,590 or 3%.



⁵ Savings against LPP show savings against the amount that could have been spent for procuring the same quantity, i.e. main procurement, as procured in the 2015 budget year at 2014 MoH prices

Savings actually delivered against 2015 programme budgets, i.e. money left after the main quantity was procured⁶ that was then spent procuring additional quantities, were lower than savings against LPP making up USD 8.6 million. However, savings by disease programme are spread across the programmes in a similar way to savings against LLP, i.e. USD 14,200 or 0.19% for Childhood Haemophilia, 2% or USD 105,950 for Adult Hepatitis, 18% or USD 1.7 million for TB medicines and 44% or USD 6.82 million for Adult Cancer⁷.



As a next step UNDP prices in the 2016-2018 budget years were assessed against relevant prices from ProZorro.

| Budget year / | 2016 | | 20 | 017 | 2018 | |
|---------------------------|------|----------|------|----------|------|----------|
| Disease programme | UNDP | ProZorro | UNDP | ProZorro | UNDP | ProZorro |
| Adult Cancer | 83 | 68 | 87 | 69 | 89 | 67 |
| Adult Hepatitis | - | - | 10 | 8 | 10 | 8 |
| Childhood Cystic Fibrosis | 3 | 3 | 4 | 4 | 4 | 4 |
| Childhood Haemophilia | 13 | 11 | 15 | 14 | 16 | 7 |
| TB medicines | 28 | 19 | 33 | 22 | 33 | 17 |
| ProZorro coverage* | 80% | | 79% | | 68% | |

Only those INNs which were identified in ProZorro were compared⁸.

* by total number of INNs per budget year

As there were several rounds of procurement in each of the budget years 2016-2018, as in the budget year 2015, given the considerable gap in time between procurements, UNDP prices for the main procurement i.e. the procurement of the quantities initially budgeted, were used for the comparison. In cases when several batches of the same INN in the main procurement were procured at different prices, the UNDP price was calculated as the weighted average price of the batches procured. If identical INNs with the same presentation and dosage appeared in more

⁶ Main quantity is the quantity assigned in the Terms of Reference for a specific disease programme, which was then quoted in the Invitation to Bid. After these quantities for all INNs were procured, budget savings could be used to procure additional quantities

⁷ The balance is the amount that was unspent for additional procurement and was reported to the MoH according to UNDP records

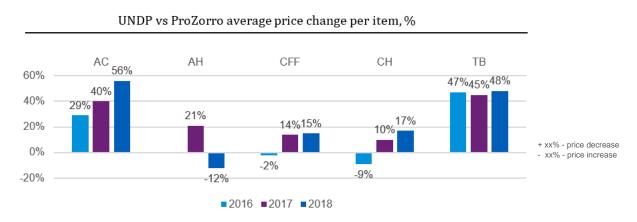
⁸ For more details on the approach applied to searching ProZorro references, please, refer to the General approach to assessment, assumptions and baselines section

than one subsection of the final INN list in the Terms of Reference for a specific disease programme, they were considered as one INN and the price was calculated as a weighted average.

In general, UNDP procured more cost-efficiently in the 2016-2018 budget years, compared to regional procurement through ProZorro, and delivered better performance almost every budget year in terms of average price change by disease programme, and savings against ProZorro prices in value for most of the disease programmes assessed.

More specifically, the average saving in price per item for Adult Cancer was 29% in the 2016 budget year, rising to 56% in the 2018 budget year. In the meantime, the average price decrease for TB medicines remained almost at the same level throughout the 2016-2018 budget years with an average value of around 47% over the three years.

The average saving in price per item for Childhood Cystic Fibrosis and Childhood Haemophilia, however, was lower compared to Adult Cancer and TB medicines and varied across below 20% against ProZorro in 2017 and 2018 having improved from negative values in 2016. The performance against ProZorro was the least consistent for Adult Hepatitis as a 21% average saving in price against ProZorro in the 2017 budget year was followed by average price per item 12% higher than in ProZorro in 2018.



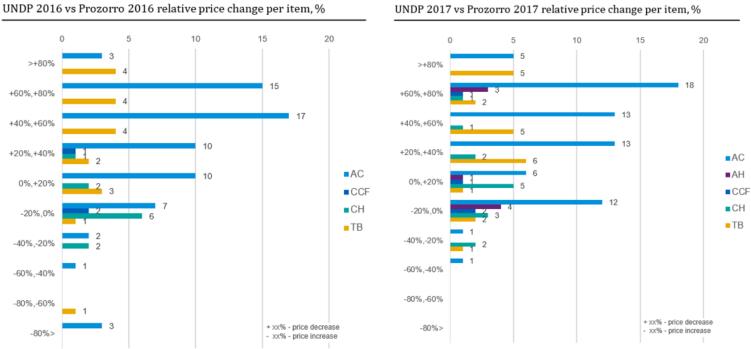
A closer look at relative price change per item against Prozorro for each budget year shows that most items were procured at prices lower than in ProZorro (please, refer to the graphs below).

Adult Cancer was the disease programme with the biggest number of INNs and the number of items procured at better prices than through ProZorro was correspondingly the largest. This programme saw the biggest savings in price per item against ProZorro, varying between below 20% and in some cases more than 80%, with the biggest number of items falling within the ranges of 40%-60% and 60%-80%.

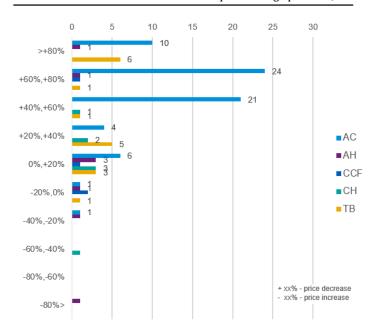
Out of all items procured for five disease programmes in the 2016 budget year 21 item (more than for any other range) fell into the 40%-60% price saving range. In 2017 and 2018 the biggest number of items, i.e. 25 and 27 items respectively, fell into the 60%-80% price saving range.

Nonetheless, there were items where prices for UNDP procurement were higher than those on ProZorro. For example, the graph for the 2016 budget year shows that 8 out of 11 assessed items within the Childhood Haemophilia programme were procured at a higher price per item than in

ProZorro. In total, in the 2017 budget year 28 out of the 117 items compared were procured at prices higher than in Prozorro, 23 of those falling within the price increase range up to 20%. In the 2018 budget year, only 9 items were procured at a price per item higher than available through ProZorro, with 5 of them at price per item up to 20% higher.



UNDP 2018 vs Prozorro 2018 relative price change per item, %

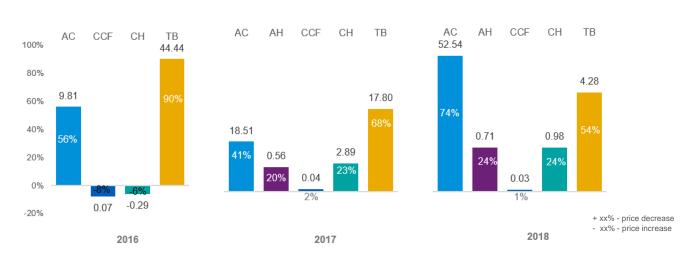


UNDP 2017 vs Prozorro 2017 relative price change per item, %

In addition to relative price change against ProZorro, the team analysed savings / increased spending against ProZorro for each budget year in value. Calculations were based on quantities in the main procurement and show the savings or increased spending by UNDP compared to a situation when the same quantities would have been procured at ProZorro prices.

Although spending on Childhood Cystic Fibrosis and Childhood Haemophilia was slightly higher compared to ProZorro in the 2016 budget year, savings across all programmes against ProZorro were USD 54.89 million. In 2017 the saving was USD 39.8 million and in 2018, USD 58.54 million.

In the meantime, relative savings varied significantly throughout the 2016-2018 budget years. The lowest values were observed for Childhood Cystic Fibrosis as they did not exceed 2%. Relative savings remained close to 20% for Adult Hepatitis and Childhood Haemophilia in 2017 and 2018 and reached far above 50% for Adult Cancer and TB medicines almost year-on-year.



Savings/increased spending vs Prozorro, mln USD

Herewith, it should be noted that comparison against ProZorro prices may be partially misleading, in particular in cases of negative price change, i.e. relative price increase against ProZorro, and increased spending accordingly as the ProZorro platform does not provide confirmation of actual delivery at the contracted price, the final quantity delivered or the actual shelf life and quality standards of the products delivered. It also does not provide details on any special price conditions applied, if any, for example for trial batches.

Savings against ProZorro may also give a misleading impression, as centralized procurement is usually undertaken for bigger quantities than regional procurement, and hence one would expect lower prices. Procurement through Prozorro could reasonably have been expected to deliver lower prices had the procurement been for bigger quantities.

The next step in assessing UNDP procurement efficiency in terms of changes in price is calculation of actual savings against allocated disease programme budgets and relative price change against budgeted prices, i.e. MoH TOR prices⁹.

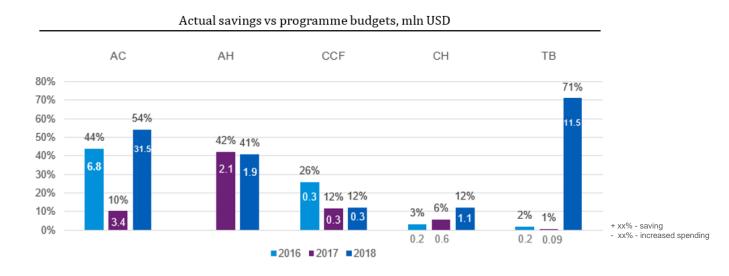
⁹ The budgeted price or MoH TOR price was the expected price per item budgeted by MoH for a specific INN and provided in the Terms of Reference (TOR) for a relevant disease programme. The MoH TOR price is the price based on which quantities to be procured, and the disease programme budgets were assigned

Actual savings against programme budgets were calculated as a difference between allocated programme budget and value of the main quantity¹⁰ procured for each INN.

UNDP delivered savings against budget for each disease programme assessed, in each budget year, procuring more efficiently than forecast by the MoH.

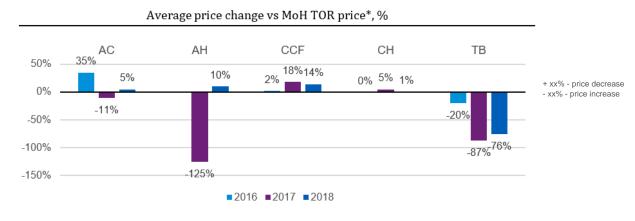
Total savings against total budgeted spend were USD 7.5 million or 24% in the 2016 budget year, USD 6.5 million or 10 % in the 2017 budget year and USD 46.3 million or 51 % in the 2018 budget year.

Savings delivered in 2018 proved to be the highest, not only in absolute value but also as a percent against individual disease programme budgets reaching 71% for TB medicines, 54% for Adult Cancer, 41% for Adult Hepatitis and 12% for Child Cystic Fibrosis and Childhood Haemophilia.



Average price change against the MoH TOR price per disease programme varied considerably with a price increase of 125% for the Adult Hepatitis programme in the 2017 budget year, and 87% and 76% for TB medicines in the 2017 and 2018 budget years respectively.

¹⁰ Main quantity is the quantity assigned in the Terms of Reference for a specific disease programme, which was then quoted in the Invitation to Bid. After these quantities for all INNs were procured, budget savings could be used to procure additional quantities



* No comparison is made against 2015 MoH TOR prices as they ere not defined for the 2015 budget year

However, these figures are not consistent with actual savings against budget, suggesting that MoH TOR prices can be both under- and overstated. Taking Adult Hepatitis in the 2017 budget year as an example¹¹, one will see that most items were procured at prices lower than the MoH TOR prices and for some of those the price decrease was more than 60%. However, three items were procured at prices significantly higher than the MoH TOR price. The budgeted price for one of the items, Ribavirin, was almost ten times lower than the market price, driving a negative value of the average price change, i.e. price increase, for the whole disease programme.

More details on relative price increases (decreases) against MoH TOR prices by disease programmes and budget years are available in the Annexes.

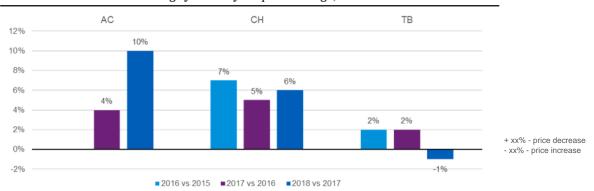
The assessment of savings against allocated budgets and UNDP prices against the MoH TOR prices suggest that there is significant room for improvement in price forecasting and quantification at the MoH.

The last step of the procurement efficiency assessment in terms of price change is **year-on-year UNDP price change**. For this comparison, only items procured for the maximum possible number of subsequent budget years were included for each programme.

| Budget year / | Numbe | er of items pro | Used for | | |
|---------------------------|-------|-----------------|----------|------|------------------|
| Disease programme | 2015 | 2016 | 2017 | 2018 | y-o-y comparison |
| Adult Cancer | - | 83 | 87 | 89 | 83 |
| Adult Hepatitis | 9 | - | 10 | 10 | 10 |
| Childhood Cystic Fibrosis | - | 3 | 4 | 4 | 4 |
| Childhood Haemophilia | 13 | 13 | 16 | 16 | 12 |
| TB medicines | 19 | 28 | 33 | 33 | 12 |

Year-on-year price comparison shows that UNDP delivered average year-on-year price reductions for each disease programme under assessment, except for Tuberculosis in 2018, where average annual price increase made up 1%.

¹¹ Please, refer to Annex 17 for more details on MoH TOR prices, actual UNDP prices and actual savings / increased spending by item for Adult Hepatitis 2017



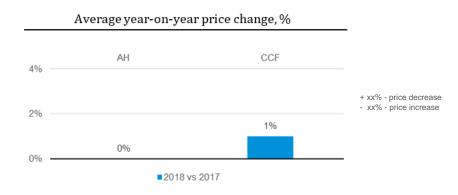
Average year-on-year price change, %

However, whilst there was an average price decrease across disease programmes year-on-year, this does not imply that UNDP prices improved for each item. A closer look at price changes per item¹² shows that there were items in most disease programme prices for which increased y.o.y. or were higher for one or more of the years.

Although not the subject of the present assignment, the evaluation team assumes that these price increases were driven by the market or could be justified by changes to treatment protocols or quality assurance requirements and have been properly managed by UNDP as a procurement agent.

On the other hand, there are cases where price decreases per item reached more than 50%-60%. This was most frequent for Adult Cancer with some of such examples as Capecitabine and Trastuzumab, prices for which decreased by around 70% in the 2018 budget year. In absolute values, prices for these medicines went down from USD 0.64 to USD 0.16 for Capecitabine 150 mg, from USD 1.42 to USD 0.30 for Capecitabine 500 mg, and from USD 519.4 to USD 164.9 for Trastuzumab 150mg. In these particular cases, the price decrease was achieved due to the fast track registration of generic & biosimilar drugs, which was legally mandated for procurement by international agencies.

Year-on-year comparison for Adult Hepatitis and Childhood Cystic Fibrosis was made only for the 2018 budget year against the 2017 budget year as the same items were procured continuously only in these two years.



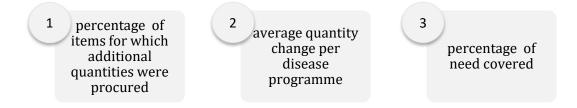
¹² Please, refer to Annex 19

The Childhood Cystic Fibrosis programme included the fewest items, but showed average price savings of 1%, while prices for Adult Hepatitis items remained unchanged for all items across the two budget years.

For more details on year-on-year price change, please, refer to the Annexes.

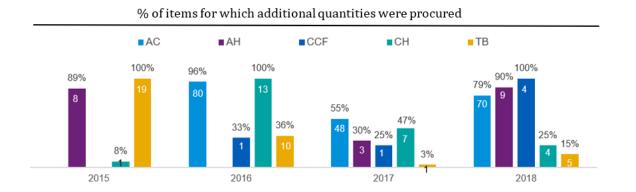
Changes in quantity

The second performance indicator analysed is changes in the quantity of procured items, with a focus on:

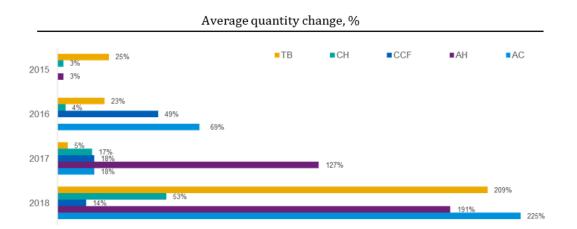


However, it should be noted that quantity change is not an absolute measure of UNDP procurement efficiency as it was the MoH that decided how to allocate savings made against the budget and for which items additional quantities could be procured.

As a first step, the share of items for which additional quantities were procured was determined. The savings delivered, allowed additional quantities to be procured for each of the disease programmes analysed and in some budget years, additional quantities were procured for each INN. This was done for TB medicines in 2015, Childhood Haemophilia in 2016 and Childhood Cystic Fibrosis in 2018. On average, additional quantities were procured for 60% of INNs over the four budget years assessed.



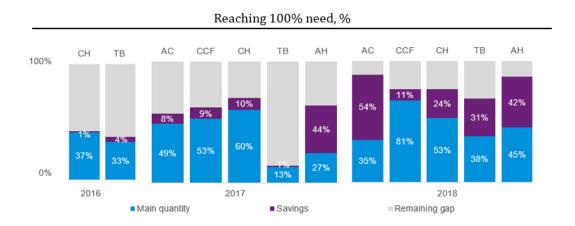
Next, the average increase in quantity per disease programme was calculated. This was done using only items where additional quantities were procured. It shows the percentage of quantity increase over the initially budgeted quantities.



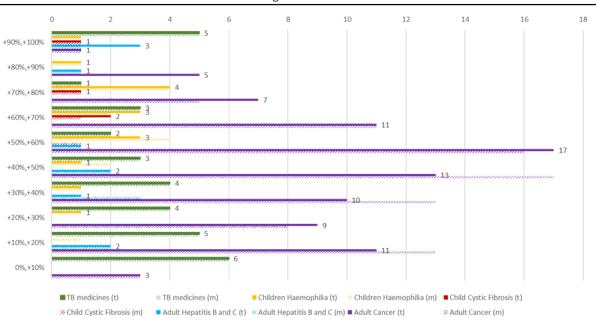
It is notable that despite big share of items for which additional quantities were procured throughout the 2015-2017 budget years, average quantity increase by disease programmes was rather modest except for Adult Cancer and Child Cystic Fibrosis in 2016, and Adult Hepatitis in 2017. In the meantime, a significant increase in purchases over the initially budgeted quantities was apparent in the 2018 budget year exceeding 200% quantity increase in for TB Medicines and Adult Cancer, and almost reaching 200% quantity increase for Adult Hepatitis. This can be equally attributed to revised programme budgets by MoH after procurement was started in 2018 and savings delivered by UNDP. However, this also points to quantification issue on MoH side prompting to assume initially budgeted quantities could be hardly considered realistic.

An assessment was also made as to whether UNDP procurement had allowed to reach 100% quantity needs for those items where additional quantities were procured. As need for all items was determined by the MoH and given in the Terms of Reference, consequently this evaluation was not undertaken for the 2015 budget year as relevant data were not provided by the MoH.

In the 2016 and 2017 budget years, additional quantities were modest and their impact on achieving 100% of need was minimal. By 2018 however, performance against 100% need had improved varying between 69% of need achieved for TB medicines and 89% for Adult Cancer. Additional quantities procured were the largest for Adult Cancer and Adult Hepatitis, making up 54% and 42% of 100% need respectively.



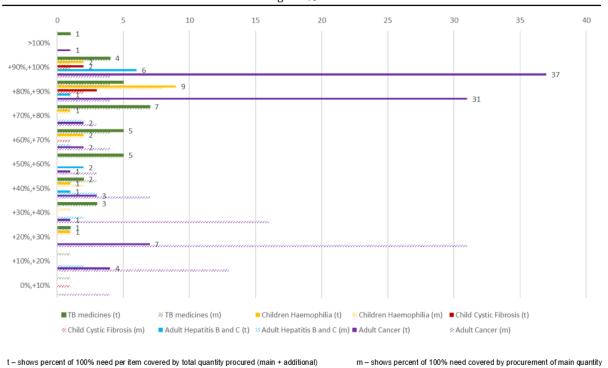
the 2016 budget year, this analysis was undertaken only for the 2017 and 2018 budget years. The analysis shows that despite average values for meeting need were below 100% across all disease programmes, there were items, for which additional procurement helped ensure meeting 70-100% of need. This primarily refers to Adult Hepatitis and Adult Cancer. The 2018 graph shows that bigger budget and additional quantities allowed almost 100% need to be met for Adult Cancer for more than 50% of items, i.e. 90-100% of need was ensured for 37 items (33 items due to additional quantities procured) and 80-90% of need was ensured for 31 items (27 items due to additional quantities procured).



Reaching 100% need in 2017

t - shows percent of 100% need per item covered by total quantity procured (main + additional)

m – shows percent of 100% need covered by procurement of main quantity



Reaching 100% need in 2018

Changes in delivery lead times

The third performance indicator used to measure procurement efficiency was **changes in delivery lead times**. The performance against this indicator was assessed through:



For the purpose of this exercise all deliveries for every item, i.e. both the main and additional procurement, were taken into account. The total of deliveries analysed is presented in the table below.

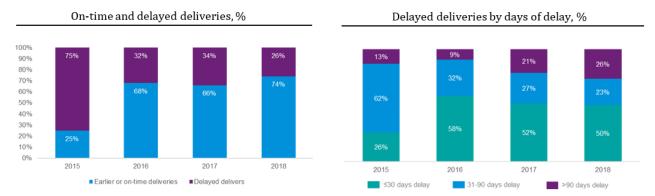
| Budget year / Disease programme | Number of deliveries | | | |
|------------------------------------|----------------------|------|------|-------|
| | 2015 | 2016 | 2017 | 2018* |
| Adult Cancer | - | 297 | 280 | 290 |
| TB medicines | 142 | 97 | 78 | 41 |
| Childhood Haemophilia | 25 | 36 | 27 | 29 |
| Adult Hepatitis B and C | 23 | - | 21 | 18 |
| Childhood Cystic Fibrosis | - | 4 | 7 | 15 |



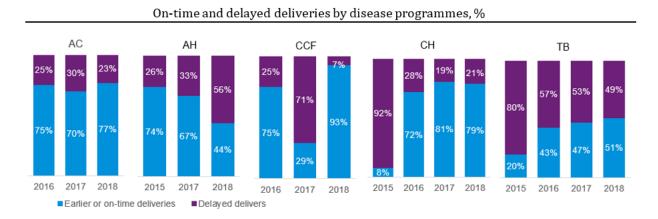
* Deliveries for the 2018 budget year include only those which were completed or confirmed as of January 21, 2020

Delivery dates defined in purchase orders were considered as contracted, and actual delivery dates were determined based on UNDP data.

Overall performance was extremely poor for the 2015 budget year with 75% of deliveries arriving with a delay, and 62% of those were delivered with a delay between 31 than 90 days. However, there was considerable improvement starting from the 2016 budget year and the progress made was maintained almost at the same level over the next three budget years. Between 2016 and 2018, approximately 70% of deliveries arrived on time and of those delayed, approximately 53% were delivered with less than a 30-day delay.



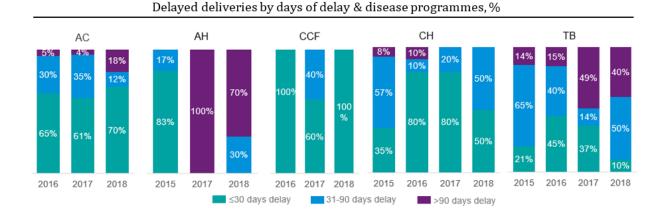
Supplier performance was also analysed by disease programme and is visualised as a graph below. It clearly shows that the TB medicines programme had the lowest percent of on-time deliveries and that supplier performance did not improve year-on-year with less than 50% of deliveries arriving on time over the four years. Alternatively, in the 2016-2018 budget years supplier performance was the highest and the most stable for Adult Cancer and Childhood Haemophilia, at approximately 74% and 77% of on-time deliveries on average respectively. The highest share of on-time deliveries was achieved for Childhood Cystic Fibrosis in the 2018 budget year, reaching 93%, however, this is the disease programme with the least deliveries out of those analysed.



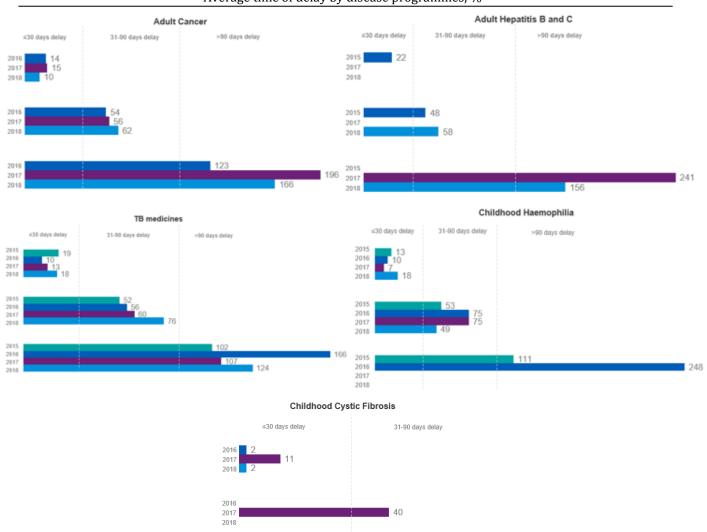
To examine the issue of delayed deliveries further, all delayed deliveries were split into three groups by the number of days of delay: 30-days delay and less, 31-90-days delay and more than 90-days delay.

The overall performance in terms of days of delay by disease programmes was inconsistent.

The shortest delays, i.e. 30 days or less, were most common for the Adult Cancer, Childhood Haemophilia and Childhood Cystic Fibrosis programmes. Thus, in these programmes the vast majority of supplies arrived on time or with a delay of 30 days or less. Meanwhile, supplier performance in terms of days of delay was the lowest for Adult Hepatitis, especially in the 2017 and 2018 budget years, when most delayed deliveries, were delayed by more than 90 days.



A closer look at the average number of days of delay shows that there was little progress in reducing the average length of delays in each range of delayed deliveries. Average delays in 31-90 days delay range were growing year-on-year for Adult Cancer, Adult Hepatitis and TB medicines. At the same time, some deliveries across all disease programmes were delayed by more than 120-150 days and in some cases average delays reached almost 250 days making the third group of delayed deliveries the most critical.



Average time of delay by disease programmes, %

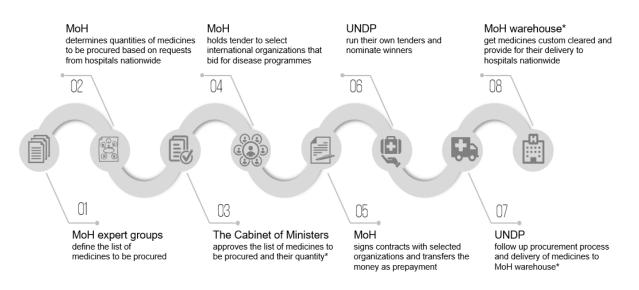
V.II. Overview of procurement process within the MoH PSS Project

UNDP has been acting as a procurement agent to the Ministry of Health of Ukraine within relevant legal framework¹³ that provides for the procurement of medicines and medical devices through specialised organisations in accordance with the rules and procedures established by these organisations and taking into account the procedure established by the Cabinet of Ministers of Ukraine.

The scheme of centralised procurement process as it was implemented until March 31, 2020 suggests it is MoH who as a customer defines the list of medicines to be procured, their quantities and selects international organisations from those that are defined by law and bid for procuring

¹³ Please, refer to Annex 2 for the full list of legal references consulted

for specific disease programmes. Only after being approved as a winner for specific disease programmes and having signed a cost-sharing agreement with MoH UNDP can proceed with the procurement.

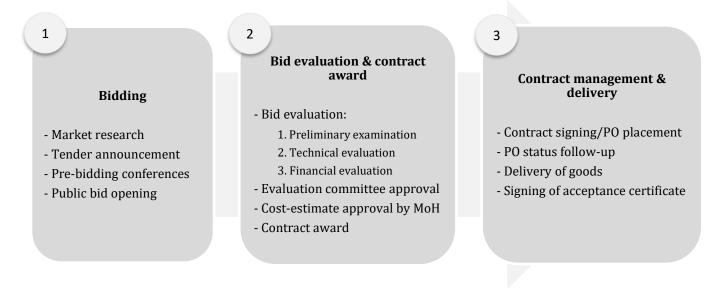


*MoH warehouse is the warehouse of a state-owned logistic company that provides for customs clearance of goods, their storage and distribution to regional hospitals

UNDP procures based on the Terms of Reference which are a part of the cost-sharing agreements with the MoH and define the list of medicines to be procured, their quantity and some other mandatory requirements, such as technical specification (for medical devices), registration, remaining shelf life and transportation.

Having a solid procurement and supply chain management background in health and non-health related projects and programmes worldwide UNDP has re-applied its procurement and supply chain standards and procedures within the MoH PSS project.

The way the UNDP procurement process is implemented can be structured as follows:



Each stage of the procurement process is backed by relevant Standard Operating Procedures and Programme and Operations Policies and Procedures¹⁴ regulating numerous aspects of quality assurance, procurement and logistics.

UNDP procurement procedures comply with both UN and international standards and abide by the following principles, as formulated by UNDP:

• Best Value for Money, which consists of the selection of the offer that best meets the endusers' needs and that presents the best return on investment. Best Value for Money is the result of several factors, including quality, experience, the vendor's reputation, life-cycle costs and benefits, and parameters that measure how well the goods or service allow the organisation to meet its social, environmental or other strategic objectives.

• Fairness, Integrity and Transparency, which ensures that competitive processes are fair, open, and rule-based. All potential vendors should be treated equally, and the process should feature clear evaluation criteria, unambiguous solicitation instructions, realistic requirements, and rules and procedures that are easy to understand.

• Effective International Competition, understood as giving all potential vendors timely and adequate information on UNDP requirements and an equal opportunity to participate in procurement actions and restricting them only when it is absolutely necessary to achieve UNDP development goals.

• In the best interest of UNDP, which means that any business transactions must conform to the mandates and principles of UNDP and the United Nations.

¹⁴ Please, refer to Annex 3 for the list of Standard Operating Procedures and Programme and Operations Policies and Procedures implemented in UNDP

Bidding process

Using its global pharmaceutical expertise, UNDP is open to provide relevant support to the MoH, even prior to starting the bidding process by reviewing lists of medicines to be procured and requirements to them and making proposals on adjustments with the account of the efficacy, WHO and other institutional treatment guidelines.

A tender announcement is usually preceded by a market research, undertaken with the purpose of keeping the list of potential bidders up to date, understanding competition and supply chains, reference prices and market trends, as well as identify proper solicitation method to be applied.

UNDP tenders are announced on the UNDP corporate website and on the United Nations Global Marketplace, for a minimum of two weeks. In order to ensure a high participation rate for fair competition UNDP may also send direct notifications to potential bidders identified by UNDP market research or disseminate procurement notices to foreign embassies and post them on social networks. All bids must be uploaded in the e-tendering system.

UNDP procedures impose strict requirements on bidders' eligibility. These include legal and financial status, previous experience as well as quality management and assurance. Bidders are required to provide necessary proofs with their bids.

The bidding process also offers the opportunity to hold pre-bidding conferences where all bidders invited to participate in the tender can receive clarifications on bidding documents and other bidding requirements, as well as evaluation process. UNDP procedures also provide for public bid opening for high value tenders (over USD 150,000), where only bidders who have submitted their proposals can participate.

Bid evaluation & contract award

UNDP evaluates received bids in three stages: a preliminary examination of the bid; a technical evaluation of the bid; a financial evaluation.

Preliminary examination of the bid makes sure that the basic requirements for bid submission have been met (whether the bid was submitted on time and whether all confirming documents have been provided etc.). Technical evaluation of the bid includes a review of qualification documents confirming a bidder's legal and financial status, their previous experience, a bid and performance security review, and a review of qualification documents confirming that the product and the manufacturing site meet all relevant quality assurance requirements. Financial evaluation goes the last and ensures that the contract is awarded to a technically qualified bidder that offers the lowest price. It also provides for the possibility of price negotiation with the lowest price bidder in line a respective procedure, if appropriate. Before a financial evaluation is conducted, all technically qualified bids undergo an approval process from an international pharmaceutical expert panel.

Bid evaluation is completed with the preparation of an evaluation report and its approval by an appropriate evaluation committee, depending on the total amount of procurement. It is then followed by preparation of a cost-estimate which is submitted to the MoH for its approval as the customer. As soon as the cost-estimate is approved contracts are awarded to the approved bidders.

Contract management & delivery

Supplier contracts and POs are subject to UNDP General Terms and Conditions and introduce specific requirements for delivery conditions and liquidated damages.

After a contract is awarded and a PO is placed, accountability for following-up the contract and delivery is handed over to the logistics team. UNDP maintains a pro-active contact management approach, which means winning bidders are asked to provide reports on manufacturing and shipment status on a regular basis.

UNDP staff provide suppliers with the necessary advice on preparation of shipping documents, receiving VAT exemption and fast track registration of new medicines in Ukraine where applicable.

As soon as the goods arrive to the MoH warehouse and acceptance certificates are signed by the MoH, UNDP and the MoH warehouse, the title of goods is handed over to the MoH.

Examining the UNDP procurement process from the perspective of the MoH PSS project the following strengths and weaknesses were identified:

Strengths

- The procurement process is well established and regulated by detailed and clear procurement policies and procedures.
- Access to global UNDP resources and that of other international organisations allows the identification of more potential bidders and dissemination of tender announcements to a bigger audience.
- UNDP brand-awareness worldwide promotes trust to the set-up procurement process among potential bidders, contracted suppliers, stakeholders and the public.
- UNDP organisation and procedures provide possibility to involve international pharmaceutical and medical experts when needed.
- E-tendering, pre-bidding conferences and public bid opening increase transparency and integrity of the bidding procedure and minimise intrusion into the process.
- Bidder qualification process is set-up in a way that allows extensive checks on bidders' eligibility.
- UNDP has applied global Quality Assurance System for Health Products procedure adjusted to the MoH PSS project which introduces more stringent quality requirements for medicines and manufacturing sites based on UNDP expertise and leading international medical frameworks in addition to those put in place by the MoH. This QA procedure also allows UNDP to conduct random sampling and pre- and post-shipment quality controls of procured goods, manufacturing sites and MoH warehouses either in-house, or with the involvement of independent laboratories/QA agencies, or both.
- Value-for-money as a key procurement principle, is regulated by a separate procedure and provides for price checks against reference countries, reinforced by price checks against the last purchasing price and the MoH TOR price.
- Bidding results are approved by several evaluation committees depending on the procurement value, thus increasing transparency and mitigating the risk of conflict of interest or fraud.
- Long Term Agreements (LTAs) proved to be an effective solicitation method, allowing the direct engagement of manufactures, securing prices and reducing the duration of the tendering process.
- Being a part of a global organisation, UNDP CO may use HQ negotiating power and global leverage when necessary.

- UNDP has relevant patent expertise, to track patented medicines and encourage participation
 of generic and biosimilar manufacturers at patent expiry, delivering savings and procuring
 bigger quantities.
- Having accumulated vast experience over the duration of the project, the UNDP procurement team is gradually switching from managing the procurement process as it is, to a category management approach, ensuring higher sustainability of the procurement on the whole.

Weaknesses

- Lack of process ownership, i.e. acting as a procurement agent, UNDP must seek approvals and decisions from the address MoH, and this often delays the process.
- Prices of winning bids are not published openly promoting negative publicity.
- Pro-active contract management and PO status follow-up are insufficient to ensure on-time deliveries.
- Insufficient levers to manage bidder discipline in the event that a conditional contract is placed, and a bidder must register its product in Ukraine prior to delivery, often result in delivery delays and stock-outs.
- Management levers provided in UNDP's general terms and conditions, contracts/POs are applied very rarely leaving suppliers violating contract conditions not penalised.
- Inconsistent and sporadic approach to supply and delivery planning by the MoH often results in a situation where the process becomes supplier-lead.
- Insufficient rigour in ensuring that the medicines delivered meet the requirements on remaining shelf life.
- There is no set of clear supplier performance KPIs to be tracked and managed on a regular basis. Although delivery tracking is implemented it is not applied with a proper determination allowing to improve supplier performance.
- The 'technically qualified lowest price' approach does not allow consideration of supplier performance and other non-price criteria when taking a decision on contract awards. Although previous supplier performance is evaluated at the bid evaluation stage, cases when a bidder's poor performance is taken into account, leading to a relevant change in the decision on contract award are very rare.
- The procurement process is very lengthy, causing overlaps in procurement and deliveries for several budget years under the same disease programmes (main and additional quantities) creating extra workload and inconsistency.

Some of the weaknesses are linked not to the UNDP procurement process directly but to the way the MoH PPS project has been set up. MoH delays in decision-making and provision of feedback on addressed requests tended to delay the whole procurement process and extend the overall time from approval of the list of medicines through to their delivery to end recipients.

One of the biggest issues complicating the process was incorrect quantification and budgeting by the MoH which led to two and sometimes even three separate rounds of the procurement process for the same medicines in different quantities, i.e. the initially budgeted quantities, additional quantities due to budget reallocation or increase, additional quantities due to savings, with a considerable gap in time. This created overlaps in the procurement process, which was usually launched from the bidding stage for every separate round, and deliveries, allowing the same medicines to be procured and delivered within different budget years creating extra document flow and workload. This could also impact on the collection of needs and quantification for the next budget year as ongoing procurement and deliveries could be omitted. More importantly, it could delay deliveries as additional quantities might not always be available at short notice due to suppliers' long-term planning cycles.

The issue with lack of ownership, both by UNDP and the MoH which comes as a result of the project set-up may be resolved in future by handing over the full procurement cycle to one entity. Such a handover has been planned by the MoH since the beginning of medical procurement reform and was several times postponed until the SoE MPU was established in late 2018, and the first stage of handover is now being planned for 2020.

Mindful of this, the evaluation team compared UNDP procurement processes with those declared to have been implemented by the SoE MPU and arrived at the following conclusions:

• The primary difference between the procurement processes of UNDP and MPU is that MPU is legally bound to procure medicines and medical devices via the open public procurement system, ProZorro, while UNDP procures for the MoH in accordance with its in-house procurement procedures. Procuring via ProZorro entails more legislative regulation and limitations, presumably fewer potential suppliers, more resources, i.e. procurement and legal, needed to conduct tender procedures, additional time required to resolve disputes with bidders, delays in decision-making, tender suspension in the event that a bidder's appeal is accepted etc.

• UNDP has well-established procurement procedures, a well-known name and an extensive supplier network. This helps the organisation to mitigate failures in conducting tender procedures, ensure open and fair competition, minimise risks that the required amount of medicines might not be procured, leverage distributors and negotiate better prices. The MPU by contrast is a new player in the field of medical procurement and, therefore has few of these advantages and is exposed to the mentioned risks.

• As part of a global organisation UNDP CO may use HQ negotiation power & global leverage when necessary, while MPU is limited to those management levers provided for by the Ukrainian legislation.

• UNDP performs procurement based on technical specifications (or Terms of Reference) prepared by the Ministry of Health of Ukraine. Meanwhile, MPU is expected to prepare the technical specifications for medicines to be procured independently, or with the help of external experts, if necessary.

• The MPU team is using MedData, a system designed to collect needs from regional hospitals and track their stockholding of medical supplies. This system is also used to distribute procured goods more efficiently and could potentially improve quantification of needs and speed-up decision making in cases when UNDP would have to seek guidance from the MoH and wait for their feedback.

• UNDP is not limited to spending budgeted amounts within calendar timeframes of a specific budget year, i.e. by December 31. In the meantime, MPU will manage government funds and will be able to procure medicines and spend funds only within the same year that the budget is allocated. UNDP is not subject to these budget law limitations and can procure over a longer period as defined by the cost-sharing agreement with the MoH, securing sustainability of the procurement cycle.

V.III. Development/programme component of the MoH PSS Project

Relevance

Evaluation question: To what extent are the UNDP health interventions relevant to national and local policies and priorities, and the needs of the intended beneficiaries?

1. UNDP's health interventions are consistent with those of Ukrainian society in general and specifically with the Government's needs and priorities

Country context and legal environment

Over the last 5 years Ukraine has faced multiple challenges, including political instability and economic and social challenges. Indices of the government's effectiveness show that it provides poor public service delivery and slow institutional reform. Ukraine is ranked low on rankings of corruption perception and rule of law¹⁵.

The ongoing conflict in the Donetsk and Luhansk oblasts undermines stability and economic recovery, and emergency and early recovery needs continue to exist in Eastern Ukraine¹⁶. The conflict resulted in wide-spread human rights violations, sexual and gender-based violence and economic decline. Internally displaced persons (IDPs) are particularly vulnerable¹⁷.

Ukrainian women remain underrepresented at all levels of decision-making, rural women are particularly vulnerable and gender-based violence is prevalent and increasing. People living with HIV, persons with disabilities and drug users face significant barriers in accessing health care, education, employment and opportunities for civic participation¹⁸.

The Government of Ukraine recognises the critical need for innovative sustainable and inclusive development strategies. The President has declared that the Sustainable Development Goals will serve as a common foundation for reform¹⁹. The 2020 Strategy for Sustainable Development of Ukraine prioritises key reforms including corruption, justice, health care and environmental protection²⁰. In September 2015 at the UN Sustainable Development Summit, the final document, *Transforming our World; the 2030 Agenda for Sustainable Development*, approved the new development targets. Ukraine joined the global process of sustainable development. A participatory and inclusive process to adapt the SDG to the Ukrainian context was launched to establish a national strategic framework for Ukraine up to 2030, based on principle, leave no one behind²¹.

The National Strategy for Reforming the Healthcare System for the period 2015-2020 (the Strategy) is a part of the National Reform Action Plan declared by Presidential Decree on 12 January 2015 No.5/2015, On Sustainable Development Strategy, Ukraine – 2020, and a CoM Activity Programme, approved by Parliamentary Regulation, No. 26-VIII dated 11 December 2014. The Strategy notes: "Corruption during tenders is an extremely painful issue which causes

¹⁹ Ibid. ²⁰ Ibid.

¹⁵ UNDP, Country programme document for Ukraine (2018-2022)

¹⁶ Ibid.

¹⁷ Ibid.

¹⁸ Ibid.

²¹ Sustainable Development Goals: Ukraine. 2017 National Baseline Report.

harm to the healthcare system and the state power as a whole". The Strategy further notes that: "in practice, one of the most known and prompt approaches to resolving serious problems associated with corruption in procurement of majority of medicines is outsourcing it to international organisations that perform such assignment on request of the government".

UNDP health interventions provided under the MoH PSS Project and other projects (CCM, RPP) in the period from 2015 to date have focused on responding to the above multiple and diverse challenges to be in line with the national priorities for the reform of the healthcare system. Such activities are also expected to contribute to achieving the nationally defined SDGs, specifically, Goal 3, Healthy lives and well-being, Goal 10, Reduce Inequality, and Goal 16, Peace, Justice and Strong Institutions.

The MoH PSS Project

The Procurement Support Services to the Ministry of Health of Ukraine project (MoH PSS project) was launched by the Ministry of Health of Ukraine in November 2015 as an emergency response, following a request from the Government of Ukraine in order to facilitate and improve access to medicines and medical devices and to contribute to the health reform agenda in Ukraine.

In 2015 the outcomes and outputs of the project were defined in the Project Document as follows:

UNDAF Outcome(s): Outcome 2.1. Improved access to and utilisation of quality health, education and social services

Expected CP Outcome(s): Outcome 2.1. Improved access to and utilisation of quality health, education and social services

The overall objective of the Project was to strengthen the national health care procurement system and thereby improve the effectiveness of diagnosis and treatment of patients. The specific objectives of the Project were:

- (i) To procure medicines and medical products for the National Public Health Programmes for 2015 and ongoing years as needed;
- (ii) To strengthen the capacity of the Ministry of Health of Ukraine to ensure transparency, accountability and effectiveness of public procurement of medicines and other medical products.

The Project and related health interventions were consistent with the anti-corruption policy and legal and institutional reforms launched by the Government of Ukraine after the 2013-2014 Euromaidan revolution and, specifically, with the Law on Public Procurement of Ukraine, and other legislative acts, as amended in 2015, to provide a legal framework for a temporary (until 31.03.2019, and recently prolonged until 31.03.2022²²) public procurement procedure for medicines and other medical products by specialised organisations.

From 2015 to date, under the relevant cost sharing agreements with the Ministry of Health, UNDP has been supplying life-saving medicines and medical products to vulnerable groups (HIV, TB, orphan diseases, autism, etc.), as well as providing HIV/TB response in Ukraine to meet the needs of key populations (including people who use drugs, sex workers, men who have sex with men, transgender people and prisoners).

²² Law of Ukraine No. 114-IX dd 19.09.2019 (amendments to Law of Ukraine on Public Procurement)

Under the Project, UNDP provided capacity building activities and technical assistance to the Ministry of Health of Ukraine, which were aimed at the development of operational and institutional capacity of the State-Owned Enterprise, Medical Procurement of Ukraine (SoE MPU), established late in 2018, that, further to the adoption of the key legislation,²³ in March 2020, obtained the mandate to perform national procurement as a national procurement organisation. UNDP's assistance included: support for the MoH in drafting of the relevant legislation regarding the SoE MPU, development of the necessary internal procedures and other documents for the SoE MPU (e.g. anti-corruption policy) and development of work skills (CIPS procurement certification, workshops, sustainable criteria, etc.).

UNDP's Project's alignment with the policies and strategies of the Government, SDGs and the UNDP/UNDAF Country Programme Strategy

In 2017 UN, UNDP in Ukraine and the Government of Ukraine developed a new UNDAF/Partnership Agreement and a new UNDP Country Programme Document (CPD) for 2018-22. Additionally, UNDP adopted a new Strategic Plan (2018-21). Consequently, the UNDAF/CPD/SP objectives and indicators were re-formulated to address the changes and the relevant SDGs were incorporated. As a result, the MoH PSS project has been realigned with the following objectives:

CPD/UNDAF Outcome: By 2022, women and men, girls and boys participate in decision-making and enjoy human rights, gender equality, effective, transparent and non-discriminatory public services.

CPD Output: 1.1. Regional and local authorities have scaled up knowledge and skills to engage communities in planning, coordination, delivery and monitoring of public service provision.

SP Output: 1.2.1. Capacities at national and sub-national levels are strengthened to promote inclusive local economic development and deliver basic services including HIV and related services.

SDG: 10.2. By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status; **3.8.** Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all; **16.5.** Substantially reduce corruption and bribery in all their forms.

The United Nations Development Assistance Framework (UNDAF) commended the early response by UNDP to the Eastern Ukraine crisis. The Recovery and Peacebuilding Assessment²⁴ determined that UNDP's reputation as an honest broker and its close working relationships with national and local governments strongly positioned UNDP to support the Government in managing the recovery of conflict-affected areas²⁵. Due to its effective performance on the ground and its emphasis on democratic governance, UNDP became a partner of choice in Eastern Ukraine²⁶.

²³ Laws of Ukraine dated 17 March 2020 No.531-IX and 532-IX (specifying the legal status of SoE MPU as a national procurement organisation and providing for special legal and tax regime applicable to public procurement performed by MPU)

²⁴ Ukraine recovery and peacebuilding assessment. Analysis of Crisis Impacts and needs in Eastern Ukraine. Volume I :Synthesis report.

²⁵ www.un.org.ua/images/V1-RPA_EngVol1.pdf

²⁶ UNDP, Country programme document for Ukraine (2018-2022)

UNDP's formulations of the outcome and SDG Targets are fully aligned with the Outcome 3. of Pillar 3: Democratic governance, rule of law and civic participation defined by the Partnership Framework²⁷. The alignment to national agenda is grounded on the following national policies and strategies: Strategy 2020, Anti-corruption Strategy, National Human Rights Strategy (2015-2020) and National Action Plan, State Programme on Fighting Human Trafficking 2020), National Health Reform strategy for Ukraine for 2015-2020, Strategy Programme on Equal Rights and Opportunities for Women and Men (2017-2021)²⁸.

2. Other UNDP health interventions (such as the CCM Project and the health component of the Recovery and Peacebuilding Programme (RPP) contributed to the country's needs and to the development of a coherent and efficient Health & Transparency Programm.

In addition to the MoH PSS project, UNDP is implementing two health initiatives: the Country Coordination Mechanism (the CCM Project) and a health component of the RPP project funded by EU. The CCM Project is a separate component of UNDP's Health & Transparency programme which is part of the Democratic Governance portfolio and the RPP portfolio is a separate areabased initiative, implemented mostly in the conflict-affected areas of Ukraine.

CCM (HIV/AIDS and TB)

Since 2013 UNDP has been helping to strengthen the capacity of the National Council on TB and HIV/AIDS in fulfilling the functions of the Country Coordination Mechanism (CCM) in line with the requirements and recommendations of the Global Fund to Fight AIDS, TB and Malaria²⁹. This includes the oversight function, involvement of all stakeholders, and ensuring consistency of response of the national programmes on TB and HIV/AIDS and the Global Fund grants³⁰.

UNDP strengthened the National Council on TB and HIV/AIDS in Ukraine by: (1) strengthening the National council's capacity to perform oversight activities and (2) ensuring participation of stakeholders' representatives including civic society (in particular representatives of the vulnerable groups and people living with diseases³¹) and the private sector, in the programme management, and (3) project management.

Based on the successful performance of the UNDP-supported CCM project, the Global Fund has confirmed its commitment to allocate another wave of funding to Ukraine of USD 135 million for 2021-2023.

Recovery and Peace-building Programme (RPP)

UNDP is implementing a USD 80 million four-year (2019-2022) EU funded project, Support to the East of Ukraine – Recovery, Peacebuilding and Governance, through indirect management by UNDP, in partnership with UNFPA, FAO and UN Women.

²⁷ The Government of Ukraine – United National Partnership Framework 2018-2022.

²⁸ Ibid.

²⁹ https://www.theglobalfund.org/media/7122/oig_gf-oig-18-003_report_en.pdf?u=637066540190000000

³⁰ https://www.ua.undp.org/content/ukraine/en/home/projects/strengthening-national-tb-and-hiv-council.html

³¹ Women's groups (women living with HIV), prisoners and transgender people, and Internally Displaced persons (IDPs) from temporarily occupied territories and participants of the Anti-terrorist Operation (ATO)

This is a joint project with stakeholders in the crisis-affected regions of Ukraine and is aimed at supporting decentralisation, reform and good governance, economic recovery and development of MSMEs³², community security and social cohesion, and health reform promotion.

In terms of the health component, the RPP supports the roll-out of the health reform by building the capacity of local stakeholders in strategic planning, promoting transparency, integrity, anticorruption and best procurement practice, ensuring oversight and monitoring by patients, health promotion, awareness raising, and behavioural change and support at the primary level of health care reform, at a local level, in the East of Ukraine.

Both UNDP health interventions (the CCM project and the health component of the RPP) complemented the country's response to the HIV/TB epidemic and human rights' protection in conflict-settings and thus were highly relevant to Ukraine's needs. These activities contributed to the development of a coherent and efficient UNDP health activities by supplementing it with the democratic governance and human rights agenda, which was aligned with UNDAF 2018-2022, UNDP CPD 2018-2022 and the 2030 SDG Agenda.

3. The Project partly fulfilled the needs of vulnerable groups and key populations (HIV/TB, orphan diseases, etc.)

Medical procurement

Representatives of patient CSOs, who are end-users of medicines procured under the MoH's programmes, provided positive feedback on UNDP's work under the MoH PSS Project.

They emphasised the following key achievements of UNDP:

- No corruption in public health procurement following the transfer of programmes from the MoH to UNDP, UNICEF and Crown Agents in 2015;
- UNDP is guided by best EU and global practice in health procurement;
- Good quality of medicines procured; all medicines certified;
- Additional quantities of medicines procured, due to cost savings;
- Prices decreased due to direct contracts with manufacturers and LTAs;
- The list of medicines (government procurement nomenclatures) was expanded;
- UNDP engaged consultants and international experts, approached EU patient associations & consortia to address issues and concerns of patient CSOs;
- Adequate response to patient CSOs concerns regarding quality, including requests for international independent laboratories to undertake quality checks.

Some negative feedback and concerns about UNDP's performance were also shared by the CSOs:

- Delayed supply of medicines (no visible improvement in delivery timings from year-toyear) leading to interrupted treatment;
- Overlapping of deliveries for several budget year(s) resulting in disrupted planning of supplies;
- Despite lower prices and use of savings, 100% of patients' needs were not covered throughout the entire period of the Project;

³² Micro, Small and Medium-Size Enterprises (MSMEs)

• In the event that the MoH working group on procurement was challenged by patients and clinicians on the quality of medicines, UNDP procurement staff were not always willing to accept and support the view of patients and clinicians despite the references to international CPGs and other literature.

Programme/Development component

HIV/TB response

HIV/TB response is an essential element of the H&T Programme which increased the capacity of HIV/TB key populations and other excluded groups to realise their health and human rights, in order to reduce inequalities and social exclusion that are driven by HIV and affect health.

Key achievements:

- UNDP conducted the Legal Assessment for Tuberculosis in Ukraine (LEA TB); the final report was launched internationally during the UNION Conference, and recommendations from the report were further incorporated into the national Strategic plan for a comprehensive response to human rights barriers for access to HIV and TB prevention and treatment by 2030.
- UNDP supported CoM of Ukraine in approving a resolution to enabling the most vulnerable groups affected by of HIV/AIDS and tuberculosis (transgender individuals, prisoners, women living with HIV, members of the Joint Operations and Anti-terrorist Operation, internally displaced persons) to fully participate and have decision- making rights in the Country Coordination Mechanism (CCM).
- The latest activity was the delivering of a comprehensive human rights-based Fast-track City Initiative (FTCI) response to the ongoing HIV and TB epidemics in three cities – Kyiv, Odessa and Dnipro.
- UNDP provided support for the sustainability of healthcare and ensuring health rights of key populations (MSM/TG and HIV-positive women) (workshops: Medical Knowledge Hub, Leaders in Global Health, for physicians and medical interns; and Self-Care, Youth Mental Health, and HIV workshop for European Public Health Week at Kyiv-Mohyla Academy).
- UNDP supported efforts of **the Positive Women NGO** to ensure sustainable resource mobilisation by providing technical expertise on fundraising in February-March 2019. In addition, as a part of the 5th Positive Women Forum, UNDP hosted a session on Universal Design Thinking for health rights for women living with HIV in October 2019.
- UNDP assessed the implementation of the Recommendations of the Global Commission on HIV and the Law in Ukraine among MSM and TG. The results were presented at the XI National LGBTI conference in October 2018.
- UNDP supported the **National LGBTI Conference** and co-facilitated the session on human rights and HIV together with UNAIDS and the Public Health Centre of the MoH in September 2019. As a result of the session, the most important issues for the LGBTI community were collected and included in the conference resolution.
- A communication platform for judges was established focusing on the topic of the HIV, TB and human rights and the role of judges in reducing stigma and discrimination. UNDP maintains communication with them, engages them in national and international events, and forwards them pertinent literature and other materials related to the HIV/TB and human rights response to raise their awareness and contribute to a zero-discrimination attitude.

A guide for trainers on HIV and human rights for law enforcement representatives
was developed and piloted within a three-day Training of Trainers programme for police
officers, aimed at raising awareness and providing practical skills in preventing
discrimination against people living with HIV (in cooperation with UNODC). The Guide is
currently undergoing approval in the MIA; once approved, it is planned to be included to
the curriculum of police academies.

Public monitoring of the delivery, availability and use of medicines at the local level by patient CSOs

In 2017-2019 UNDP conducted three rounds of a low-value grants programme, on a competitive basis, aimed at supporting public monitoring of the delivery, availability and use of medicines at the local level by patient CSOs. The purpose of the programme was to obtain data on the timing and volume of the supply of medicines and medical products, purchased by UNDP for the Ministry of Health of Ukraine (MOH), to Healthcare Facilities (HCFs) in selected oblasts; to collect information on the actual situation with regard to the supply of medicines to patients; and to assess overall satisfaction of both patients and physicians with the volumes and timing of medicine delivery in the existing system of medicine supply.

In the period of 2017-2019, twelve CSOs participated in the public monitoring of the delivery, availability and use of medicines at local level programme. During the period 12 disease programmes were reviewed. This helped enhance transparency in public procurement in the healthcare system and build the capacity of patients NGOs.

Representatives of some patients CSOs indicated that it would be important for UNDP to share the results, conclusions and recommendations of these public monitoring activities with the MoH and local authorities, to develop a road map for improvement of delivery of medicines and their availability to patients. The CSOs are ready to take part in further implementation of the actions aimed at resolving the issues identified during the public monitoring.

Representatives of patients CSOs of vulnerable groups shared their feedback on cooperation with UNDP on small (up to one year) projects. They commented positively on the financial, technical, translation and other support for their events and activities. They emphasised that they appreciated that UNDP invited foreign experts to come to Ukraine and share knowledge with Ukrainian patients. They were positive about UNDP's support for IDPs (psychological and social, legal support and advocacy), and the importance placed on gender issues/ HIV positive women's rights.

As to areas for improvement patients SCOs emphasised that they needed more long-term support (at least 2 years) to be able to realise their plans and initiatives. They wish to be engaged in planning and budgeting of their activities and outputs supported by UNDP to produce sustainable & long- term results.

4. The Project mainstreamed gender issues and promoted the human rights' agenda

At its inception, in November 2015 the Project did not specifically address gender and human rights agendas. The new Strategic Plan and CPD launched in 2018, introduced changes and now cross-cutting issues have been built into UNDP projects, programmes, processes and procedures, both internally and externally.

Promotion of the 2030 Agenda and the SDGs in line with the UNDP Strategic Plan required a response to these goals by UNDP. Promotion of Sustainable Development Goals in health and related areas by awareness-raising and training activity helps to introduce sustainable procurement elements that directly link health to human rights and gender, environment and transportation, waste management and packaging.

The UNDP MoH PSS Project contains a component related to HIV/TB response in Ukraine and the provision of support to men and women affected by HIV, lesbian, gay, bisexual, transgender and intersex individuals.

Gender and human rights issues are mainstreamed in all activities of the H&T Programme. Specifically, gender competencies are incorporated into technical assistance and capacity building activities (training, workshops, staff recruitment) and projects. Examples of gender and human rights mainstreaming include the following health interventions of UNDP and its partners: Fast-Track Cities, National Judges Platform, LEA TB, TRIPS, HIV/TB response, LGBTI and Positive Women projects, public monitoring of delivery and availability of medicines by patients CSO projects, National Police projects.

Based on interviews with stakeholders, including the MoH's senior management, however, there appears to be a low level of awareness of gender issues arising from the Project and other UNDP health interventions.

5. Outcomes and outputs of the Project remained relevant throughout the implementation period

The CPD / UNDAF outcome, CPD output and SP output of the Project were changed in 2018 following the adoption of the new UN Partnership Framework, UNDP CPD for Ukraine 2018-2022 and UNDP Strategic Plan 2018-2021.

The two outputs of the Project: 1) improved availability of medicines and effectiveness of diagnosis and treatment, through a stronger national health care procurement system, and 2) the system of public procurement is strengthened through provision of technical assistance and capacity development services to the Ministry of Health of Ukraine and national stakeholders, remained unchanged and relevant throughout the period of implementation. At the time of the evaluation, the UNDP project team prepared a new ProDoc which, however, has not been agreed with MoH yet.

6. Extent of adaptation of the Project to the changing environment and consideration of the risks/mitigation strategy.

In line with UNDP procedures, the Project undergoes regular risk assessment since its launch in 2015. The risks are specified in the AWPs and annually reviewed with relevant controls/mitigation strategy. Off-line risk logs were part of the AWPs and contained detailed descriptions of risks, causes, impacts, risk validity start and end dates, risk owners, activities for treatment (countermeasures) and time plans, as well as the expected effect of the mitigation actions.

Analysis of the Annual Progress Report 2019 indicates that appropriate actions were taken to address major project risks & issues.

A Sustainability/Exit Strategy was prepared to address the anticipated reduction of the procurement portfolio in line with the gradual transition of disease programmes to SoE MPU in 2020-2022.

7. Individual project design and project results frameworks provide an adequate response to the changes in the country and operational context

The project results framework relating to the **medical procurement component**, currently contains seven indicators (three indicators were drawn up in 2015) that help to measure progress on certain parameters of the procurement programmes (e.g. share of agreed health product procured and delivered; share of agreed total number of health products delivered, etc.). The area which raised most concerns among stakeholders that were interviewed was that of delays to delivery of supplies, throughout the entire Project period. Procurement for several budget years has been overlapping each subsequent year. This has provoked dissatisfaction among all stakeholders with UNDP's performance on the MoH PSS project. As UNDP acts as a procurement agent, it is reliant on the MoH to start its tender process each year (MoH must approve the nomenclature and technical specification of medicines and devices, and transfer funds to UNDP) and UNDP has no leverage over the continued delays. Additionally, UNDP is required to seek approvals and/or advice from the MoH on such issues as cost-estimates, (re)allocation of savings, and shelf-life or cold chain violations on delivered medicines etc., waiting for the MoH's feedback which is often delayed. The responsibility for the delays must therefore rest jointly with the UNDP and the MoH.

Given the planned shifting of part of the procurement portfolio to SoE MPU in 2020 and transfer of the entire procurement portfolio to the SoE MPU by 2022, UNDP should discuss with the MoH how timing issues can be improved in 2020-2021 in order for UNDP to be able to procure and deliver on time, all of the quantities for the budget years 2020 and 2021, and manage the frustration caused by many years of delayed supplies.

The anticipated completion of the E-stock project should also help mitigate issues concerning delayed supplies.

A full-fledged results-based framework for the **development component** of the Project, was not developed at the inception of the Project, however, the projects progress was monitored through a basic M&E plan which has been broadened in the next years. The project strategy noted that: "Although capacity development is not part of this immediate procurement support, due to time and budget constraints, it is the clear intention of UNDP to invest in sustainable results that can be achieved with an efficient and transparent national procurement service at the Ministry of Health. Capacity building efforts will be discussed at length in a separate document yet to be developed". Currently, the M&E Plan uses five indicators to measure development activities, including qualitative and quantitative parameters (e.g. number of staff trained, the extent to which public procurement legislation enables efficient health goods procurement, etc.).

Given the limited resources, UNDP may additionally like to consider using proxy indicators (e.g. perform surveys) to validate certain of its outputs. This may be particularly helpful for measuring whether UNDP health interventions have really improved people's lives, had a sustainable effect and/or to check the level of satisfaction with UNDP interventions. This could be relevant for educational activities (training) and capacity building activities for patient CSOs, local community

groups, vulnerable people and key populations. Please, refer to Annex 20 for further indicators proposed, including proxy indicators.

To ensure national ownership, it may be advisable to prepare a revised Project Document covering 2020-2022 years, listing all the relevant technical and capacity development activities therein and submit it to the next Project board for review and approval.

The key results achieved by the Health & Transparency Programme against planned outputs have been captured in relevant ROAR reports.

When UNDP's medical procurement functions are planned to shift to SoE MPU, it will be necessary to revise the current indicators to meet the new development model challenges.

<u>Conclusion: UNDP health interventions have been highly relevant to national and local</u> policies and priorities and the needs of intended beneficiaries.

Effectiveness

Evaluation question: To what extent has the Project been effective in reforming the health sector and the system of public procurement in Ukraine?

1. The Project has, in many aspects, achieved its objectives as set forth in the project documents/cost-sharing agreements, strategies, objectives and indicators

Medical procurement

The Project was effective in assisting the MoH in cost-efficient and transparent procurement of medicines and other medical devices for the relevant disease programmes.

As an international agency UNDP made a significant change in public procurement by adhering to the principles of fairness, integrity and transparency and being guided by UN and international procurement standards. This opened the way for direct participation of foreign manufacturers in the tendering process and avoidance of distributor margins. Procuring for the 2015 budget, UNDP reported around 40% savings against the allocated budget and demonstrated continuous cost-efficiency when procuring in subsequent budget years. The savings were recommitted annually for procurement of additional quantities of medicines and medical devices improving the coverage of patients' treatment needs.

The Project was less effective in ensuring timely supplies of medicines and medical devices. Of the disease programmes analysed only 25% of all shipments were delivered on time in the 2015 budget year, with most delays varying between 31 and 90 days. The timeliness of supplies considerably improved in 2016-2018 budget years, but it did not reach the target level of 95%. This has impacted upon the overall duration of procurement exceeding the timeframes set in the cost-sharing agreements. Delays in procurement against initial timings fixed in the cost-sharing agreements have been the subject of continuous concerns and criticism by the public, stakeholders and auditing authorities.

Development component

• TA/Individual consultants (ICs)

In 2016-2019 UNDP provided technical assistance to the MoH by financing the work of 26 individual consultants (ICs) to consult in various areas: procurement reform facilitation, legal support for procurement services, IP reform, project coordinators, lawyers and consultants, anticorruption experts for the MoH's Secretariat and the WG for the MoH, a monitoring specialist, a specialist in new digital technologies and other professionals.

A results-based model was not provided for the above activities in the PSS Project Document signed in November 2015, in relation to output 2 of the Project (i.e. The system of public procurement is strengthened by providing technical assistance and capacity development to the Ministry of Health of Ukraine and national stakeholders). During the implementation of the Project from 2015 to date, at annual Project Board meetings, UNDP has reported the main outcomes of the procurement cycle in the prior year, discussed procurement progress in the then current year, implemented public procurement reform initiatives and planned programme activities for the following year. Every year the MoH has expressed its appreciation of the cooperation with UNDP and other stakeholders. However, there was no detailed description and analysis of the significant volume of work done and investments made for the MoH via the technical assistance detailed in the project documents and/or AWPs (except in 2018 and particularly in 2019). Moreover, provision of technical assistance via schemes such as those delivered by contracted individual consultants (ICs) have not proved to be effective, as they have resulted in 'investment in individuals' rather than 'investment in institutional mechanisms'. Changes in senior management at the MoH and other staff turnover resulted in the suspension of the procurement cycle at the MoH and clearly demonstrated the lack of institutional capacity at the MoH and a lack of national ownership.

• Capacity building

Based on the project M&E Plan, the number of Ministry of Health, SoE MPU employees and health managers who took part in programmes or training to strengthen their skills and develop capacities to enable the implementation of sustainable public procurement in a transparent, accountable and effective manner were:

In 2016 – 150 (no gender disaggregation) against 100 planned In 2017 - 145 (f-120, m-25) against a target of 140 In 2018 – 56 (f-39, m-17) against a target of 150 In 2019 – 98 (f-63, m-35) against a target of 110

Because of political instability and frequent changes in the senior management of the MoH, some of the benefits of UNDP's interventions were not fully and effectively used by the beneficiaries or have been diminished due to staff turnover at the MoH leading to a partial loss of institutional memory.

This has resulted in reduced efficiency of the development activity, lack of national ownership, and also challenged the sustainability of the results of some UNDP contributions.

2. UNDP achievements beyond the logical frameworks, including contribution to new legislation on public procurement, reduced delivery time and the costs, and improved quality of procured medicines, vaccines and medical products

Key achievements in medical procurement

• Procurement of generics and biosimilars

UNDP took advantage of the legal mandate providing for fast track registration of medicines procured by specialised organisations in Ukraine and since the beginning of the project has ensured registration and delivery of more than 80 generic and biosimilar drugs³³ previously unavailable in Ukraine. UNDP monitored the IP situation on the Ukrainian market and found generic manufacturers for the medicines where patents had expired and encouraged them to launch their products on the Ukrainian market. Some of the medicines were then procured at prices up to 70% lower than previously - for example Capecitabine and Trastuzumab used in Adult Oncology.

• UNDP medical donations

In 2019 UNDP donated and delivered a range of life-saving medicines (with an invoice value of more than USD 316,000 to patients in Ukraine to cover urgent humanitarian needs under certain programmes (dwarfism, botulism and childhood cancer).

There seems to be a lack of public awareness of UNDP's medical donations in spite of the regular information campaigns conducted.

• Quality assurance (QA) policy

In 2017, UNDP developed a QA policy for health products procured and supplied by the organisation. In July 2018, the UNDP Executive Group approved the QA policy. On 27 March 2019 the QA policy and procedures for health products were added to the procurement section of the Programme and Operations Policies and Procedures and became mandatory for all countries dealing with medical procurement, including Ukraine. Following consultation with the MoH, UNDP obtained a waiver postponing implementation of the QA policy until 31.03.2020.

Key achievements in the development component

UNDP contributed to the development of public procurement legislation and supported other legal initiatives³⁴:

- **Trained over 500 MOH and regional health departments staff** (conflict of interest, sustainable procurement, etc.);
- Supported development of the concept of the Medical Procurements of Ukraine (MPU) & procurement system which was endorsed by the Government in September 2018;
- Developed the roadmap for the reform in public health procurement in line with the health reform agenda;
- Jointly with WHO, UNDP submitted recommendations to the Draft Law No.2089 to make medicines more affordable for citizens by opening the market to manufacturers of cheaper generic medicines;

³³ Please, refer to Annex 11 for the list of medicines registered in Ukraine under fast track registration procedure as of 15 February 2020

³⁴ UNDP, Project Document 2019

- Undertook a Legal Environmental Assessment on Tuberculosis (LEA TB). The ensuing recommendations were included in the National Strategic Plan for comprehensive response to the barriers in the field of human rights to ensure access to prevention and treatment of HIV and TB until 2030;
- Contributed to digitalisation of health procurement by supporting the development of E-Liky and E-stock (inception phase) nationwide platforms. The tools aim to enhance the transparency of medicine distribution, ensure the rights of patients and will allow future needs to be projected using real-time data;
- Conducted the Sector Integrity Vulnerability Assessment (SIVA) in Health Product Procurement and Public Expenditure Tracking Survey (PETS) projects (in collaboration with WB) and followed these activities up with Action Plans for the MOH;
- Conducted three rounds of public monitoring on the delivery, availability and use of medicines at local level by local NGOs in eight oblasts of Ukraine. As a result, three reports on drug accessibility have been prepared;
- Supported **patent reform** and integration of TRIPS flexibility, by supporting and facilitating three Intellectual Property workshops. This activity aimed to make medicine more accessible for Ukraine by diversifying the market for cheaper medical products.
- Promoting Sustainable Health in Procurement to reduce the harm to people and the environment caused by the manufacture, use, and disposal of medical products and by the implementation of health programmes (SHiPP project). SHiPP Report prepared: Environmental Questionnaire for UNDP Suppliers and Manufacturers of Healthcare Products (The Case of Ukraine).

As legal support to the MoH was provided by ICs, there is lack of awareness among stakeholders, including the MoH, about UNDP's contribution to the development of public procurement legislation.

3. Existence of a framework, involving the MoH and other international purchasing organisations, enabling timely and effective resolution of the critical issues arising in the course of procurement (absence of planning strategies, delayed deliveries, quality of procured medicines, vaccines and medical products, etc.)

Annual Project Board meetings held from 2016 to 2019 and participation in the regular Permanent Working Group on Public Procurement (the highest decision-making body at the MoH) proved to be an effective framework for resolving most of the critical issues arising over the course of the procurement, based on the feedback from international partners. However, there have been complaints from stakeholders (patients CSOs, clinical experts, business) about delayed decision-making on critical issues concerning deliveries, quality of medicines, etc. which have yet to be resolved.

Other stakeholders (international organisations, academia, clinical experts) also emphasised the unresolved issue of the absence of forecasting and planning over the entire period 2015-2020, claiming it was a missed opportunity.

Following the change of leadership at the MoH in the autumn of 2019 and twice, in spring of 2020, there was disruption to the decision-making and communication process among all stakeholders. Dialogue between the MoH and international organisations was interrupted.

There is an expectation from the EU Delegation and international and local stakeholders, including UNICEF and the academic community, that UNDP should take a pro-active approach in the creation/development of a communication platform with the involvement of the MoH and all stakeholders for the efficient resolution of public procurement issues.

4. Existence of innovative technologies and/or detailed methodologies and/or activities and/or unique resources that enable effective public procurement, including in the area of anti-corruption and transparency

• Digitalisation in health procurement

UNDP contributed to the digitalisation of health procurement by supporting financially the **E-Liky** and **E-Stock** (initial development phase) nationwide platforms. These tools aim to enhance the transparency of medicine distribution, ensure the rights of patients and will allow accurate forecasting of future needs in real time.

E-Liky – UNDP awarded a grant to a national patient CSO to develop and implement a system for online monitoring of the stock of medicines in medical institutions. Patients now receive information about medicines that are purchased through the national budget and which are available in hospitals. E-Liky is now available in all regions of Ukraine and covers 1,739 hospitals. The platform allowed more than 165,000 people to check the availability of medicines on-line.

Based on stakeholder feedback **E-stock** (a system for the management of medicines and medical product information) is a very important initiative and anti-corruption tool, which has yet to be fully implemented as the first round of the tender process was halted due to limited funding and high value bids from tender participants (10 global and local software development companies). UNDP is planning for the next tender process and intends to secure sufficient budget to ensure a positive tender outcome in 2020.

• Innovative methodologies in the area of anti-corruption and transparency

UNDP conducted a **Sector Integrity Vulnerability Assessment (SIVA)** in Health Product Procurement for the Ministry of Health and also carried out a **Public Expenditure Tracking Survey (PETS)** in Donetsk and Luhansk oblasts (in collaboration with the World Bank and the Kyiv School of Economics). Those assessments allowed identification and highlighting of gaps in the healthcare system to be tackled by policy and planning work. Recommendations and Action Plans were submitted to the MoH for action.

5. Improved dialogue with vulnerable groups enabling resolution of concerns and issues arising over the course of procurement cycle, over delayed medicines/vaccines/medical products, in a timely and efficient manner

Effective national dialogue and communication with vulnerable groups and/or patient groups was established, developed and maintained by UNDP to address their requests and expectations related to the outcomes of UNDP interventions. Specifically, UNDP provided adequate and timely response to various ad hoc issues raised by vulnerable groups/patient groups (e.g. on quality concerns, late deliveries, etc.), through clear communication of UNDP procurement procedures

and processes, via regular (quarterly) stakeholders' meetings held with patient CSOs and via the media, including social networks.

UNDP's initiatives aimed at strengthening the capacity of patient CSOs via public monitoring grant projects, improved the dialogue between UNDP and patient organisations, between CSOs and other stakeholders, including local and regional authorities and clinicians.

There is strong evidence of efficient dialogue between UNDP and vulnerable groups.

6. Progress by UNDP in capacity building at the SoE MPU to develop it as a national procurement agency, and public awareness of UNDP's ownership of the project

Third-party organisations play a significant role in the development of the professional capacities of personnel, the recruitment process and the contracting process within the MPU.

UNDP provides SoE MPU with financial assistance to cover the salary costs of its staff. In 2019 UNDP conducted a number of workshops for MPU staff, including a UNDP PSM Workshop in Turkey and a UNDP CIPS programme.

UNDP has demonstrated its openness and readiness to provide any further assistance and support for the capacity development of SoE MPU employees and is willing to share its experience, and fund additional training programmes.

At the time of this forward-looking evaluation, UNDP was assessing the procurement capacity of SoE MPU and its performance with regard to transparency, corruption and accountability. UNDP initiated a capacity assessment of SoE MPU in order to understand its strengths and weaknesses and determine growth opportunities. The awareness of current capacity level of SoE MPU will help UNDP to tailor their approach to capacity development at the agency and make the SoE MPU capacity development programme more efficient.

UNDP is not the only donor to SoE MPU. There is no public awareness about the split of TA/capacity building activities among UNDP, USAID, and other partners and donors.

7. The extent to which UNDP activities in the area of environmental sustainability in public procurement have been effectively contributing to the development of a more sustainable health sector

- UNDP effectively promoted sustainable health in procurement to reduce the harm to people and the environment caused by the manufacture, use, and disposal of medical products and by the implementation of health programmes (SHiPP project). An environmental study titled 'Questionnaire for UNDP Suppliers and Manufactures of Healthcare Products: the Case of Ukraine' was prepared to contribute to the development of a Sustainability Procurement Index of Health.
- UNDP conducted **two case studies on best practice for national manufacturers and suppliers,** Farmak and Lifetime Cycle Assessments, on promotion of the adoption of sustainable practices by manufacturers and suppliers in Ukraine.
- UNDP conducted situational assessments of the health waste management practice in eight hospitals in six regions and prepared a report for national stakeholders.

- Following a request received from the National Public Health Centre, with the support of UNDP, a **training module on addressing climate change** from the perspective of health care risks is being developed.
- UNDP facilitated the participation of representatives of the Public Health Centre of the Ministry of Health, in a regional **seminar on the climate change in Moldova.**

8. Existence of a dialogue with the private sector, healthcare providers/regional health authorities

Based on feedback from one representative, there was a dialogue with the private sector, but it was not very efficient, and the following typical concerns were raised by pharmaceutical manufactures or their local representatives, namely:

- There was a lack of coordination of the donors' support by the MoH and no effective communication from UNDP regarding its assistance for the MoH, for instance concerning capacity building and technical assistance for the MoH. There was no awareness about the split of TA/CB activities between UNDP and other donors (USAID, TAPAS, Global Fund). The sources of funding of the MoH' Secretariat and other personnel was unclear and raised issues about non-transparency of the processes and procedures relating to TA/CB.
- Significant delays to supplies under cost sharing agreements. Delays in the supply of medicines resulted from the inefficiency of both the MoH and UNDP, rather than just the MoH.
- Lack of transparency regarding the criteria and process for the selection of specialised procurement organisations and of distribution of disease programmes among specialised procurement agencies by the MoH.
- UNDP could have explored opportunities to procure high-quality generics instead of giving preference to the lowest priced drugs.

The private sector believes that UNDP could provide technical assistance to the MoH and SoE MPU in the following key areas:

- Review of and amendment to nomenclatures and technical specifications;
- Implementation of LTAs (non-binding, price/volume, price confidentiality issues) and MEA (Market Entry Agreements).

Dialogue with healthcare providers

Feedback shared by one of the leading healthcare providers involved in the Permanent Working Group on Procurement at the MoH was as follows:

- There was good communication with UNDP regarding procurement issues related to particular diseases programmes.
- There were no visible improvements in the first years of procurement by UNDP. The last two years showed modest improvements, i.e. the timing of tenders was known and there was some certainty about the timing of deliveries.

- There was price reduction, but it was not significant ³⁵. Reductions in price were achieved due to UNDP's negotiation power.
- The medicines procured by UNDP were original products from companies with a good reputation.
- Among the issues that were negatively perceived were delayed deliveries, which, in the opinion of one healthcare provider, were caused by the MoH's late commencement of the procurement process, rather than UNDP inefficiency.
- There was no evidence of corruption in health procurement. The process was fully transparent.
- Despite the price reductions, the list of INNs procured by the MoH at the national level covered only 50% of the essential need for medicines for treatment of patients and only 3% of the total budget necessary for treatment of patients, which was due to the limited state budget funding allocated for MoH procurement.
- A range of new medicines were registered in Ukraine from the beginning of the procurement via international organisations. Earlier patients had to bring in Ukraine unregistered drugs for their own treatment.

Regional health authorities

As part of this evaluation, the evaluation team did not come across evidence of a dialogue with regional health authorities. Patient CSOs consider it important to ensure medicines reach endusers, i.e. patients. It may be advisable to leverage the positive results of the NGO Public Monitoring projects to develop a framework to improve the supply of medicines and medical products to patients through the regional health authorities. Specifically, UNDP may consider holding regional events (conferences, seminars, round tables, trainings, etc.) aimed at improving needs assessments by regional healthcare authorities and ensuring patients' CSO engagement and empowerment by regional health authorities, etc.

<u>Conclusion: The Project has, in many aspects, been effective in reforming the health</u> <u>sector and the system of public procurement.</u>

Efficiency

Evaluation question: To what extent were the Project's outputs produced efficiently with respect to cost and timelines?

1. The extent to which the Project is cost-effective, including the extent to which the price, quantity and delivery lead times of the procured medicines and medical products have improved compared to procurement conducted by the MoH and regional healthcare departments

The Project's procurement efficiency was assessed against the five disease programmes for which UNDP procured for the 2015-2018 budget years. While relevant findings are described in more detail in the Procurement Efficiency Assessment section, some of the main highlights are summarised below.

³⁵ This is interviewee's input, more specific findings on cost-efficiency are provided in the Procurement efficiency overview section

In 2015 UNDP was already procuring more efficiently than the MoH had in the 2014 budget year and delivered savings in average price per item and in value against MoH 2014 prices for the programmes assessed. Average price decreases and savings against MoH prices vary depending on the programme, however, total savings against 2014 MoH prices were USD 22.72 million or 48% and the average price decrease per item was approximately 20%³⁶.

UNDP also procured mostly more efficiently when compared to regional procurement in ProZorro in the 2016-2018 budget years. Savings were delivered both in average price per item and in value for most of the disease programmes assessed. Total savings against ProZorro for the three budget years were approximately USD 153.23 million for the disease programmes in focus. The average price decrease per item purchased against ProZorro was around 23% over the three years.

In addition to savings against last purchasing price and similar regional procurement, UNDP delivered savings against allocated programme budgets year-on-year. Since the beginning of the project UNDP has reported approximately USD 66 million savings against allocated budgets.

Those savings were used to procure additional quantities of medicines and medical devices. However, the additional quantities were small compared to main procurement until the 2018 budget year. In 2018 the amount of savings allowed for the purchase of between 191% and 225% more of most of the listed items for Adult Hepatitis and Adult Cancer, and part of items for TB medicines. However, none of these programmes met 100% of total need, reaching 87%, 89% and 69% of need respectively on average³⁷. Here it should be noted that reaching 100% need is beyond control of UNDP as medicines are procured based on the available funding and decisions on additional procurement are taken by MoH.

The Project's achievements in meeting delivery timings were less good. Only 25% of all deliveries arrived on time in the 2015 budget year, with more than two-thirds of those delivered with a delay varying between 31 and 90 days. Even though the share of on-time deliveries improved to around 70% in the subsequent years, it did not reach the targeted 95%, and the split in terms of days of delay remained more or less the same year-on-year - 53% of delayed deliveries arrived with 30 or less days of delay, 27% of deliveries were delayed for 31-60 days and around 19% were late by more than 90 days.

2. Resources (funds, human resources, time, expertise) to achieve the relevant outputs and outcomes were allocated strategically

Medical procurement

Given the specific procedure requiring the annual selection of specialised procurement organisations by the MoH and the award of disease programmes for procurement, which takes place once the year has started, it is difficult for UNDP and other agencies to reliably estimate in advance the resources (financial and human, and other) required to fulfil the Project.

³⁶ All values are provided with respect to the disease programmes selected for the procurement efficiency assessment ³⁷ The assessment of whether 100% quantity need was reached was made only based on those items in a disease programme for which additional quantities were procured

Stakeholders' opinions on personnel changes at UNDP CO varied. Some felt that following staff turnover in 2018 there was a gap in procurement expertise compared to 2016 and 2017. Others felt that the staff changes did not have a negative impact on deliveries and that the level of staff expertise remained broadly similar.

All stakeholders admitted that the overlapping of procurement for several budget years within one calendar year meant that UNDP procurement and logistics staff were often overloaded and that this may have created extra tension and impacted upon performance.

Development component

The development component was relatively small and had a limited budget when compared to the large scale medicines procurement activities (for the five consecutive years the development component funded by UNDP, UBRAF, SHiPP and other sources together with the project management cost [staff and others] represented just 1.7% of the total project budget of around USD 525 million or 0.3% without the project management cost [just the programme activities]). The Project started as an emergency procurement project and the programme component had to respond to ongoing development needs as procurement capacity developed. Additionally, the programme component was, and still is, very dependent on revenue received as a result of the procurement activities by UNDP CO and other UNDP sources (UBRAF, SHiPP, etc). These programmes have their own logic and planning cycle, in which UNDP acts as an implementer. This emergency nature of the Project impacted on the adequacy of planning and the M&E framework.

UNDP's health interventions were planned based on AWPs and UNDP project documents. They were mostly short-time projects or interventions covered by the Project budget (except SHiPP and UBRAF funding). The evaluation team felt that there was no effective tracking system, which listed all the health interventions of the H&T programme for the past five years, providing a breakdown of key inputs (people, purchases, partnerships, etc.) that were necessary to deliver the outputs. Such a system would monitor UNDP staff time from Ukraine and HHD, estimate their costs and include them into the Project budget. The first extensive annual progress report was only prepared for the Project in 2019, and additionally explored key elements of the H&T programme and relevant developments from earlier years.

The Project had very limited human resources devoted to the programme element - usually no more than one middle level professional supported by UNV and ICs. The position of M&E associate was introduced in the middle of 2017. At the same time stakeholders interviewed felt that UNDP efficiently combined human resources by engaging Ukrainian staff and, on ad hoc basis, international UNDP experts (HHD/GF HIST team), as well as local staff and external contractors (e.g. ICs, patient CSOs) to achieve outputs and deliver outcomes.

3. Produced results (outputs and outcomes) were mostly within the expected timeframe

Medical procurement

UNDP performance on ensuring improved availability of medicines and effectiveness of diagnosis and treatment through a stronger national health care procurement system is measured based on several output indicators defined in the effective Project Document. Each indicator has set target values for each of the budget years, and a specific timeframe within which they are supposed to be achieved. The achievement of target values of output indicators is then assessed and reported in annual progress reports.

Although there was variance between planned and achieved values, UNDP achieved the set targets for the share of agreed health products procured and delivered (in financial terms) and the agreed share of the total number of health products delivered. However, the delivery target, of 95% of health products delivered within standard time guidelines was not met. In reality on-time delivery was just about 70% in 2016-2018, as confirmed by the delivery timings analysis for the selected disease programmes.

Two more output indicators considered were the share of health products delivered under long term agreements (LTA) and the share of health products procured directly from manufacturers with the target values being 10% and 60% respectively in monetary value. Both targets were exceeded starting from the 2017 budget year. The share of items delivered under LTAs was 52% in the 2017 budget year, 46% in 2018 and 34% in 2019. The share of products procured directly from manufacturers was 81% in the 2017 and 2018 budget years and grew to 91% in the 2019 budget year.

Development component

The outputs were generally delivered on time although some activities were delayed due to both internal and external factors.

1. The E-Stock platform is not functioning yet. In 2019 the E-Stock was rated as level 1 on the M&E plan against a target of 3, indicating significant delay in implementation. The majority of stakeholders emphasised the high importance of this tool to the transparency and accountability of the public procurement system. The evaluation team recommends intensifying the next phase in the implementation of this health intervention (selecting an IT company and finding donors to share the costs). Realisation of the E-Stock programme is now planned for 2020-2021. It is important to ensure national ownership by the MoH/SoE MPU of the E-Stock platform.

2. Efforts to develop the capacity of the SoE MPU to procure medicines and medical products in a transparent, accountable and effective manner, were rated as level 2 on the M&E Plan, again, against a target of 3.

3. The Project was successful in meeting its targets on strengthening the ability of employees' and health managers at the MoH and SoE MPU to implement sustainable public procurement in a transparent, accountable and effective manner. The data demonstrated a high level of participation by women.

4. In 2019 the Project achieved its target on raising awareness and/or improvement of skills in HIV/TB and human rights by health professionals, civil servants, community leaders, justice and CSO representatives. In 2018 the target was exceeded fivefold. Over 2018-2019, the total number of persons trained was 563 against a target of 150.

5. The extent of the Project's contribution to achieving the target on public procurement legislation, enabling efficient health goods procurement was assessed as level 4 meaning that this target was fully achieved in 2019.

4. The project was mostly efficiently and appropriately managed, coordinated and monitored

The Project is a key component of UNDP's Health & Transparency Programme. Funding comes from the MoH and other UNDP resources, including UBRAF and ShiPP. Other key H&T Programme activities include the Strengthening of National Council on TB&HIV/AIDS in Ukraine project, funded by the Global Fund to Fight AIDS, Tuberculosis and Malaria. UNDP is also implementing a four-year EU-funded project, Support to the East of Ukraine – Recovery, Peacebuilding and Governance, implemented through indirect management by UNDP in partnership with UNFPA, FAO and UN Women.

UNDP Ukraine is responsible for the daily implementation of the MoH PSS Project with support from UNDP HQ and regional bureaux (HHD/GF HIST team) and the BMS (procurement team). The Project also benefits from the institutional structure of UNDP's Country Office, in Kyiv, including its financial, operations, and procurement systems (Country Office Support Services).

The work of the Project is regulated by UNDP's POPPs, SOPs and quality assurance policies (the new UNDP Quality Assurance Policy and Guidance for UNDP Country Offices on Health Products and Quality Assurance in the Supply Chain). All project staff responsible for activities related to procurement and supply of health product are bound by UNDP's quality assurance system to ensure that all health products procured and supplied by UNDP Ukraine are of appropriate quality and do not expose patients to avoidable risks.

The Project team is specifically built to ensure efficient delivery of two key MoH PSS components: medicine procurement and programme activities. The Project team leader's prime responsibility is to ensure that the Project produces the results specified in the Project Document and CSAs with MoH, to the required standards of quality and within the specified constraints of time and cost.

UNDP Ukraine also contributed to the Project covering travel expenses to workshops, covering office rent, utilities and maintenance, provision of necessary office equipment, and covering office communication costs.

The management, coordination and monitoring function improved from 2019 following reorganisation of the structure of the Health & Transparency Programme. Actions were taken to monitor progress on the Project. However, there is no evidence of monitoring regarding promotion of the SDGs, gender equality and the human rights' agenda. The M&E team confirms that the limited nature of the UNDP contribution to these areas makes effective monitoring difficult. Nevertheless, UNDP monitors these issues through UNDAF/CPD/SP monitoring: SDG indicators, and gender markers.

There have been many activities undertaken and high-quality materials and presentations produced alongside the Project, but these various health elements have not been captured and subject to monitoring. Only since 2018-19 have the progress reports been developed, describing the H&T Programme and its elements in more detail. Based on available documents and information there is no understanding on how various MoH PSS project-related health initiatives are connected with those provided outside of the Project, and this raised the questions: What is the H&T Programme? How do all these health interventions fit into one programme? What are the linkages and how are synergies being used? How is it possible to ensure the H&T Programme's coherence and effectiveness? How can the Project be properly monitored and

evaluated? It is advisable to prepare a publication describing the UNDP H&T Programme and addressing these issues.

<u>Conclusion: whilst there were some issues with individual projects, the majority of outputs</u> were efficiently managed with regard to cost and timelines.

Sustainability

Evaluation question: To what extent has the Project been able to create sustainable structures and mechanisms to ensure the sustainability of the results of UNDP technical assistance and capacity development activities?

1. UNDP's sustainability strategy, including capacity development of key national stakeholders, has been developed or implemented, and includes a mitigation strategy for possible risks that may jeopardise sustainability of the results

From the start of the Project in 2015 to date, UNDP has made a significant progress towards achieving the following set objectives, i.e. the two outputs of the Project:

- (i) improved availability of medicines and effectiveness of diagnosis and treatment, through a stronger national health care procurement system, and
- (ii) the system of public procurement is strengthened through provision of technical assistance and capacity development services to the Ministry of Health of Ukraine and national stakeholders.

The Project has produced many results which have had significant impact and laid the foundations for a smooth and gradual transition of the medicine procurement function from UNDP to SoE MPU. UNDP is firmly committed to assisting with the development of international expertise at the Ministry of Health and other healthcare environments. For this purpose, UNDP has developed an exit strategy and a road map for the implementation of the incremental transfer of the Project to the SoE MPU or other institutions designated by the MoH.

The second half of 2019 and early 2020 have brought new challenges and vulnerabilities to health procurement reform as a whole, and more importantly, seriously affected the work of UNDP in medical procurement and the capacity development of the SoE MPU. Political instability and frequent changes in leadership at the MoH, high staff turnover, and the recent COVID-19 crisis, have led to temporary delays in effective written communication between the MoH and UNDP and some ambiguity regarding the status and responsibilities of the SoE MPU. This has significantly impacted on UNDP's workplan and the timeframes adopted for implementation of the activities. There is a high level of uncertainty regarding the 2020 procurement cycle and the role of UNDP in the process.

Changes in the leadership of the MoH led to the departure of staff who were responsible for procurement at the MoH and for the transfer of the procurement function from international procurement agencies, including UNDP, to the SoE MPU. Currently, there is no institutional mechanism at the MoH capable of ensuring sustainability of the benefits of UNDP's technical assistance and capacity development for the MoH and SoE MPU. Structuring technical assistance through contracted ICs' has created additional risks to sustainability. Absence of

national ownership by the MoH and SoE MPU of the results of UNDP's TA/CB activities has jeopardised the sustainability of the results. There is an evidence of a partial loss of institutional memory at the MoH.

To address the challenges, risks and uncertainties of the situation in Ukraine and the MoH as a whole and public procurement in particular, UNDP has developed a sustainability strategy providing for several alternative scenarios for UNDP CO's role in health procurement, depending on whether the SoE MPU is able to start procurement of medicines in 2020. The strategy is subject to revision to address any possible changes in the situation. It is important to note that UNDP is ready to support the SoE MPU in 2020 should procurement fail for any objective factors (lack of effective communication between the MoH and SoE MPU, significant impacts of COVID-19, inability to reach target prices through ProZorro procurement process, etc.).

2. UNDP has undertaken regular monitoring of public/stakeholder's awareness in support of the Project's objectives and of concerns raised by stakeholders with regard to the Project

UNDP has taken action in support of the Project's objectives and of concerns raised by stakeholders with regard to the Project, including:

- Remaining in constant contact with key individuals and departments at the MOH and MPU;
- Establishing a regular communication platform for meeting with the Minister of Health to discuss and find solutions;
- Conducting necessary consultation with the government and the Parliamentary Health Committee;
- Conducting regular meetings with partners and stakeholders;
- Conducting regular meetings with patient NGOs to promote transparency and efficiency in the process;
- Surveying key stakeholders;
- Providing low-value grants to patient CSOs to provide public monitoring activities.

3. Policy and regulatory frameworks are in place that will support continuation of benefits

Policy and regulatory frameworks are in place, enabling the SoE MPU to function as a national procurement agency in 2020. Adoption of two main laws 531-IX and №532-IX by parliament on March 17, 2020 which took effect from March 18, 2020 and April 1, 2020 respectively provided the legal basis for the SoE MPU to serve as a national central procurement organisation and use the key special legal and tax benefits that have been available to UNDP and other specialised procurement organisations under the laws and regulations enacted in 2015 and subsequent years (e.g. fast track registration, VAT exemption, etc.).

Certain important decisions are awaited from the MoH to enable the SoE MPU to start procurement for 2020 (approved nomenclatures, assigned budgets by disease programmes, target prices).

The political instability which has seen leadership at the MoH change twice in spring 2020, and the recent COVID-2019 pandemic situation roll-out, led to the dialogue between the MoH and the

SoE MPU and other stakeholders of the Project being interrupted. This raised risks concerning the further steps necessary for the SoE MPU to undertake procurement in 2020. UNDP could serve as a safety net provided proper documents (CSAs) are signed with MoH.

4. The Central Procurement Agency/SoE Medical Procurement of Ukraine has the required institutional capacity to serve as an independent national procurement agency

The SoE Medical Procurement of Ukraine is gradually preparing for the takeover of procurement activities from international organisations. Since its foundation, MPU has established an organisational structure, documented operational procedures and developed drafts of tender documentation and contracts, has undertaken market analysis and has systematically built up its capacity.

MPU staff are sufficiently aware of public procurement legislation, have a thorough understanding of ProZorro procurement process and basic quality standards in medical procurement.

MPU has its own IT system, MedData, to collect needs requirements for medicines and medical devices from regional hospitals and to track the availability of medical supplies. The use of MedData is aimed at increasing the efficiency and improve the timeliness of MPU medical procurement activities. However, the results of the most recent public monitoring at the local level by patient NGOs, undertaken in 2019 for the 2018 budget year demonstrated that in the regions, awareness of MedData was very low and in most cases absent.

MPU has adopted anti-corruption policies and related documents that are in line with national anti-corruption legislation and cover key risks. Senior management of MPU pays a high level of attention to adherence by the procurement staff to MPU values and recognises the risks that may occur in the early stages of medical procurement.

The MPU plan is to start with 14 of 38 disease programmes. This seems very ambitious and may negatively influence procurement capacity.

Being one of the international parties supporting the establishment of the SoE MPU and having a solid procurement and supply chain management background in health and non-health related projects and programmes worldwide UNDP can contribute to strengthening the sustainability of MPU by:

- Providing support in the development of SOPs for areas which are not covered by relevant operating procedures;
- Sharing hands-on experience and providing relevant training on quality assurance and control at different stages of the procurement cycle;
- Sharing its expertise and delegating its professionals to MPU working groups developing category management strategies.

The above areas are found to be of the primary focus by the evaluation team, however, UNDP support to MPU could also include more specific directions such as experience sharing workshops on verifying technical compliance for medical devices or pharmaceutical patent trainings. In addition, UNDP could offer its HQ pharmaceutical and other health procurement experts as consultants supporting MPU upon request during the takeover period, as well as share the

database of trusted international QA laboratories and patient organizations that could be addressed in case controversial issues may arise. Certification of MPU staff by a recognized national or international procurement development agency, e.g. Kyiv School of Economics, IPSM Procurement, Chartered Institute of Procurement and Supply Chain (CIPS), could also be considered on later stage.

5. Assessment of the platforms and communication networks in the framework of the Project that have the highest potential for further scaling-up and/or replication

As Ukraine has the second largest HIV epidemic in Eastern Europe and Central Asia, the Project takes a range of actions to decrease the stigma and discrimination toward HIV-positive, TB-affected, sexual minorities, transgenders, and other vulnerable groups. Specifically, the Project established a successful communication platform with judges on the topic of HIV, TB, and human rights, and the role of judges in reducing stigma and discrimination. Representatives from various levels of the judicial system joined the platform to share experience and discuss challenges related to their work, especially with the most vulnerable groups. This National Judges Platform has highest potential for scaling-up.

Conclusion: the Project has not yet been able to create sustainable structures and mechanisms to ensure the sustainability of the results of UNDP technical assistance and capacity development activities.

Impact

Evaluation question: To what extent has the Project contributed to long-term changes in the national health care procurement system and thereby improved the effectiveness of diagnosis and treatment of patients?

1. Evidence of the Project's contribution to reducing corruption risks associated with public health sector procurement

UNDP made its most impactful contribution in the area of anti-corruption in public health procurement. There is strong evidence that the Project has reduced corruption risks associated with public health sector procurement:

- The share of medicines and medical products procured directly from manufactures increased to almost 80%;
- Participating suppliers came from an increased number of countries;
- Since 2015 over 80 new medicines were registered in Ukraine³⁸;
- Increased access to medicines was provided by increasing the share of generics (in certain cases leading to a 70% price decrease for a generic when compared to the branded original);
- Gradual price decrease and supply stability through LTAs;
- More medicines procured with funds saved;

³⁸ Please, refer to Annex 11 for the list of medicines registered in Ukraine under fast track registration procedure as of 15 February 2020

• Systematic quality assurance approach.

The successful experience of UNDP Ukraine in the field of procurement of medicines was reapplied in five other countries (Bosnia and Herzegovina, Kazakhstan, Moldova, Turkmenistan and Uzbekistan).

UNDP's health interventions relating to the development component of the Health & Transparency programme have made a significant impact as evidenced by the following:

- Support for the development of a central procurement agency, leading to the establishment of SoE MPU, which was endorsed by the Government in October 2018;
- Development of a roadmap for public procurement reform in line with the health reform agenda;
- The strategy for provision of access to medicines through to 2025 was endorsed in December 2018 by the CoM. The strategy aims to implement a mechanism that will ensure the quality of medicines, provide opportunities for subsidising expensive treatments and create opportunities to reduce drug prices;
- Supporting the MoH's annual AC action plans;
- Training for MoH staff on conflict of interest;
- Supporting communication on the efficiency of public procurement reform;
- Quality assurance policy development;
- Supporting the capacity of local patient CSOs promoting the development of E-Liky an electronic system for monitoring the availability of medical supplies at medical institutions (covers all regions of Ukraine, over 200,000 users, over 1,700 hospitals, over 1,000 consultants);
- Supporting development of the E-Stock platform (phase I completed) digital stock management system for medicines and medical products.

As a result, the capacity of the Ministry of Health of Ukraine to ensure transparency, accountability and effectiveness of the public procurement of medicines and other medical products has been strengthened.

2. UNDP's health initiatives (CCM, RPP, HIV/AIDS and TB response) have contributed to an effective response to HIV/TB and other health related issues in vulnerable groups and key populations

UNDP's health initiatives, including the health components of other projects (RPP Programme and CCM) have contributed to the effective response to HIV/TB and other health related issues for vulnerable groups and key populations. This is evident from analysis of numerous activities undertaken in the reviewed period.

As mentioned earlier in the report, UNDP put in place various activities, including but not limited to the following:

- The human rights-based Fast-Track City Initiative (FTCI);
- Awareness campaigns among local and national stakeholders on HIV;
- Support for the efforts of the Positive Women NGO;
- Support for the National LGBTI Conference and co-facilitation of the session on human rights and HIV together with UNAIDS and the Public Health Centre;

- Workshops on mental health for physicians and medical interns and a Self-Care, Youth Mental Health, and HIV workshop for European Public Health Week at Kyiv-Mohyla Academy;
- Various brochures on HIV and awareness capacity building programmes for judges on HIV, TB and Human Rights and provision of legal support to HIV/TB patients.

Overall, the programme has helped more than 57 health professionals, government officials, community leaders, justice officials and NGOs to raise their awareness and / or improve their skills in the areas of HIV, tuberculosis and human rights.

3. Existence of awareness and/or positive feedback received on UNDP's impact from vulnerable groups and other beneficiaries and/or stakeholders

There is a high level of awareness among vulnerable groups who are end-users of the medicines and medical products supplied by UNDP. These groups are usually patient and or parents' groups organised in most cases as patient NGOs or charitable funds. They actively use social networks and follow the MoH and procurement news, including news shared by UNDP via its social network channels. Some of them are patient advocates and have the required capacity to consolidate and educate cohorts of patients. They attend stakeholder meetings at the invitation of UNDP, participate in various conferences, events both in Ukraine and abroad, and apply for grants from international organisations. The feedback among this cohort about UNDP's interventions is generally very positive.

All stakeholders, without exception, acknowledged UNDP's impact in the area of anti-corruption and transparency in the procurement of life-saving medicines and medical products.

Feedback from patient CSOs that are end users of UNDP delivered medicines and medical products is generally positive (mindful of the special concern of patients on late/delayed supplies).

4. UNDP health initiatives have promoted the issues of gender equality, the rightsbased approach and human development in Ukraine

UNDP has taken numerous actions to support gender equality, the rights-based approach and human development in Ukraine. These have included, among other things the integration of gender issues into the medicine procurement component and support for projects aimed at empowerment of HIV-Positive Women. Specifically,

- The project-empowered HIV-positive women, in its collaboration with the NGO Positive Women, to present a poster on a Model for Gender-sensitive Services for Internally Displaced HIV Positive Women in Donetsk and Lugansk Oblasts, at the AIDS 2018 Conference in Amsterdam.
- The Project supported the National Conference of Positive Women, where the information campaign, Be Aware Be Protected, was officially launched and further disseminated through a range of communication channels in ten oblasts during the national campaign, 16 days against GBV.
- As a part of the Violence has no Excuse campaign sport and language activities were organised to empower HIV-positive women and promote a healthy lifestyle.
- In 2016 UNDP supported the NGO, the Alexander Yaremenko Ukrainian Institute of Social Research. The Institute prepared a research protocol for review: Gender analysis of

policy aimed at prevention, diagnostics and treatment of HIV on national and local levels and capacity assessment of the services providers on local level. The paper contained questionnaires for HIV-positive women and service providers.

Due to the short-term nature of the majority of these health interventions (other than the medicines procurement gender component) and ineffective planning which omitted the need for specific outputs, baselines and indicators for the programme/development component, it is difficult to estimate the results of these interventions and their short-term and long-term impact at the national and/or regional level.

5. The impact of the Project regionally and globally. Evidence of successful replications of the Ukrainian MoH PSS Project in other countries

Procurement of medicines through UNDP in Ukraine became an example of a successful approach nationally and internationally. Following the launch of procurement in Ukraine five countries in the RBEC region, Moldova, Turkmenistan, Uzbekistan, Kazakhstan, Bosnia and Herzegovina, implemented same approach to medical procurement as a temporary measure. Ukraine also implemented collaborative procurement with Kazakhstan and provided capacity building support to Kazakhstan and Moldova. UNDP plans to continue sharing its successful experience and lessons learnt globally and regionally.

Conclusion: The Project has strongly contributed to long-term changes in the national healthcare procurement system and thereby improved the effectiveness of diagnosis and treatment of patients.

Future outlook

Ukraine's health sector has been vulnerable and unstable during 2019 and early 2020. Implementation of the health sector reform launched by a former leader at the MoH (who held office as acting Minister from August 2016 through to September 2019) was interrupted and put at risk with each of the three subsequent Ministers' appointments, during the period from September 2019 through April 2020. The uncertainty regarding the continuation of the reforms as originally designed and planned, and the limited nature of their tenure, the lack of any specific strategy or plan coupled with the COVID-19 crisis, influenced the feedback of stakeholders interviewed in March 2020. None of them was able to share any clear view on the future developments in the wider health sector and in public procurement in particular. Yet, the political tension and lack of effective dialogue between the MoH's leadership and the leadership at the SoE MPU which arose in March-April 2020 put at risk further development of plans for SoE MPU to take over procurement for the list of disease programmes agreed in early March 2020.

It is currently difficult to provide specific comments on the future outlook, as it is highly dependent on the focus for the health sector in the new political context.

Generally, every stakeholder interviewed agreed that anti-corruption initiatives should continue to be implemented in public procurement in health sector. As to the specific context of the reform, as of April 2020 there were implications that the reform would not follow the previously planned course and that changes would be implemented but to what extent, is currently unclear.

It is vital for UNDP to establish dialogue with the MoH's new leadership. However, it may take time before the new leadership are ready to discuss new strategy and plans for health sector reform.

Evaluation question: What should the future steps for UNDP be to ensure the sustainability of its health programme (exit strategy, new development actions, etc.) following the end of the PSS Project with the MoH?

1. Analysis of the areas where UNDP has experience and best practice to support health reform in the public health system and health procurement in Ukraine

Based on data analysis from all sources, including interviews with stakeholders, UNDP has relevant experience and can use its best practice to continue supporting the health reform in the public health system and health procurement in Ukraine in the areas including (but not limited to) the following:

I. Technical assistance and management/technical/capacity building/support for the MoH and the SoE MPU:

- Anti-corruption and transparency (TRIPS, etc.);
- CPGs' review and updating;
- Review of nomenclatures and technical specifications and their quality improvement;
- Procurement forecasting and planning;
- SOPs to be developed to clearly provide for communication mechanisms between the MoH and SoE;
- Cost-benefit analyses linking procurement to achieving clinical benefits for patients;
- Quality Assurance policy implementation;
- Development of eligibility criteria for health professionals and CSOs/patient organizations for their involvement with the MoH at all stages of public procurement process.

II. Digitalisation of medical supply-chain management: implementation of the digital stock management system (E-Stock) jointly with development partners

III. Support for HIV/TB affected people and key populations, capacity building of NGOs/CSOs, awareness-raising campaigns, upholding human rights, promotion of gender issues, communication platform for judges, LEAs, promotion of SDGs

IV. Joint projects with other partner agencies and international organisations (WHO, UNICEF, UNAIDS, World Bank) in the East and in other regions of Ukraine, support for decentralisation and strengthening local governance, CBA implementation, and promotion of the Sustainable Health in Procurement Project (SHiPP).

2. Evidence of the changes or proposed changes to be made in UNDP health initiatives to account for the changing context of decentralisation and local governance reform. Adjustments to previously developed priorities, focus areas for interventions and design of future UNDP initiatives (implemented or discussed) to ensure sustainability of interventions

UNDP has produced its annual progress report for 2019 in which it proposes new priorities and actions for the following years. The AWP 2020 was developed and the PSS MoH Project Document for 2020-2022 was updated for approval by the donor.

The new changes to formulation of project outcomes and outputs in UNDP reports demonstrate the revised approach to UNDP health interventions that should account, among other things, for the changing context of decentralisation and local governance reform. However, based on the evaluation, there is no clear vision for the design of future interventions.

UNDP indicates that it will be expanding the Health & Transparency portfolio by strengthening the nexus between healthcare, environment, human rights, anti-corruption and transparency, to support health reforms in Ukraine based on the key UN's concepts, such as a human-rights based approach, leaving no one behind, gender equality, women's empowerment, sustainability and resilience, and accountability.

UNDP will continue to support the RPP programme in the East, which focuses among other things on local de-centralisation. UNDP will also continue to support the CCM Project, which has been recently extended to 2022.

3. Evaluation of areas where UNDP should cease work going forward

The evaluation team considers there are none.

4. The level of UNDP's partners' readiness for a potential follow-up phase for the Project; external factors to be considered, risk and risk mitigation measures

Given the political instability and changes in senior management of the MoH and CoM, and the COVID-19 crisis, UNDP partners are currently waiting for resumption of dialogue with the new Minister of Health and more certainty about whether the SoE MPU (which has recently become a central procurement organisation) will be able to take on the assigned procurement portfolio. UNDP is ready to support the MoH and back-up the SoE MPU as a safety net in the event that MPU is unable to undertake procurement for any reason (absence of decisions from the MoH; budget issues, tender / pricing concerns, etc.).

5. Consideration of new approaches to data collection given limited in-country capacity to provide up-to-date data in limited time

State statistics are generally of poor quality. MedData does not contain all of the data necessary to monitor the procurement progress. The websites of the MoH and international organisations, including UNDP, do not contain full up-to-date data on the procurement and supply-chain management cycle.

Representatives of academia have suggested that the possibilities should be explored with UNDP's involvement to develop such dashboard or other single source of data on public procurement. Neither on the website of UNDP, nor MoH's web site there is consolidated data showing progress of public procurement, showing certain statistics (number of patients, cost of treatment, HIV medicines procured using Global Fund vs public procurement, etc.). important to various stakeholders (researchers, patients, clinicians, etc.).

6. Assessment of the progress of UNDP's healthcare interventions: new indicators to be utilised

During the evaluation, the team noted that there are no indicators to track interlinkages and synergies between various components of the H&T Programme.

Indicators for development of capacity (training, workshops, conferences) are based on the process (i.e. capture the number of participants attending rather than allowing for the evaluation of benefits and follow-up on the results of the investment). However, UNDP put in place an assessment of SoE MPU capacity, which in fact was the first attempt to formulate a baseline for efficient monitoring of capacity building. This specific assessment will be re-evaluated in two years.

Given the limited financial and human resources required to introduce new indicators, it may be advisable to use proxy indicators (e.g. surveys and questionnaires) as an additional indicator to track change/impact and value of the relevant health interventions of UNDP. The evaluation team have proposed few new indicators that could help partially address this matter.

Considering that the MoH PSS Project is expected to gradually transform and focus largely on development activities, the evaluation team have also proposed several new indicators to measure progress in the areas where national procurement system has gaps and deficiencies and where UNDP expertise as a development agency can be of relevant value. These specifically include a set of indicators aimed to promote human rights agenda and involvement of patients and other key populations in public procurement process at all stages.

For more details on the proposed set of indicators, please, refer to Annex 20.

V.IV. Lessons learnt

Lessons learnt: procurement component

- The handover of medical procurement to international organisations and UNDP in particular proved to be fully justified and showed positive results already in the first budget year. UNDP delivered around 40% reported savings against allocated budget procuring for the 2015 budget year, showed significant price decrease and savings against 2014 MoH prices making a real shift in medical procurement. The UNDP CO procurement team have reported around USD 66 million savings in state budget funds since the beginning of the MoH PSS project, allowing for the purchase of additional quantities of medicines every year and coming closer to matching 100% of need. This has become possible largely due to the direct involvement of manufacturers in biddings (around 80% of all medicines were procured directly from manufacturers), utilisation of long term agreements (over 40 LTAs signed for more than 200 medicines and medical products) and the entrance and registration of generics and biosimilars onto the Ukrainian market (more than 80 medicines were registered in Ukraine within UNDP-managed disease programmes).
- Delivery delays remain one of the biggest issues in terms of the procurement part of the Project. Although supplier performance has improved compared to the 2015

budget year, when the majority of the deliveries were significantly delayed, it still remained inconsistent and difficult to manage with some delays exceeding 90 days. There are few efficient management levers available to ensure on-time deliveries, while the situation is aggravated by further delays in the distribution of procured medicines and medical devices to end recipients by the MoH.

- Quantification, budgeting and delivery planning are key areas requiring improvement. Although all of these are beyond the direct responsibility of UNDP, they have a significant impact on project consistency and efficiency. The smoothness of the procurement cycle is disrupted by continuous review of quantities to be procured, budget reallocations, incorrect price budgeting, unrealistic delivery timings requested by the MoH and an inconsistent approach to regular tracking of the remaining stock levels, their distribution and delivery planning.
- Lack of process ownership by UNDP which comes as a result of the initial project set-up creates inefficiencies in decision-making. Acting as a procurement agent, UNDP is required to seek approvals and advice from the MoH on such issues as winning bidders and contract award (cost-estimates), (re)allocation of savings, and shelf-life or cold chain violations on delivered medicines etc., which often delays the process for weeks or months.
- There is no open resource where full information on procurement status is available to the public. Neither the MoH, nor UNDP offer a user-friendly resource/data source where anyone interested can find the necessary details on the progress of procurement. Although UNDP procurement has a positive image overall and UNDP does publish delivery schedules on its website, finding up-to-date information on procurement and delivery status, with data from the bidding stage onwards, requires significant effort, and this is likely to downgrade the Project's achievements.

Lessons learnt: development/programme component

- Investing in the development of institutional mechanisms is key to sustainability in health procurement. UNDP's impact in the field of anti-corruption and transparency in public health procurement in Ukraine in 2015-2019 was mainly achieved due to outsourcing of the procurement function to UNDP and its performance in line with best international practice rather than building sustainability mechanisms at the MoH that would ensure the sustainability of the benefits created as a result of UNDP's capacity building and other health interventions. The changes to senior management at the MoH led to an immediate interruption of the public procurement process, put at risk continued treatment of vulnerable groups of patients and increased the risk of corrupt practice returning to the MoH.
- Ministerial changes, a lack of strong leadership and changes to the political environment meant that UNDP and other organisations (UNICEF and Crown Agents) were unable to deliver all of the assistance necessary to help MoH implement several key initiatives vital for ensuring sustainability in health procurement and for real improvement of the lives of patients, i.e. proper assessment of patients' needs, forecasting and planning, and on-line monitoring of delivery of medicines to end-users in various regions of Ukraine.
- Active engagement of the MoH in the formulation, planning, monitoring and evaluation of the results and resources framework of UNDP's development activity

would contribute to its efficiency, national ownership and sustainability of the benefits of UNDP's health interventions.

- It has been difficult to evaluate various health interventions because there is no tracking system to monitor them along with all relevant inputs (people, resources, funds, etc.) and because they are not yet fully integrated and inter-linked within the **Health & Transparency Programme.**
- UNDP is still perceived as a **procurement agency in the health sector** in Ukraine rather than a development partner, and technical adviser. A strong communication strategy is required to change this view.

V.V. Recommendations

As procurement using specialised organisations has been legislatively prolonged until March 31, 2022 it is expected that UNDP will continue procuring for the MoH, although for fewer disease programmes presumably. This opportunity may be taken to build on some of the lessons learnt **in the procurement part of the Project** and improve the quality of service to the MoH as suggested below.

1. Publishing of up-to-date information on the progress of procurement and deliveries should become regular practice for UNDP. The format of the report/status file and update frequency should be aligned with the MoH and include all necessary details to provide the fullest picture on the procurement and delivery status starting from the bidding stage and onwards. The file could also indicate the standard timing assigned for a specific action/procurement stage and provide proper clarification when it is delayed. It is also advisable that the file is available both on UNDP and MoH web sites, indicating the date of the current and next update.

2. UNDP could offer its procurement and supply chain expertise to the MoH to improve quantification, budgeting and delivery planning. This revised approach could have a significant effect on the procurement cycle, allowing procurement of larger quantities at once, avoiding overlaps of budget years and reducing decision-making on budget and savings (re)allocations. This is also likely to secure better prices for larger quantities, secure on-time deliveries (primarily in cases when splitting procurement of medicines with long manufacturing cycles or short shelf life in two or three rounds has in the past created gaps in deliveries and stock-outs) and improve supply planning on manufacturers' side. The revised delivery planning approach should potentially consider stocks held in the central MoH warehouse and regional hospitals, remaining shelf life of available medicines and medical devices, and those awaiting dispatch, monthly need, minimum order/batch quantity, supplier and MoH distribution lead times. These improvements could be in parallel replicated for SoE MPU as proved working practice.

3. Managing supplier performance after contract signature should be a priority. It is advisable to develop a set of KPIs allowing the tracking and review of supplier performance on a regular basis. Some of those may include targets for on-time deliveries, QA non-conformities, quality of shipping documents etc. and be fixed in supplier contracts. KPI reporting should be also distributed to suppliers and provide for generation of mitigating actions/back-up scenarios in the event of low performance by the supplier, both by UNDP and the supplier.

4. Non-price evaluation criteria may be introduced to strengthen decision-making on bid evaluation and contract award. This would allow for proper consideration of supplier performance under previous contracts and avoiding cases when poor performing suppliers are awarded new contracts being technically qualified and offering the lowest price. Non-price evaluation criteria could include on-time deliveries (with clarification on reasons for delays), mitigating actions taken by a supplier, speed of reaction, QA compliance etc. A scoring scale and score weight should be developed and assigned to each evaluation criterion, including price and technical compliance. Thus, a contract will be awarded to a bidder having the highest score. A sample scoring table allowing consideration of non-price criteria for bidders that have a proven record of deliveries to UNDP is provided in Annex 21.

5. Supply security should be a focus both for MoH and UNDP. For cases when on-time delivery may be at risk, for example, due to placing a conditional contract, and outstanding registration of a new medicine or poor performance of a potential contract holder under previous contracts, it may make sense to develop a dedicated approach to splitting quantities between two or more suppliers guided by total cost of ownership principles in order to avoid delays and stockouts.

Taking into account the project set-up and the MoH's role as a customer and often as the key decision-maker most of the suggested recommendations on procurement part can be implemented only on the condition that the MoH is directly involved and supportive.

For the development component, the list of specific actions generated through this evaluation and intended to improve some of the most critical aspects of the programme identified includes the following:

6. Updating the MoH PSS Project Document and submitting it to the Board Meeting

Although board meetings were held regularly, and with the participation of MoH, development activities provided under the MoH PSS Project to the MoH since 2015 to date have never been formally defined in sufficient detail by the parties, i.e. MoH and UNDP, in the Project Document. This led to lack of ownership and monitoring on the part of the MoH. The evaluation team recommends that UNDP updates the Project Document and submits it to the next Board Meeting for MoH's approval. No Board Meeting has taken place yet to examine the results from 2019. The Project Document should also be updated to cover the extension of the PSS Project to March 31, 2022 to be in line with the relevant legislation covering procurement via international organisations.

7. Strengthen Results-Based Management

Currently, the Health & Transparency Programme is an emerging programme consisting of the PSS and CCM project, and certain related health interventions (some very small-scale), rather than a coherent and fully integrated programme. It is difficult to track the inputs on such interventions and effectively monitor and evaluate them. There is visible lack of interlinkage between interventions. The TA/CB provided by UNDP under the MoH PSS project has not been registered with the Ministry of Economic Development and Trade (MERT) as ITA project/programme.

Actions proposed for the CO may include:

1) To develop a tracking and monitoring system at the programme level that would list all health interventions of the H&T programme with a breakdown of key inputs (people, purchases, etc.) that are required to deliver the outputs. This should include UNDP staff time, which must be adequately estimated, costed and captured in the project budget.

2) To establish a clear procedure by which health intervention baselines, indicators and targets are harmonised and aligned with those of the H&T Programme.

3) To strengthen collaboration between health interventions and consider potential synergies and linkages between health interventions in order to track them and promote the highest level of cooperation possible.

4) To arrange training for programme staff to ensure integrity and understanding of the H&T Programme RBM, monitoring & evaluation principles.

5) To consider whether conducting registration of the TA/CB activities to the MoH//SoE MPU as part of the H&T programme with MERT would provide additional benefits and contribute to national ownership and MoH's engagement in monitoring.

8. UNDP's positioning

In health sector, UNDP should build up its position as a **developmental technical adviser** (as opposed to the current perception of UNDP as a procurement agency) and promote its **integrated and coherent Health & Transparency Programme** securing better positioning for UNDP as a unique services provider.

This would be particularly relevant in view of the gradual transition from the medical procurement model to the development model.

9. Capitalise on expertise gained from medical procurement to build up a development service offering

UNDP has a unique experience in procurement for the MoH since 2015. UNDP should preserve its niche proactively offering a value proposition to the MoH for the services it most needs, including but not limited to capacity-building (anti-corruption) and sustainable procurement, reviewing and improving nomenclatures, implementing a QA policy, HIV/AIDS-TB response quantification, budgeting and delivery planning, cost-benefit analyses, and relationships and negotiation with international manufacturers.

10. Support for local reform and de-centralisation

UNDP CO may capitalise on its effective performance on past projects at a local level, including in managing the recovery of conflict affected areas (RPP, CBA and other programmes and projects funded by the EU and other international donors). UNDP should engage in close working relationships with national and local governments. Partnering with the EU and building on successful community-based programming, UNDP will be able to support local governments to strengthen public service delivery, focusing on the sustainable human development agenda, engagement of civil society, gender equality, transparency and development processes, and can thus use its power to forge effective partnerships with the private sector and community-based organisations (including women's organisations and civil society).

Annexes

Annex 1

Terms of Reference

1. PROJECT BACKGROUND AND OVERVIEW

1.1 Project factsheet

| Project name | Procurement Support Services to the MoH project (MoH PSS Project) | | |
|---------------------------------------|--|--|--|
| Project IDs | 90474; | | |
| Services required | Forward-Looking Evaluation of UNDP's MoH PSS | | |
| | Project | | |
| Country / Duty Station | Ukraine, national | | |
| Starting date of assignment | December 2019 | | |
| Duration of Initial Contract | Up to 3 months | | |
| Supervisor's name and functional post | Vitaliy Kuchynsky, UNDP M&E Analyst | | |
| Payment arrangements | 30 days net upon provision of deliverables, duly | | |
| | certified by UNDP | | |

1.2 Project background and context

After the 2013-2014 Revolution of Dignity, the new Government has made a breakthrough in anti-corruption policy, legal and institutional reforms by adopting an anti-corruption strategy and legislative package which strives to bring the country into compliance with international anti-corruption standards. True to this commitment, the Government of Ukraine, particularly the Ministry of Health, in cooperation with civil society initiated the reform of the state healthcare procurement, as one of the most important ones.

Mindful of the long-lasting nature of such a reform process, and of the need to avoid further disruption in the provision of certain medicines to Ukrainian patients, in 2015 the Parliament of Ukraine modified the national legislation and temporarily transferred the procurement of the essential medicines and medical devices to international organizations until March 2019. In late 2018, the Parliament extended the legislation which enables international organizations such as UNDP to procure the medicine and medical products until the end of March 2020. On 19 September, the Verkhovna Rada approved bill No. 1076 in second reading, which extended the medicines procurement through international organizations for another two years. As a result of the March 2019 elections a new President was elected by a swaying majority of 75 % of national votes. The July Parliamentary Elections ended with the Presidential party getting absolute majority in the Parliament as well. These rapid political changes resulted in the new political landscape and reform agenda in the country. With the limited capacity of MoH in health procurement (Central Procurement Agency created in late 2018), it's important to understand how the procurement of medicine and medical products will be performed after March 2022.

Back in n 2015, UNDP started procuring medicines and medicinal products on behalf of the Ministry of Health of Ukraine, as an emergency response and following a request of the government of Ukraine. This emergency temporary measure was designed to restore supply of medicines to Ukrainian citizens, which had been previously interrupted due to inefficiencies. The necessary cost sharing agreement was signed at the end of 2015 and since then UNDP conducted procurement for 111 programmes brining additional savings for more than \$66 mln as of now

The Procurement Support Services to the Ministry of Health of Ukraine project (MoH PSS Project), the largest project of UNDP Health&Transparency Programme, aims to strengthen the national healthcare procurement system and thereby improve the effectiveness of diagnosis and treatment for Ukrainian patients. In the short term, UNDP provides support to the Ministry of Health for cost-effective and timely procurement of life-saving medicines and medical products in Ukraine. In the long term, in cooperation with UNICEF and WHO, UNDP helps the Ministry of Health to develop its own operational and professional capacity to efficiently perform medicine procurement, based on international standards. As soon as a designated agency under the Ministry of Health and reaches the required capacity to manage a fully functioning national procurement system, including effective and accountable supply chain management, has appropriately trained personnel and efficient management processes that meet international standards and guarantee that healthcare needs of all Ukrainians are met with integrity, transparency and accountability, UNDP will progressively hand over the procurement of medicines to the assigned agency under the Ministry of Health.

Additionally, to the health reform challenges, Ukraine continues to have a concentrated HIV epidemic among key populations (including people who use drugs, sex workers, men who have sex with men, transgender people and prisoners). The HIV epidemic is characterized by a growing number of registered HIV cases in most regions of the country. The rapid assessment data of HIV service organizations report indicates growth of risk behaviour (especially in the collective centres for internally displaced persons, losses of prevention networks and increased use of drugs (including injecting). UNDP MoH PSS Project contains a component related to HIV/TB response in Ukraine.

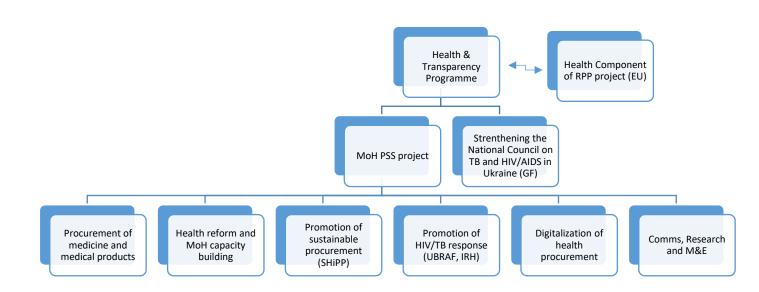
In 2018 UNDP began implementation of the Sustainable Health in Procurement Project (SHiPP) in collaboration with Health Care Without Harm (HCWH), and funded by the Swedish International Development Agency, that aims to reduce the harm to people and the environment caused by the manufacture, use and disposal of medical products and by the implementation of health programmes. SHiPP is a four-year project aiming to promote sustainable procurement in the health sector, in the United Nations (UN) Agencies, and in key project countries through the reduction of toxicity of chemicals and materials in health products, the reduction of greenhouse gases in the supply chain and the conservation of resources. Project countries include Guatemala, Moldova, Ukraine, Tanzania, Vietnam, and Zambia. Since January 2013 UNDP helps to strengthen the capacity of the National Council on TB and HIV/AIDS (NTHC) in fulfilling its functions of the Country Coordination Mechanism in line with the requirements and recommendations of the Global Fund to Fight AIDS, TB and Malaria. These include the oversight function, involvement of all stakeholders, and ensuring consistency of response of the National Programs on TB and HIV/AIDS and the Global Fund grants.

As part of a new four-year funding agreement with EU titled Support to the East of Ukraine – Recovery, Peacebuilding and Governance to be implemented through indirect management by UNDP in partnership with UNFPA, FAO and UN Women, UNDP will work with stakeholders in the crisis-affected regions of Ukraine on supporting decentralization reform and good governance, economic recovery and MSME's development, community security and social cohesion, as well as the health reform promotion. As part of the Health Component, the Programme will support the health reform rolling out by capacity building of local stakeholders in strategic planning, promoting transparency, integrity, anticorruption and best procurement practice, ensure the patients' oversight and monitoring, health promotion, awareness raising, and behavioural change and support to the primary health care reform at the local levels in the East of Ukraine.

UNDP seeks to conduct a forward-looking evaluation of the MoH PSS Project to formulate the future vision of UNDP's work in health area. The nature of the evaluation is largely a management tool to provide the Government of Ukraine, programme team and stakeholders with an account of the project's results assessed against the initial plans, project documents and cost-sharing agreements, provide recommendations and guide development of more consistent and result-oriented Health & Transparency Programme (the Health Programme).

2. SCOPE AND OBJECTIVE OF THE ASSIGNMENT

<u>The main objective of the assignment is to conduct a forward-looking Evaluation of the Procurement</u> <u>Support Services to the MOH project.</u> The purpose of the evaluation is two-fold: a) to assess the implementation of the MoH PSS Project, both its medicine procurement component (at least 5 nosologies [TBD] procured from 2015-18 budgetary years³⁹) as well as its development/programme component using generally accepted evaluation criteria and draw lessons learned; and b) to provide recommendations and inform the future development of UNDP's health activities.



This forward-looking evaluation will assess the project's performance against the review criteria: **relevance**, **effectiveness**, **efficiency**, **sustainability and impact**. The evaluation should specifically explore the issues of the project's effectiveness, interlinkage with other UNDP's initiatives stated above, and initial impact referring to the project's document as well as the current legislation. The cross-cutting issues such as gender and human rights as well as other UNDP programme principles should be additionally considered per UNDP's evaluation guidelines. The evaluation should propose potential options of using the UNDP approaches to reform the health sector and the system of public procurement in Ukraine for possible new interventions in this area. More specifically, it will cover, but not be limited to, the following areas and PRELIMINARY questions:

A. RELEVANCE

The report will examine the extent to which the UNDP health interventions are relevant to the:

- Country context: How relevant are UNDP's health interventions to the Ukrainian society in general and specifically for the Government's needs and priorities? To what extent are the project aligned with the policies and strategies of the Government, SDGs as well as UNDP/UNDAF country programme strategy?
- How relevant are other UNDP's health interventions including the CCM project and the health component of the Recovery and Peacebuilding Programme to the country needs? How these activities contribute to the development of a coherent and efficient Health&Transparency Programme?

³⁹ The selection of programmes will be undertaken jointly with the project team and will be based on the priorities of the EU-Ukraine Association Agreement (Charter 22 Public Health).

- Does the Project fulfil the needs of vulnerable groups (HIV/TB, orphan diseases, autism, etc)? Are there any gender issues considered and what can be done additionally to capture these needs?
- Does the Project remain relevant considering the changing environment while taking into consideration the risks/challenges mitigation strategy? Is there a need to reformulate individual projects' design and the projects' results framework given changes in the country and operational context (in case the project will be extended in 2020)?

B. EFFECTIVENESS

- Assess the overall performance of the Project with reference to its respective projects documents/cost-sharing agreements, strategies, objectives and indicators, and identify key issues and constraints that affected the achievement of the project's objectives.
- What are the results achieved beyond the logical frameworks, particularly, referring to the new legislation on public procurement which expected to reduce the delivery time and the costs, and to improve the quality of procured medicines, vaccines and medical products? What were the supporting factors? What are the main lessons learned from the partnership strategies and what are the possibilities of replication and scaling-up?
- What could have been done differently in the project (from a methodology and/or activity, or resource usage point of view) to implement the project more effectively?
- How the future interventions could build on or expand the achievements?
- How have stakeholders been involved in the Project implementation? How effective has the health interventions been in establishing ownership (e.g. by the Central Procurement Agency/Medical Procurement of Ukraine)?
- How well the project was able to follow the key environmental sustainability policies and practices to lower the negative environmental and social impacts of procurement to contribute to the development of a more sustainable health sector?

C. EFFICIENCY

The extent that to which (see detailed requirements below):

- To what extent the Project is cost effective. Is the Project using the least cost options? Has the cost and delivery time of the procured medicine and medical products decreased, and if yes for how much? Is the procurement conducted by UNDP more efficient than other procurement conducted by state and private agents?
- Have resources (funds, human resources, time, expertise, etc.) been allocated strategically to achieve the relevant outputs and outcomes?
- Has the Project produced results (outputs and outcomes) within the expected time frame? Was implementation delayed, and, if it was, did that affect cost effectiveness or results?
- Was the projects management, coordination and monitoring efficient and appropriate?

D. SUSTAINABILITY

Sustainability is understood as the likelihood of continued benefits after the intervention ends. Assessment of the sustainability of the Project results will be given special attention.

- To what extent are the project's results (impact, if any, and outcomes) likely to contribute after the interventions' ends? Define the areas that produced the most sustainable results, and the most promising areas requiring further support and scaling-up in the course of future interventions.
- Is there sufficient public/stakeholder awareness in support of the Project's long-term objectives?
- To what extend the Central Procurement Agency (Medical Procurement of Ukraine), supported by UNDP, has the necessary capacity to conduct efficient procurement of medicine in Ukraine? What future steps could be undertaken by UNDP to ensure sustainability of the Agency.

 Is the Project's activity likely to continue, be scaled up, replicated and increasingly contribute to the health reform and sustainable public procurement after the end of the interventions? Define which of the platforms and communication networks developed in the framework of the Project have the highest potential for further scaling up and/or replication.

E. IMPACT

- Has the Project contributed or is likely to contribute to long-term changes for the national health care procurement system and thereby improve the effectiveness of diagnosis and treatment of the patients of Ukraine? Did the Project contribute to reducing corruption risks associated with public health sector procurements in the past? Did the project contribute to effective response to HIV/TB and other health related vulnerable groups?
- What impact had the Project on the representatives of vulnerable groups?
- What impact the project had regionally and globally (governments and UNDP). How successful are the replications of the Ukrainian MoH PSS Project in other countries?

F. FUTURE OUTLOOK

- Considering that the legislation enabling the international organizations such as UNDP to undertake the procurement of medicine on behalf of the Government ends in March 2020 what should be future steps for UNDP to ensure sustainability of its health programme (exist strategy, new development actions, etc.).
- Based on the UNDP experience as well as other reforming partners, what are the best future options for UNDP to support the reform of the public health system and health procurement in Ukraine?
- What should be the priorities, focus areas of intervention and design of future UNDP initiatives to ensure the sustainability of interventions considering the changing context of decentralization and local governance reform?
- What approaches should be further utilized by UNDP? What actions should be dropped?
- What is the level of UNDP potential partners readiness in a potential follow up phase for the Project? What are the external factors to be considered, risks and risk mitigation measures?
- How to improve the data collection mechanism considering limited country capacity to provide upto-date data in limited time?
- Which new indicators should UNDP utilize to assess the progress of its healthcare interventions?

The final list of evaluation questions and tools to be proposed by the evaluator and agreed with UNDP.

Recommendations on the cost efficiency assessment.

As part of the evaluation exercise, an efficiency assessment on the procurement of medicine and medical products needs to be conducted for at least 5 nosologies. The selection of programmes will be undertaken jointly with the project team and will be based on the priorities of the EU-Ukraine Association Agreement (Charter 22 Public Health). This scope of activities foresees:

- Analyse changes in the quantity, prices and delivery time of procured pharmaceuticals, medical supplies and equipment within the state programmes implemented by UNDP for the implementation period of the 2015 to 2018 state budget years.
- Provide baselines for the procurement of medical supplies and equipment for the selected programmes.
- Compare the cost of UNDP procurement of medicines and medical equipment with the same items procured by state or nonstate agents.

- Compare total budgetary expenses (unit costs, logistics, administrative, currency gain/loss, VAT and other costs of UNDP) under the 2015-2018 procurement cycle with the same package of goods of the Ministry of Health, considering the exchange rate fluctuations of the reference period.
- Determine whether there were significant changes in nomenclature of the pharmaceuticals, medical supplies and equipment planned for procurement that could have been related to the partial shift of the procurement function to the international organizations.
- Analyse for potential strengths and weaknesses the two separate scenarios where tenders are conducted by the MoH and by UNDP:
 - o contract implementation controlling process,
 - o marketing and procurement notices dissemination potential,
 - o registration of new items,
 - savings and benefits,
 - o reference prices,
 - reaction on the critique.
- Conduct interviews/meetings with key partners for validating the information and data, specifying the procedures, obstacles and decision made the influenced the efficiency of the costs.

3. EVALUATION APPROACH AND METHODOLOGY

3.1. Methodology

The scope of the evaluation will cover all activities undertaken in the framework of the Procurement Support Services to the MOH project as well as some elements of other UNDP's health interventions. The project's effectiveness and initial impact should receive special attention. Given the forward-looking nature of the evaluation, the Evaluator will: a) compare planned outputs of the individual projects to actual outputs and assess the actual results to determine their contribution to the attainment of the project's objectives, as well as b) provide clear recommendations for the follow-up phase of the project and the Health Programme in general, based on identified lessons learned in key areas. These findings will serve to inform the development of the follow-up phase of the MOH PSS Project and consolidate the UNDP Health Programme in general.

The evaluation will need to use mixed methods and tools to ensure that data gathering and analysis deliver evidence-based qualitative and quantitative information, based on diverse sources: desk studies and literature review, cost-benefit analysis, individual interviews, surveys and direct observation. This approach will not only enable the evaluation to assess causality through quantitative means but also to provide reasons for why certain results were achieved or not and to triangulate information for higher reliability of findings. The concrete mixed methodological approach will be detailed in the inception report and stated in the final report. All data provided in the report should be disaggregated by gender and vulnerability.

The evaluation is expected to follow a participatory and consultative approach ensuring close engagement with the project, government counterparts, international partner organisations, UNICEF, WHO, UNDP Country Office (CO) and projects team at all stages of the evaluation planning and implementation. The evaluation will assess the extent to which the projects were successfully mainstreamed with UNDP strategic priorities, including eradicating poverty, accelerating structural transformations for sustainable development a building resilience to crises and shocks.

The evaluation of the project's performance will be carried out against the expectations set out in the costsharing agreements, project Logical Framework/Results Frameworks, relevant legislation on procurement which provides performance and impact indicators for project implementation along with their corresponding means of verification. New set of indicators (with baselines) for a new wave of funding should be proposed. The evaluation will assess the key financial aspects of the projects. The evaluation should provide a proposed design, methodology of evaluation (methods, approaches to be used, evaluation criterion for assessment to be proposed), detailed work plan and report structure to UNDP prior to the start of fieldwork; these documents and the list of organizations and other stakeholders to visit should be agreed with UNDP. While proposing the methodology, the Consultant should be guided by UNDP approach to programme/project evaluations⁴⁰.

The evaluator is expected to develop and present detailed statement of evaluations methods/approaches in the inception report to show how each objective and evaluation criterion will be assessed.

The methodology will be based on the following:

- 1. Desk review of the documents listed below (but not limited to):
 - a) The original project documents, databases monitoring reports, action plans, M&E frameworks, assessments, and financial documents (such as the cost-sharing agreement with MoH);
 - b) Notes from meetings involved in the projects (such as board meeting minutes);
 - c) Other project-related material produced by the projects (such as datasets, publications, audiovisual materials and consultancies reports).
- Cost efficiency assessment of the procured medicine and medical products for at least 5 nosologies within 2015-2018 procurement cycle. The selection of programmes will be undertaken jointly with the project team and will be based on the priorities of the EU-Ukraine Association Agreement (Charter 22 Public Health).
- 3. Interviews with the relevant UNDP Country Office and the Project's management and staff, MoH and the various national and sub-regional authorities dealing with the Project activities as necessary, to provide in-depth briefing on the interventions, its results, context of partnerships with different stakeholders etc. as well as vision for future.
- 4. Interviews and/or focus groups discussions with partners and beneficiaries. Partners and beneficiaries can be divided into three distinct groups:
 - a) Patient organizations and other civil society organizations and associations;
 - b) Government institutions (including but not limited to MoH, logistics' state entities, State expert centre, others);
 - c) International development actors active in the field of intervention (EU, USAID, UNICEF, WHO etc).

Debriefing session with UNDP's stakeholders will be arranged for discussing the evaluation findings, results and recommendations.

3.2 Deliverables

The company should provide the following deliverables:

| | description | Timeframe |
|--|-------------|-----------|
|--|-------------|-----------|

⁴⁰ http://web.undp.org/evaluation/handbook/documents/english/pme-handbook.pdf

| | Output : Final evaluation report containing all required annexes indicated in the paragraph #3 of the present TOR, submitted to UNDP, MoH for final review and validation. | |
|----------------|---|-----------------|
| Deliverable #5 | Collect, review and incorporate comments from UNDP, MoH and others into the final version of the evaluation report (in English, no more than100 pages). Finalise Power Point presentation to be distributed to general public (should be a stand-alone doc). | Till 15/03/2020 |
| | be held with the Contractor prior to the event. Output: PowerPoint presentation prepared and delivered during the joint meeting of interested parties (to cover major findings and lessons learned from the evaluation as defined in section 3 of this TOR with diagrams/pictures, where applicable). | |
| Deliverable #4 | Prepare a detailed PowerPoint presentation of the evaluation study (in English) and present the results during the meeting between UNDP, MoH and other key stakeholders (can be arranged also distantly via Skype depending on meeting arrangements. Consultations regarding UNDP expectations from the presentation will be held with the Contractor prior to the quest. | Till 08/03/2020 |
| | Output : draft report in English produced and submitted for UNDP comments (<i>UNDP review will take up to 10 working days</i>). Tables of baselines and tables of the unit costs of the same medicine products procured by state or nonstate agents submitted to UNDP. | |
| Deliverable #3 | Produce a draft report of the evaluation covering all items detailed in the paragraph #2 of the present TOR with definition of the lessons learned and recommendations for the future. The draft report should also contain detailed set of indicators (with baselines) for a possible new wave of funding. | Till 23/02/2020 |
| | Initial findings discussed in a wrap-up session with the Project team and UNDP CO (can be done on-line via Skype conference). | |
| Deliverable #2 | Based on the developed methodology and data gathering tools, conduct the research of the available project documentation, consultations and interviews with the project staff and project partners. Examine how stakeholders assess the activities and what are their concerns and suggestions. Clarify issues that emerge from the preliminary analysis of the intervention and require hard and soft data to substantiate their reasoning. Discuss the existing needs in the field of the health sector development and how the follow-up phase of the project should address them. Collect and analyse feedback from the partners. | Till 31/01/2020 |
| | evaluation methodology); draft structure of the final evaluation report; preliminary interview plans are developed and submitted to UNDP. | |
| Deliverable #1 | to UNDP. Output: Draft inception report in English (with draft description of the | Till 22/12/2019 |
| | Develop draft evaluation methodology to conduct the Forward-Looking Evaluation, propose a draft structure of the final evaluation report; prepare preliminary interview plans. Submit all the required documents | |

Copyright

The title rights, copyrights and all other rights are regulated by Annex 4.

5. Proposed payment schedule

Payment Method: 30 days net

Payments will be made in 3 tranches according to the following payment schedule:

- First payment upon satisfactory submission and approval of Deliverable #1(25%);
- Second payment upon satisfactory submission and approval of Deliverables #2 and #3 (50%);
- Third payment upon satisfactory submission and approval of Deliverable #4 and #5 (25%).

6. Management Arrangements

The Company shall be responsible for managing the process of the work implementation, its resources, logistics and expenditures related to the tasks in timely and accurate manner.

7. Monitoring/Reporting requirements

The company will work under the overall guidance of the M&E and relevant Project team members, and direct supervision of the project coordinator.

The company has to consult with UNDP on all steps of the process and proceed to the next step only upon obtaining approval on the accomplished step.

The company should arrange its activities based on the principle of constructive co-operation. It is mandatory to take into account all proposals of UNDP CO M&E and project team.

The electronic version of final report should be prepared and submitted for clearance to UNDP not later than abovementioned fixed dates.

UNDP requirements to analytical reports

The key product expected is a comprehensive evaluation report (no more than 60 pages without annexes, single spacing, Myriad Pro font, size 11), which includes, but is not limited to, the following components:

- Executive summary (up to 3 pages)
- Introduction
- Evaluation scope and objectives
- Evaluation approach and methodsⁱ
- Development context and project background
- Data analysis and key findings and conclusions
- Lessons learned and recommendations for future intervention (including viable ideas on work directions which could be sharpened and further enhanced in the next programme phase)
- Annexes: TOR, list of people interviewed, interview questions, documents reviewed, proposed new indicators, etc.

<u>The conclusions</u> related to the implementation of the Project should be comprehensive and balanced, and highlight the strengths, weaknesses, challenges and outcomes of each intervention. They should be well substantiated by the evidence and logically linked to the evaluation findings. They should respond to key evaluation questions and provide insights into the identification of and/or solutions to important problems or issues pertinent to Project beneficiaries, UNDP and the Government of Ukraine.

<u>The recommendations</u> for the follow-up phase of the MoH PSS Project and the Health Programme in general should identify how best practices and achievements of the Project can be scaled up or proliferated to increase the positive impact of the intervention on medical procurement in Ukraine and health reform, as well as adapt/strengthen the theory of change of the interventions, based on interviews with partners and beneficiaries and desk analysis. The recommendations need to be supported by an evidential basis, be credible, practical, action-oriented, and define who is responsible for the action - to have potential to be used in decision-making.

The annexes should be duly numbered; all tables and figures should contain references to sources and be numbered; there should be references to them in the text of the report. The report should contain a bibliography and list of Web-resources, if relevant.

The final report should take into account the UNDP analytical standards and standards for writing reports. The report format (layout, text borders, format of charts and tables, format of titles, subtitles and main text, etc.) should provide for a convenient reading of the document and be in line with basic requirements to design (aesthetics) of such kind of documents.

The Report should be logical and understandable and have a limited number of specialized terms. It should also have a clear structure and be broken into sections (subsections).

The assessment shall be carried out objectively without consideration of interests of any parties. All points of view as regards the events and processes shall be provided and compared.

The Company shall provide the report in the electronic form (.doc format, initial materials and annexes .doc, *.xls formats).

Experience and qualifications requirement

The Company/Organization should propose a strong evaluation team who will comprise experts, national or international, with a solid M&E and economic background and respective practical experience of evaluating both development interventions and procurement projects. One of the team members will be assigned with the Team Leader responsibilities. Specifically, the following general requirements will apply:

- The Company/Organization should be multi-national entity officially registered;
- At lest ten years of international or national experience of carrying out project/programme evaluations, economic and cost-benefit assessments and similar.
- Proven experience of conducting studies in health economics, finance or other relevant fields would be a strong asset;
- Previous experience of work in the region, particularly on the issues of health reform, medicine procurement and similar would be a strong asset.
- Experience of working with international organizations and UN agencies in health area would be a strong asset.

8.2 Requirements for the Company Team members:

Evaluation Team Leader:

- At least Bachelor/Master's degree or equivalent in Health Economics, Public Health, Data analysis, or other relevant area;
- At least five years of professional experience in programme/project evaluations, economic research, and analysis;
- At least three years of professional experience leading a team or managing different studies and projects;
- Fluency in English;

• Knowledge of Ukrainian and Russian would be an advantage;

Evaluation Analyst:

- Bachelor/Master's or equivalent degree in Health Economics, Public Health, Data analysis, or other relevant area;
- At least five years of professional experience with data collection, financial analysis;
- Good knowledge of English;
- Fluency in Ukrainian and Russian.

The Company/Organization may include additional team members with relevant qualifications as it finds appropriate to implement the assignment.

¹ The Projects should be evaluated in accordance with UNDP Evaluation Policy.

List of key documents consulted

1. Methodology:

- The revised UNDP Evaluation Policy (DP/2019/29, 5 July 2019), available at http://web.undp.org/evaluation/documents/policy/2019/DP_2019_29_E.pdf
- UNDP Handbook on Planning, Monitoring and Evaluating for Development Results (PME Handbook, 2009), available at
 - http://web.undp.org/evaluation/evaluations/handbook/english/documents/pme-handbook.pdf;
- Better Criteria for Better Evaluation Revised Evaluation Criteria Definitions and Principles for Use OECD/DAC Network on Development Evaluation, 2019, available at https://www.oecd.org/dac/evaluation/revised-evaluation-criteria-dec-2019.pdf;
- Evaluation criteria-OECD, available at https://www.oecd.org/dac/evaluation/daccriteriaforevaluatingdevelopmentassistance.htm;
- Guidance on Evaluating Institutional Gender Mainstreaming ((UNEG Institutional Gender Mainstreaming, Aug 2018.), available at <u>http://www.uneval.org/document/detail/2133</u>

2. National strategic documents

- The Ukraine–European Union Association Agreement, signed on 27 June 2014
- National Strategy for Reforming Healthcare System Ukraine for the period 2015-2020 years, available at <u>https://moz.gov.ua/strategija;</u>

3. UNDP programme documents:

- Government of Ukraine United Nations Partnership Framework 2018-2022
- Country Programme Document for Ukraine (2018-2022)
- Standard Basic Framework Agreement (SBBA) Agreement between the Government of Ukraine and the United Nations Development Programme
- Country Programme Action Plan between the Government of Ukraine and the United National Development Programme for 2012-2016
- UNDP Strategic Plan 2018-2021/ Theory of Change (DP/2017/38/UNDP Strategic Plan, 2018-2021)
- UNDP, Annual report 2017 Delivering on the SDGs. Buying for a better world

4. Project's documentation

- Project Document
- Project reports
- Minutes of the Project Board meetings
- Annual UNDP ROAR reports
- Available UNDP annual work plans
- Available UNDP Annual progress report 2019
- Available M&E plans

5. Project's publications and reports

- Sustainable Development Goals: Ukraine: National Baseline Report, 2017
- Implementing the 2030 Sustainable Development Goals in Ukraine: analysis of government strategies and public policy. ISER, Institute for Social and Economic research, 2017
- Ukraine Recovery and peacebuilding assessment/ Analysis of crisis impacts and needs in Eastern Ukraine. Vol. I:Synthesis report.

6. Materials on UNDP and MoH's websites, FaceBook pages

List of key legislation consulted

1. LAWS OF UKRAINE

- Law of Ukraine dated 4 April 1996 No. 123/96-VR On Medicines (as amended);
- Law of Ukraine dated 25 December 2015 No. 922-VIII On Public Procurement (as amended);
- Law of Ukraine dated 19 March 2015 No. 269-VIII On Amendments to Some Laws of Ukraine Concerning Provision of Timely Access of Patients to the Required Medicines and Medical Products by Implementing Government Procurement with the Involvement of Specialised Procurement Organisations (as amended);
- Law of Ukraine dated 9 April 2015 No. 332-VIII On Amending the Tax Code of Ukraine regarding exemption from taxation of certain medicinal products and medical products (as amended);
- Law of Ukraine dated 16 January 2020 No.475-IX On making amendments to Section IX Final and transition provisions to the Law of Ukraine On Public Procurement to ensure possibility of procurement of medicines and medical products by specialised procurement organisations (prolonging procurement by specialised organisations until 30 April 2020)
- Law of Ukraine dated 19 September 2019 No.114-IX On Amendments to Law of Ukraine On Public Procurement (prolonged procurement of medical products with the involvement of specialised organisations until 31 March 2022);
- Law of Ukraine dated 17 March 2020 No. 531-IX On making amendments to certain legislative acts of Ukraine aimed at increasing availability of medicines and medical products and other goods to be procured by the Person authorised to perform procurement in the healthcare sector;
- Law of Ukraine dated 17 March 2020 No. 532-IX On making amendments to the Tax Code of Ukraine to increase availability of medicines, medical products and other goods procured on account of state budget funds, and to create conditions for procurement in the healthcare sector on account of state budget funds

2. CABINET OF MINISTERS OF UKRAINE'S RESOLUTIONS

- The Resolution of the Cabinet of Ministers of Ukraine dated 22 July 2015 No. 622 On certain issues concerning public procurement of medicines and medical products with the involvement of specialised procurement organisations (as amended)
- The Resolution of the Cabinet of Ministers of Ukraine dated 24 February 2016 No. 175 On the Strategy for the Reform of the Public Procurement System (Roadmap)
- The Resolution of the Cabinet of Ministers of Ukraine dated 23 August 2017 № 582-p. (as amended) On Approval of the Concept note on reforming the public of medicines, medical products, supplementary items and other medical devices
- The Resolution of the Cabinet of Ministers of Ukraine dated 5 December 2018 No. 1022 On Approval of State Strategy for Implementation of State Policy to ensure provision of medicines to people for the period until 2025
- The Resolution of the Cabinet of Ministers of Ukraine dated 27 November 2019 No. 1172 On certain issues concerning ensuring effective functioning of the system for procurement of medicines, medical products, supplementary items and other medical devices
- The Resolution of the Cabinet of Ministers of Ukraine dated 17 March 2011 No. 298 (as amended) On approval of the Procedure for use of funds provided in the state budget for implementation of programmes and centralised actions in the field of healthcare

List of consulted UNDP Procurement Operating Procedures

- 1. UNDP Financial Regulations and Rules (2012)
- 2. Flowchart for guiding IP cases (draft)
- 3. Internal Guidelines on Performing Site Visits to designated warehouses/logistics providers
- 4. SOP Pharmaceuticals Quality Control and sampling plan strategy (working document)
- 5. Procurement Road Map Procurement Support Services to MoH of Ukraine Project
- 6. Risk Analysis (of Conducting Medical Procurement in Ukraine)
- 7. SOP Addressing intellectual property matters in procurement of medicines by UNDP
- 8. SOP Contract Management
- 9. SOP Engaging CSO/NGO as a Responsible Party
- 10. SOP Evaluation of Offers
- 11. SOP General Considerations of Contracting
- 12. SOP Handling of Procurement Complaints
- 13. SOP Individual Contract Policy
- 14. SOP Innovation Challenges
- 15. SOP Logistics Operations MoH
- 16. SOP Long Term Agreements (LTAs)
- 17. SOP Market research & Sourcing Strategy
- 18. SOP Negotiation strategy
- 19. SOP Payment and Taxes
- 20. SOP Pre-Award Negotiations
- 21. SOP Procurement Authority and Increased Delegated Procurement Authority
- 22. SOP Procurement Ethics, Fraud and Corrupt Practices
- 23. SOP Procurement Forecasting and Delivery
- 24. SOP Procurement Methods
- 25. SOP Procurement of Goods, Civil Works and Services
- 26. SOP Procurement Oversight and Procurement Review Committees
- 27. SOP Procurement Overview and Principles
- 28. SOP Procurement Processes
- 29. SOP Shipping and Insurance
- 30. SOP Solicitation
- 31. SOP Sourcing and Market Research
- 32. SOP Submission and Receipt of Offers
- 33. SOP Sustainable Procurement
- 34. SOP Technical and Quality Criteria for review and assessment of Manufacturers and Products during bid evaluation
- 35. SOP Transactional Procurement Strategies & Procurement Planning
- 36. SOP Use of online eTendering system
- 37. SOP Vendor Sanctions
- 38. Standard Operating Procedure Template
- 39. UNDP Quality Assurance Policy for Health Products
- 40. UNPD Quality Assurance System for Health Products
- 41. Value for Money Guidelines

Evaluation matrix for development/programme component

| A. RELEVANCE | | | | |
|--|--|--|--|--|
| | o what extent are UNDP health interventions relevant to national and local policies eds of the intended beneficiaries? | | | |
| Evaluation answer 1: | | | | |
| Indicator 1.1. | The outcomes of UNDP's health interventions are consistent with priorities and needs of Ukrainian society, policies and strategies of the GoU, vulnerable groups (HIV/TB, orphan diseases, autism, etc.), SDG, and UNDP/UNDAF country programme strategy | | | |
| Indicator estimate | | | | |
| Related facts, figures and | | | | |
| references | | | | |
| Indicator 1.2. | UNDP's health interventions (CCM Project and the health component of the Recovery and Peacebuilding Programme) contribute to the country's needs and to the development of a coherent and efficient Health & Transparency Programme | | | |
| Indicator estimate | | | | |
| Related facts, figures and references | | | | |
| Indicator 1.3 | The Project fulfils the needs of vulnerable groups and key populations (HIV/TB, orphan diseases, etc.) | | | |
| Indicator estimate | | | | |
| Related facts, figures and references | | | | |
| Indicator 1.4. | The Project considers the gender issues and human rights agenda | | | |
| Indicator estimate | | | | |
| Related facts, figures and references | | | | |
| Indicator 1.5. | Outcomes and outputs of the Project remain relevant throughout the period of implementation | | | |
| Indicator estimate | | | | |
| Related facts, figures and references | | | | |
| Indicator 1.6. | Extent of adaptation of the Project to the changing environment and consideration of the risks/mitigation strategy | | | |
| Indicator estimate | | | | |
| Related facts, figures and | | | | |
| references | | | | |
| Indicator 1.7. | The individual project's design and the projects' results framework provide for an adequate response to the changes in the country and operations context | | | |
| Indicator estimate | | | | |
| Related facts, figures and | | | | |
| references | | | | |
| B. EFFECTIVENESS | | | | |
| Evaluation question 2: T system of public procure | o what extent has the Project been effective in reforming the health sector and the ment in Ukraine? | | | |
| Evaluation answer 2: | | | | |
| Indicator 2.1. | The Project has achieved its objectives as set forth in respective project documents/cost- sharing agreements, strategies, objectives and indicators | | | |

| Indicator estimate | |
|---|--|
| Related facts, figures and | |
| references | |
| Indicator 2.2. | UNDP's achievements beyond logical frameworks, including contribution to the new legislation on public procurement, reduced delivery time and the costs, and improved quality of procured medicines, vaccines and medical products. |
| Indicator estimate | |
| Related facts, figures and references | |
| Indicator 2.3. | Existence of a framework, involving the MoH and other international purchasing organisations enabling timely and effective resolution of critical issues arising in the course of the procurement (absence of planning strategies, delayed deliveries, quality of procured medicines, vaccines and medical products, etc.) |
| Indicator estimate | |
| Related facts, figures and references | |
| Indicator 2.4. | Existence of innovative technologies and/or detailed methodologies and/or activities and/or unique resources that enabled effective public procurement, including in the area of anti-corruption and transparency |
| Indicator estimate | |
| Related facts, figures and | |
| references | |
| Indicator 2.5. | Improved dialogue with vulnerable groups and/or groups of patients, which enabled resolution of concerns and issues arising in the course of procurement cycle, such as delayed medicines/vaccines/medical products, in a timely and efficient manner |
| Indicator estimate | |
| Related facts, figures and references | |
| Indicator 2.6. | Progress on capacity building for the establishment of the Central Procurement Agency, Medical Procurement of Ukraine as a national procurement agency, and public awareness about UNDP's ownership of this project |
| Indicator estimate | |
| Related facts, figures and references | |
| Indicator 2.7. | The extent to which UNDP's activities in the area of environmental sustainability in public procurement have effectively contributed to the development of a more sustainable health sector |
| Indicator estimate | |
| Related facts, figures and references | |
| Indicator 2.8. | Existence of a dialogue with the private sector, healthcare providers/ regional health authorities |
| Indicator estimate | |
| Related facts, figures and references | |
| C. EFFICIENCY | · |
| Evaluation question 3: T and timelines? | o what extent were the Project's outputs produced efficiently with respect to cost |
| Evaluation answer 3: | |
| | |

| Indicator 3.1. | The extent to which the project is cost-effective, including the extent to which the price, quantity and delivery lead times of procured medicines and medical products have improved compared to procurement conducted by the MoH or regional healthcare departments |
|--------------------|---|
| Indicator estimate | |

| Evaluation answer 5: | |
|-----------------------------------|---|
| health care procurement patients? | o what extent has the Project contributed to long-term changes in the national system and thereby improved the effectiveness of diagnosis and treatment of |
| E. IMPACT | |
| references | |
| Related facts, figures and | |
| Indicator estimate | |
| Indicator 4.5. | Assessment of the platforms and communication networks in the framework of the Project that have the highest potential for further scaling up and/or replication |
| references | |
| Related facts, figures and | |
| Indicator estimate | |
| Indicator 4.4. | The Central Procurement Agency/ Medical Procurement of Ukraine has the required institutional capacity to serve as an independent national procurement agency from 2020 |
| references | |
| Related facts, figures and | |
| Indicator estimate | |
| Indicator 4.3. | Policy and regulatory frameworks are in place that will support continuation of benefits |
| references | |
| Related facts, figures and | |
| Indicator estimate | |
| Indicator 4.2. | UNDP undertakes regular monitoring of public/stakeholder's awareness in support of the Project's objectives and of concerns raised by stakeholders with regard to the Project |
| references | |
| Related facts, figures and | |
| Indicator 4.1. | stakeholders, has been developed or implemented, including a mitigation strategy for possible risks that may jeopardise sustainability of the results |
| Indicator 4.1 | UNDP's sustainability strategy, including capacity development of key national stakeholders, has been developed or implemented, including a mitigation strategy for |
| Evaluation answer 4: | |
| | o what extent has the Project been able to create sustainable structures and ne sustainability of the results of UNDP technical assistance and capacity |
| D. SUSTAINABILITY | |
| references | |
| Related facts, figures and | |
| Indicator estimate | |
| Indicator 3.4. | The Project was efficiently and appropriately managed, coordinated and monitored |
| references | |
| Related facts, figures and | |
| Indicator s.s. | |
| references Indicator 3.3. | Produced results (outputs and outcomes) are within the expected timeframe |
| Related facts, figures and | |
| Indicator estimate | |
| In direction and in the | outputs and outcomes were allocated strategically |
| Indicator 3.2. | Resources (funds, human resources, time, expertise etc.) to achieve the relevant |
| references | |
| Related facts, figures and | |
| Related facts figures and | |

| Page | <u>103</u> |
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| Indicator 5.1. | Evidence of the Projects' contribution to reducing corruption risks associated with public health sector procurement | | |
|--|---|--|--|
| Indicator estimate | | | |
| Related facts, figures and references | | | |
| Indicator 5.2. | UNDP's health initiatives have contributed to an effective response to HIV/TB and other health related issues in vulnerable groups and key populations | | |
| Indicator estimate | | | |
| Related facts, figures and references | | | |
| Indicator 5.3. | Existence of awareness, and/or positive feedback received on UNDP's impact from vulnerable groups and other beneficiaries and/or stakeholders | | |
| Indicator estimate | | | |
| Related facts, figures and references | | | |
| Indicator 5.4. | UNDP health initiatives have promoted the issues of gender equality, the rights-based approach and human development in Ukraine | | |
| Indicator estimate | | | |
| Related facts, figures and references | | | |
| Indicator 5.5. | The impact of the Project regionally and globally. Evidence of successful replication of the Ukrainian MoH PSS Project in other countries. | | |
| Indicator estimate | | | |
| B I i i i i i i i i i i | | | |
| Related facts, figures and references | | | |
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| references F. FUTURE OUTLOOK Evaluation question 6. W | hat should UNDP's next steps be to ensure the sustainability of its health , new development actions, etc.) following the end of the PSS Project with the | | |
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| Indicator 6.5. | Consideration of new approaches to data collection mechanisms considering limited in- country capacity to provide up-to-date data in limited time |
|----------------------------|--|
| Indicator estimate | |
| Related facts, figures and | |
| references | |
| Indicator 6.6. | |
| Indicator estimate | Assessment of the progress of UNDP's healthcare interventions: new indicators to be utilised |
| Related facts, figures and | |
| references | |

KMPG Interview Plan

| N⁰ | Time | Location | Person interviewed | Organisation/title | |
|--------|------------------------|----------------------------------|--|--|--|
| 24 Feb | oruary (Monday) | | | | |
| 1 | 15:00 – 16:00 | WHO CO office, meeting | Svitlana Pakhnutova | WHO Country Office Ukraine National Pharmaceutical Supply Specialist/ NPO medicines policies, former UNDP Procurement Consultant | |
| 25 Feb | oruary (Tuesday) | | | | |
| 1 | 9:30-10:00 | World Bank office, meeting | Olena Doroshenko | World Bank, Economist Health, Nutrition & Population Global Practice, Belarus, Moldova and Ukraine | |
| 2 | 11:30 – 12:30 | KPMG office, meeting | Oleksandr Shmilo | Haemophilia Patient All-Ukrainian Association, Head of Association | |
| 3 | 13:00 – 13:30 | Conference call | Andriy Beznosenko | National Institute of Cancer, Chief Medical Officer | |
| 4 | 16:00 - 17:00 | MoH office, meeting | Andriy Semyvolos | Deputy Minister of MoH of Ukraine and MoH senior management team | |
| 5 | 18:00 – 19:00 | KPMG office, focus group meeting | Nina Astaforova-Yatsenko, Sergiy Shemet | Haemophilia NGOs patient organisations (NGO Factor D and CF Children with Haemophilia), heads of NGOs | |
| 26 Feb | oruary (Wednesda | ay) | | | |
| 1 | 9:45 – 11:00 | KPMG office, meeting | Viktor Nestulia | SoE MPU, former acting head | |
| 2 | 12:30 – 13:30 | SoE MPU office, meeting | Arsen Zhumadilov Dmytro Bigunets | SoE MPU, CEO Person in charge of anti- corruption function in SoE MPU | |
| 3 | 16:00 – 17:00 | DEC office, meeting | Tetyana Dumenko | CEO of State Expert Centre | |
| 27 Feb | 27 February (Thursday) | | | | |
| 1 | 9:30 – 10:30 | UNDP office, meeting | Tetyana Grytsenko | UNDP, Gender Issues Specialist | |
| 2 | 11:00 – 13:00 | MoH office, meeting | Oleksandr Komarida Oleksiy Tuchak Andriy Gavrilyuk | MoH, Head of Pharmaceutical Directorate MoH, Acting Anti-corruption Sector Head MoH, Head of Medical | |
| 3 | 14:00 - 18:00 | MoH office, meeting | Lyudmyla Melnychenko Ludmyla Demshevska | Directorate MoH, Head of Audit Department MoH, Head of Legal Department | |

| N⁰ | Time | Location | Person interviewed | Organisation/title |
|-----------------|----------------|--------------------------------------|--|--|
| 28 Feb | ruary (Friday) | | | |
| 1 | 14.00 – 18.00 | UNDP office, meeting | Oleksii Shafarostov Viktor Cherniavskyi | UNDP, Logistics Specialist UNDP, Procurement Associate UNDP, Procurement and |
| 1 14.00 - 18.00 | | Iryna Shchokova Olena Syniegobova | Administrative Specialist UNDP, Procurement Associate | |
| 2 Marc | h (Monday) | <u> </u> | | |
| | | | Pavlo Starobykovskyi | UNDP, Procurement Specialist |
| 4 | 45.00 47.00 | | Daryna Velychko | UNDP, Finance & HR Specialist |
| 1 | 15.00 – 17.00 | UNDP office, meeting | Anna Pylypchuk | UNDP, Data Management, Monitoring & Evaluation Associate |
| 2 | 16:30-17:30 | Arzinger office, meeting | Lana Sinichkina | Arzinger law firm, Partner, Attorney-at-Law |
| 2 | 10.00 11.00 | | Yevgenia Ocheretko | Arzinger law firm, Senior Associate |
| 3 Marc | h (Tuesday) | | | |
| 1 | 10:30 -11:00 | KPMG office, meeting | Larysa Lopata | Patients NGO Amazonki. Women against cancer, Head of NGO |
| 2 | 10:30 - 11:00 | KPMG office, skype call | Maria Adamchuk-Korotitska | Patients NGO Stop Cancer Patient Organization, Head of NGO |
| 4 Marc | h (Wednesday) | | | |
| 1 | 10:00 - 11:00 | UNDP Copenhagen, skype call | Zafar Yuldashev | UNDP CPH office, procurement specialist; former UNDP Ukraine Programme Specialist |
| 2 | 11:00-12:00 | KPMG office, meeting | Olena Volkova | Judge from Mykolayiv region. Active participant of the Judges' Platform on HIV/TB issues. |
| 3 | 14:00 -15:00 | AbbVie office, meeting | Vitaliy Gordienko | APRAD (Association of pharma companies - manufacturers of innovative medicines), Head of Board of Directors |
| 4 | 15:30 – 16:00 | MoH office, meeting | Lubov Vereta | MoH, Chief Accountant |
| 5 | 16:30 - 17:40 | MoH office, meeting | Liubov Kravets, Iryna Koroieva | MoH, Secretariat of the National Council on TB/HIV/AIDS |
| 5 Marc | h (Thursday) | | | |
| 1 | 12:30 – 13:30 | KPMG office, | Oksana Musienko | Patients NGO, CF Patients of Ukraine |
| | | focus group meeting | Vladyslav Denysenko | Patients NGO, CF 100% of Life |
| 2 | 16:00 – 17:00 | KPMG office, meeting | Kateryna Denisova | UNDP, HIV issues specialist |
| 6 Marc | h (Friday) | | | |
| 1 | 10:00 - 11:00 | Ukrvaktsyna office, meeting | Stanislav Trut | Head of SoE Ukrvaktsyna (MoH logistic partner) |

| Nº | Time | Location | Person interviewed | Organisation/title | | | |
|----------------------|--------------------|---|-------------------------|--|--|--|--|
| 2 | 10:20 - 11:20 | UNDP Istanbul, conference call | Rosemary Kumwenda | UNDP Istanbul HIV issues Regional HIV/Health Team leader, SPHS Coordinator, UNDP Istanbul Regional Hub | | | |
| | | | John Macauley | UNDP Istanbul HIV issues Regional HIV, Health and Development Programme Specialist, UNDP Istanbul Regional Hub | | | |
| 3 | 11:00 – 12:00 | KPMG office, meeting | Inna Boyko | Patients NGO, CF Patients of Ukraine, Head of CF | | | |
| 4 | 12:00 - 12:30 | UNICEF, conference call | Andrej Slavuckij | UNICEF, Chief, Health and Nutrition | | | |
| 5 | 12:30 – 13:15 | UNDP, conference call | Olena Ruditch | UNDP, RPP Programme Coordinator (Recovery and Peacebuilding Programme) | | | |
| 6 | 15:00-16:00 | EU Delegation to Ukraine office, meeting | Virginija Dambrauskaite | EU Delegation to Ukraine Policy Officer, Health and Social Policies, Support Group to Ukraine, Delegation of the European Union to Ukraine | | | |
| 10 Mar | 10 March (Tuesday) | | | | | | |
| 1 | 14:00 – 15:30 | UNDP office, meeting | Yulia Petsyk | UNDP, M&E Officer | | | |
| 2 | 15:30 - 17:00 | UNDP office, meeting | Vitaliy Kuchynskiy | UNDP, M&E Analyst | | | |
| 11 March (Wednesday) | | | | | | | |
| 1 | 9:30 – 10:00 | KPMG office, conference call | Andriy Kovalyov | Kyiv School of Economics (KSE), Lecturer; involved in Strategy Development and Piloting Procurement of SoE MPU project in Oct 2018 – Dec 2019 | | | |
| | 13:00 – 13:30 | | Yaroslav Kudlatskiy | KSE, Head of Healthcare Research Centre, Analyst | | | |
| 2 | 10:00 - 11:00 | KPMG office, meeting | Dmitry Aleshko | Legal Alliance law firm, Partner | | | |
| 3 | 10:30-11:30 | KPMG office, conference call | Ivan Zelenskyi | Patients NGO, CF Kraplya Krovi (oncology), Head of CF | | | |
| 4 | 14:30 – 16:00 | KPMG office, meeting | Nataliya Lukyanova | UNDP, former HIV and Health Programme Specialist, HIV and Health Policy Officer | | | |
| 5 | 15:00 – 16:00 | KPMG office, meeting / conference call | Iryna Rachynska | Patients NGO, CF Patients of Ukraine | | | |
| | | | Mykyta Trofymenko | Patients NGO, CF 100% of Life | | | |
| 12 March (Thursday) | | | | | | | |

| Nº | Time | Location | Person interviewed | Organisation/title | | | |
|--------------------|---------------|----------------------|--------------------|---|--|--|--|
| 1 | 10:00 - 11:00 | UNDP office, meeting | Dorin Rotaru | UNDP, Health Programme Specialist | | | |
| 2 | 16:00 – 17:00 | UNDP office, meeting | Svilen Konov | UNDP, Chief Technical Adviser | | | |
| 13 March (Friday) | | | | | | | |
| 1 | 12:00 - 12:40 | Conference call | Olena Stryzhak | Patients NGO, CF Positive Women (NGO supporting women living with HIV), Head of CF | | | |
| 28 April (Tuesday) | | | | | | | |
| 1 | 12:30 - 13:00 | Skype call | Manal Fouani | UNDP, Deputy Resident Representative | | | |

Semi-guided interview questionnaire (for UNDP, MoH, other authorities)

A. RELEVANCE

- To what extent are UNDP's MoH PSS Project and other health interventions (hereinafter together the Project) consistent with Ukrainian government needs and priorities, as well as UNDP/ UNDAF country programme strategy, SDGs and Strategic Plans?
- To what extent does the Project contribute to Ukraine's needs and the development of a coherent H&T Programme? What are the key facts, figures, achievements which demonstrate the contribution and coherence of the H&T programme of UNDP?
- Is UNDP engaging with the MoH and other stakeholders to discuss priority areas of the Project? If so, how regularly? Have you seen any adjustments to UNDP project/processes/procedures/activities and outputs following such meetings or discussions?
- Is there any priority area you would like UNDP to focus on?
- Are there any gender issues and other social and economic and human rights-based issues relevant to UNDP /the GoU/MoH? Please briefly describe.
- Is there an efficient framework mechanism established for consultation between UNDP, GoU/MoH, other stakeholders? In what way, and how does UNDP capture feedback and comments from stakeholders? Are there any follow-up actions, lessons learnt that lead to changes in the Project?
- To what extent does the Project take into consideration the context/changing context in Ukraine (change of power, developments in the East, etc.)
- In your view, is the Project responsive to other stakeholders' concerns and issues? Can you provide 2-3 examples of any requests, how they were addressed and possible follow-up actions/remedies.
- Has the Project been unresponsive to any stakeholders' requests and/or concerns? Why? Can you provide 2-3 examples with relevant explanations.
- Has UNDP led any joint activities with the MoH and other stakeholders that are relevant for health reform development? How were the outputs consistent with UNDP outcomes?
- What would you like future UNDP projects to focus on?

A. EFFECTIVENESS

- Are you aware of the key objectives of UNDP-MoH PSS Project and its aims? Do you think they have been achieved? Which have not been? Please provide examples.
- Has UNDP been involved in drafting / commenting on the new legislation / draft policies, strategic documents for the GoU/MoH/other stakeholders, aimed at improving health reform/public procurement? Which?
- To what extent are the public procurement procedures and legislation well-structured and appropriately regulated in the field?
- What is your view on the MoH's shifting of procurement of government programmes to international purchasing organisations (e.g. UNDP and other) in 2015? Was it worth? Can you provide key reasons?
- Has UNDP provided support (via technical assistance or capacity building programmes) which was helpful to the GoU/MoH/other stakeholders?
- Have UNDP initiatives such as E-Liky and E-Stock been effective, useful? What is the feedback from stakeholders? Positive or negative?
- Have UNDP's interventions been effective in reducing cost of public procurement at national/regional/local levels? Is there any evidence, facts, figures that the procurement process has become more accountable and transparent?
- Have you come across any negative feedback from CSOs about public procurement? Have these issues been addressed? How? What kind of concerns raised about UNDP/MoH procurement were most typical?
- To what extent has the Project addressed gender equality and women's empowerment, and environmental issues?

- Are you aware of any instances when corruption issues were identified at the government (MoH) and/or regional level? How were they addressed and resolved and how quickly? Was NABU or other anti-corruption authorities involved? How were the issues documented and reported to the authorities? Was it an effective way to resolve issues? Were the issues reported by you and to whom?
- Do you feel positive about the capacity building and the shifting of the public procurement function to a procurement agency (SoE MPU)? If not, why?
- Has UNDP organised/led any training/workshops/conferences, etc. alone or jointly with other partners? Have they been useful? Which of them did you find most useful and why?
- Has there been any progress with public procurement (e.g. time of delivery, quality of medicines/medical devices)?
- Has there been any progress following UNDP's health interventions at the MoH (management and staff education, management development, etc.). Do the same people at MoH consistently interact with UNDP regarding health procurement and other interventions? At which level are they?
- Are you satisfied with the contribution by UNDP management and procurement specialists in to the MoH's procurement function? Is UNDP responsive to MoH/regional health authorities' needs?
- What are your expectations of an effective procurement organisation?
- Which of UNDPs health interventions (other than the MoH PSS's project) are most effective in your view and why?
- Are there any joint activities (UNP/MoH/regional/local authorities) that have proved effective in recent years? Is there an effective dialogue between UNDP/MoH and other stakeholders?
- Has the information/data flow been effective between UNDP/MoH and other stakeholders? Which areas require improvement? Were there any concerns from vulnerable groups, medical professionals, pharmaceutical companies?
- To what extent have the level of UNDP's communication about health reform in public procurement and other interventions in health been effective? To what extent were UNDP's communication strategies coordinated with the GoU/ MoH / other authorities?
- To what extent has UNDP's activity in the area of environmental sustainability effectively contributed to the development of a more sustainable health sector?

B. EFFICIENCY

- Are you aware of how UNDP's health interventions were financed?
- In your opinion, have UNDP's interventions in strengthening public procurement and contributing to socialeconomic and other interventions been reasonable and sufficient? Please explain.
- Would you suggest reallocating financing to other priority areas? Why? And what would those areas be?
- Is UNDP more efficient in its activity than other international organisations engaged by MoH in public procurement? Why?
- Is UNDP allocating money for its health interventions appropriately? What would the optimal way for UNDP to target its money and resources in the next year or two?
- Is UNDP efficiently managing the resources provided by the MoH for procurement under national programmes to ensure timely delivery of good quality medicines and medical devices to Ukrainian patients?
- Do you find UNDP management team and staff approachable and well-coordinated?

C. SUSTAINABILITY

- Has UNDP managed to establish sustainable structure and mechanism to ensure sustainability of results of UNDP's interventions?
- Is capacity building of the SoE MPU and subsequent shifting of the procurement function to the SoE MPU the only option? Have other alternatives been considered? Has feedback from other stakeholders been considered?
- Will your needs as regards accountability and transparency be met by the established SoE MPU?

• What kind of legislation and regulations on public procurement developed by UNDP would secure the sustainability of current procurement practices?

D. IMPACT

- To what extent has UNDP contributed to long-term changes in the Ukrainian healthcare system?
- To what extent has support from UNDP been valuable to the MoH and other stakeholders, vulnerable groups?
- How would you rate UNDP's contribution to health reform in public procurement when compared to other international organisations?
- Has UNDP's impact in other areas such as the TB-HIV response, autism, gender issues been visible and clearly attributable to UNDP?
- How important has the impact of UNDP been for vulnerable groups and other beneficiaries and stakeholders?
- Has UNDP had an impact on the MoH's accountability and transparency? Was UNDP instrumental in resolving any corruption-related/conflict of interest issues related to health procurement at the MoH or at the level of regional/local authorities?
- What are the key features of UNDP's health interventions in Ukraine?
- What are the communication channels /sources of information about UNDP's interventions?

E. FUTURE OUTLOOK

- What do you expect to happen with UNDP health interventions going forward?
- What are UNDP and its partners planning to focus on in the future?
- What do you think hampers improvements in the field of public procurement of medicines?
- Are there any issues concerning public procurement pending decision at the GoU/MoH/other stakeholders' level that you expect to be resolved better, or regulated better in the near future?
- What are your expectations of the potential strategies of the MoH regarding public procurement and health reform? Will there be changes or will things continue as planned under former management?

Semi-guided interview questionnaire (for Government institutions)

A. RELEVANCE

- To what extent has public procurement via international organisations and, specifically, via UNDP matched the government's needs and priorities?
- Is the Project still relevant to your organisation's needs? Can you briefly describe your needs?
- Has your organisation been invited to participate in stakeholders' meetings to discuss priority areas that reflect your needs? If so, how regularly? Have you seen any adjustments in the UNDP project process or procedure following such meetings?
- Is there any priority area you would like UNDP to focus on?
- What gender issues and other social and economic and human rights-based issues are relevant to your institution/authority? Please briefly outline.
- To what extent does the Project take into consideration the context/changing context in Ukraine
- Is the Project responsive to your organisation's concerns and issues? Can you provide 2-3 examples.
- Has the Project been unresponsive to your requests and/or concerns?
- What would you like future projects to focus on?

B. EFFECTIVENESS

- Are you aware of the UNDP-MoH PSS Project's key objectives and purposes? Do you think they have been achieved?
- What is your view on the MoH's shifting of procurement of government programmes to international purchasing organisations (e.g. UNDP and other) in 2015? Was it worth? Can you provide key reasons?
- To what extent are public procurement procedure and legislation well-structured and appropriately regulated in the field?
- Has your organisation received any support (via the technical assistance or capacity building programme) from UNDP that helped you to effectively implement your actions/projects in a timely manner?
- Are you aware of E-Liky and E-Stock? Are they useful? Do you use them often? If not, why? Can digitalisation approaches improve health procurement and reduce corruption and make the process more accountable and transparent?
- Have you come across any negative posts on social networks about public procurement delays? Were there any concerns raised with respect to UNDP?
- To what extent has the Project has been addressing gender equality and women's empowerment, and environmental issues?
- How many instances of corruption have you faced at the government (MoH) and/or regional level? Have you reported the issues? To whom? How were they resolved and how quickly?
- Are you happy with procurement for your programme moving to the SoE MPU? If not, why?
- Have you attended any training/workshops/conferences, etc. organised by UNDP either on their own or jointly with other partners? Have they been useful? Which of them did you find most useful?
- Has there been any progress with public procurement e.g. delivery time, quality of medicines/medical devices, etc. procured?
- Have you seen any progress in the MoH procurement personnel function? Do you interact with the same people at the MoH and UNDP regarding procurement?
- Are you satisfied with the level of expertise of UNDP procurement specialists? Are they responsive to your organisations' needs?
- What are your expectations of an effective procurement organisation?

- Are you aware of other UNDP health interventions other than MoH PSS's project? Which of them are effective in your view and why?
- Are you aware of the capacity building activities of UNDP in the East (peace building and recovery programme)? If so, what was your source of information?
- To what extent has UNDP's activity in the area of environmental sustainability effectively contributed to the development of a more sustainable health sector?

C. EFFICIENCY

- Are you aware of how UNDP's health interventions are financed?
- Have you received low-value grants from UNDP for public monitoring of delivery of medicines and medical products to patients? Was it an efficient use of money in your view?
- Is UNDP more, or less efficient in its activity than other international organisations engaged by the MoH in public procurement? Why?
- Is UNDP allocating money among its health interventions appropriately? Can you suggest the optimal way for UNDP to focus its money and resources in the next year or two?
- Is UNDP efficiently managing the resources provided by the MoH for procurement under national programmes to ensure timely delivery of good quality medicines and medical devices to Ukrainian patients?
- Do you find the UNDP management team and staff approachable and well-coordinated?

D. SUSTAINABILITY

- Are you aware that the procurement function will shortly shift to the SoE MPU? What are your views on that change?
- Will your needs be met by the SoE MPU?
- What legislation and regulations relating to public procurement processes as developed by UNDP, would secure the sustainability of current procurement practices?

E. IMPACT

- To what extent has UNDP contributed to long-term changes to the Ukrainian healthcare system?
- Are you aware of the individual areas of health reform supported by UNDP and other partners? i.e. which organisation is supporting which element of health reform?
- Are you aware that UNDP has other health initiatives apart from procurement for MoH?
- Have you heard about TB-HIV response, autism, gender issues? What was your source of this information? UNDP web site? TV and radio programmes? Stakeholders' meetings? Somewhere else?
- Is the perception of UNDP among patient organisations positive or negative or neutral? Please provide 2-3 arguments.
- Have you had any corruption-related/conflict of interest issues related to health procurement? Was UNDP a source of support?
- What was the most prominent news about UNDP that you have heard of in the media or dealt with personally?

F. FUTURE OUTLOOK

- What do you expect to happen with UNDP health interventions going forward?
- What are UNDP and its partners planning to focus on in the future?
- What things do you think hamper improvements in the field of public procurement of medicines?
- Are there any issues concerning your organisation that you expect to be resolved soon or regulated better?

• What are your expectations about the potential strategies of the MoH regarding public procurement and health reform? Should they be adjusted or continue as planned under the former minister?

Semi-guided interview questionnaire (for EU Delegation to Ukraine, UNICEF, WHO, etc.)

A. RELEVANCE

- To what extent are UNDP's PSS Project and other health interventions (hereinafter the Project) consistent with Ukrainian government needs and priorities, and the UNDP/ UNDAF country programme strategy, SDGs and Strategic Plans?
- To what extent does the Project contribute to Ukraine's needs and the development of a coherent H&T Programme? What are the key facts, figures, achievements which prove the contribution and coherence of the UNDP H&T programme?
- Is UNDP engaging the MoH and other stakeholders in the discussion of priority areas of the Project? If so, how regularly? Have you seen any adjustments in the UNDP project/processes/procedures/activities and outputs following such meetings or discussions?
- Is there any priority area you would like UNDP to focus on?
- Are there any health interventions performed jointly by your organisation and UNDP? How relevant have they been for the GoU/MoH other stakeholders?
- How are UNDP's health interventions aligned with your organisations' activities at global/national/regional/local levels?
- How relevant have UNDP's interventions have been in the social/economic/human rights area (gender equality and women's empowerment)?
- Is there an efficient framework mechanism established for consultation between UNDP and other partners? Which issues are most relevant for discussion between UNDP and other international organisations, partners?
- To what extent does the Project take into consideration the context/changing context in Ukraine (change of power, development in the East, etc.)
- In your view, is the Project responsive to other stakeholders' concerns and issues? Can you provide 2-3 examples of any issues, how they were addressed and any follow-up actions/remedies.
- Has the Project been unresponsive to any stakeholders' requests and/or concerns? In what way? Can you provide examples with relevant explanations.
- Has UNDP led any joint activities with the MoH and other stakeholders that are relevant for health reform development? How consistent were the outputs with the UNDP outcomes?
- What would you like future UNDP projects to focus on?

B. EFFECTIVENESS

- Has UNDP achieved the key objectives set out in the project documents/ cost sharing agreements, strategies, objectives and indicators? Please provide examples of any that have not been met.
- Has UNDP had any achievements beyond logical frameworks? e.g. has it been involved in drafting / commenting on new legislation/ draft policies, strategic documents for the GoU/MoH/other stakeholders aimed at improving health reform/public procurement? Which were most effective?
- To what extent are public procurement procedures and legislation well-structured and appropriate to regulate this field?
- What is your view on the MoH's shifting of procurement of government programmes to international purchasing organisations (e.g. UNDP and other) in 2015? Was it worth? Can you provide key reasons for your answer?
- Has UNDP provided support (via technical assistance or capacity building programmes) which was helpful to the GoU/MoH/other stakeholders?
- Have UNDP initiatives such as E-Liky and E-Stock been effective, useful? What is the feedback from stakeholders? Positive or negative? Please comment.

- Have UNDP's interventions been effective in reducing corruption in public procurement at national/regional/local levels? Is there any evidence, facts, figures that procurement processes have become more accountable and transparent?
- Have you come across any negative feedback from CSOs on public procurement? Have these issues been addressed? In what way? What, if any, were the most typical concerns raised with respect to UNDP and other international partners, regarding procurement?
- To what extent has the Project addressed gender equality and women's empowerment, and environmental issues?
- How effective has UNDP been in the area of anti-corruption and transparency?
- Do you feel positive about capacity building and the shifting of the public procurement function to the SoE MPU? If not, why?
- Has UNDP organised/led any conferences/high-level meetings alone or jointly with other international organisations /partners? Have they been valuable? Which of them did you find most valuable and why?
- Has there been any progress in public procurement (e.g. delivery times, quality of medicines/medical devices)?
- Has there been any progress following UNDP's health interventions at the MoH (management and staff education, management development, etc.). Do the same individuals at the MoH usually interact with UNDP regarding health procurement and other interventions? At what level are they?
- Are you satisfied with the contribution of UNDP management and procurement specialists in the MoH's procurement function? In your view is UNDP responsive to MoH/regional health authorities' needs?
- What are your expectations of an effective procurement organisation?
- Which of the UNDP's health interventions (other than the MoH PSS's project) are most effective in your view and why?
- Are there any joint activities (UNP/MoH/regional/local authorities) that have proved effective in recent years? Is there an effective dialogue between UNDP/MoH and other stakeholders?
- Has the information/data flow been effective between UNDP/MoH and other stakeholders? Which areas require improvement? Have concerns been raised by vulnerable groups, medical professionals, pharma companies?
- To what extent have the level of UNDP's communications about health reform in public procurement and other interventions in health been effective? To what extent have UNDP's communication strategies been coordinated with the GoU/MoH/international partner organisations/various authorities?
- To what extent has UNDP's activity in the area of environmental sustainability effectively contributed to the development of a more sustainable health sector?

C. EFFICIENCY

- To what extent has UNDP effectively allocated its resources to achieve results in the health reform sector/ public procurement?
- Are there any co-financed projects with your organisations? Are these long-term or short-term projects?
- Which factors cause inefficiency in the local projects of UNDP and other international organisations in Ukraine?
- What are the indicators of efficiency of health interventions? Is it possible to measure them appropriately and what are the limitations?
- Have UNDP's interventions in strengthening public procurement and contributing to social-economic and other interventions been effective and sufficiently financed? Please explain.
- Would you suggest reallocating financing to other priority areas? Why? To which areas?
- Is UNDP more or less efficient in its activity than other international organisations engaged by the MoH in public procurement? Why? What is the perception among international organisations, other stakeholders?
- Is UNDP allocating money among its health interventions appropriately? Can you suggest an optimal way for UNDP to allocate money and resources?
- Is UNDP efficiently managing the resources provided by the MoH for procurement under national programmes to ensure timely delivery of good quality medicines and medical devices to Ukrainian patients?
- Do you find that the UNDP management team and staff are approachable, well-coordinated and that they have the necessary professional expertise to run projects successfully?

D. SUSTAINABILITY

- Has UNDP managed to establish sustainable structures and mechanisms to ensure sustainability of the results of UNDP's interventions?
- Is capacity building of the SoE MPU and subsequent shifting of the procurement function to the SoE MPU the only choice? Have other alternatives been considered? Was this issue discussed among all stakeholders with the involvement of international organisations?
- Are you expecting that the SoE MPU will serve as a national procurement agency soon, i.e. that it will have the necessary capacity to manage national public procurement, have professionally trained staff, and meet accountability and transparency criteria? If not, why? Please explain.
- What kind of legislation and regulations on public procurement would secure sustainability of current procurement practices? How could UNDP contribute to this?

E. IMPACT

- To what extent has UNDP contributed to long-term changes in the Ukrainian healthcare system?
- To what extent was the support of UNDP valuable to the MoH and other stakeholders, vulnerable groups?
- Was UNDP's contribution more or less substantial and valuable to health reform in public procurement than other international organisations?
- Has UNDP's impact in other areas, such as the TB-HIV response, autism, gender issues been visible and attributable to UNDP? To which extent?
- How would you gauge the impact of UNDP's health interventions, on vulnerable groups and other beneficiaries and stakeholders?
- Has UNDP made an impact on the MoH's accountability and transparency agenda? Was UNDP instrumental in resolving any corruption-related/conflict of interest issues related to health procurement at MoH or at the level of regional/local authorities?
- What are the key features of UNDP's health interventions in Ukraine? How well do you think they are known and respected in Ukraine?
- Are the available communication channels /sources of information appropriately used to enhance the impact of UNDP's interventions?

F. FUTURE OUTLOOK

- What do you expect to happen with UNDP health interventions going forward?
- What should UNDP and other international organisations in Ukraine focus on in the future in the health sector? What are the priority areas/sectors?
- Which current trends and developments are the drivers that could influence adjustments to priorities for Ukraine?
- Which health interventions should be dropped by UNDP as they proved inefficient or had limited benefit at national/regional/local level?
- What do you think hampers improvements in the field of public procurement of medicines?
- Are there any issues concerning public procurement that are pending decision at the GoU/MoH/other stakeholders' level that are likely to be resolved soon or regulated better?
- What are your expectations with regard to the potential future strategies of the MoH on public procurement and health reform? Will the strategy be adjusted or continued as planned by the former government?

Semi-guided interview questionnaire for focus groups (NGOs/patient organisations)

A. RELEVANCE

- To what extent has public procurement via international organisations and, specifically, via UNDP reflected the needs and priorities of NGOs/ patients?
- Is the Project still relevant to your needs? Can you briefly describe your patients' needs?
- Has the Project invited you to participate in stakeholders' meetings to discuss priority areas that reflect your needs? If so, how regularly? Have you seen any adjustments in the UNDP project process or procedure following such meetings?
- Is there a priority area you would like UNDP to focus on?
- Are gender issues and other social and economic and human rights-based issues relevant to your work? Please briefly outline.
- To what extent does the Project take into consideration the context/changing context in Ukraine
- Is the Project responsive to your patients' concerns and issues? Can you give 2-3 examples.
- Has the Project ignored your requests or concerns?
- What would you like future projects to focus on?

B. EFFECTIVENESS

- Are you aware of the key objectives and purposes of the UNDP-MoH PSS Project? Do you think they have been achieved? Where can you find this information? Have you searched for it on the internet? Do you receive email updates from UNDP on public procurement?
- Are you aware why the MoH shifted procurement of government programmes to international purchasing organisations (e.g. UNDP and others) in 2015? Can you provide key reasons?
- Are those consistent with your patients' own experience of obtaining UNDP-procured medicines/medical devices/ vaccines procurement from the MoH/regional health authorities? If not, have you reported any difficulties? To whom?
- Is there any clear guidance in lay language available for NGOs regarding the public procurement budget and delivery cycle in Ukraine?
- Have you received any support (financial, technical, translation, communication) from UNDP that has helped you to effectively resolve problems or issues in a timely manner?
- How effective and consistent has UNDP been in defending patients' rights to high-quality & effective medicines/medical devices/vaccines?
- Are you aware of E-Liky and E-Stock? Are they useful? Do you often use them? If not, why?
- Have there been interruptions to the supply of medicines to your patients? How has UNDP responded to negative posts on social networks about public procurement delays?
- To what extent the Project has been addressing gender equality and women empowerment, as well as environmental issues?
- How many instances of corruption have you come across at the government (MoH) and/or regional level? Did you report these issues? To whom? How were they resolved and how quickly?
- Are you happy with the shifting of procurement for your programme to the SoE MPU? If not, why?
- Have you attended any training/workshops/conferences, etc. organised by UNDP, either on their own or jointly with other partners? Have they been useful?
- Has there been any progress with public procurement e.g. delivery times, quality of medicines/medical devices, etc. procured?
- Have you seen any positive progress in the procurement function at the MoH? Do you interact with the same people at MoH and UNDP regarding procurement?

- Are you satisfied with the level of expertise of the UNDP procurement specialists? Are they responsive to your needs?
- What are your expectations of an effective procurement organisation?
- Are you aware of other UNDP health interventions apart from the MoH PSS's project? Which of them are effective in your view and why?
- Are you aware of the capacity building activities of UNDP in the East (peace building and recovery programme)?
- If so, what was your source of information?
- To what extent have UNDP's activities in the area of environmental sustainability effectively contributed to the development of a more sustainable health sector?

C. EFFICIENCY

- Are you aware of how UNDP's health interventions are financed?
- Have you received low value grants from UNDP for public monitoring of delivery of medicines and medical products to patients? Was it an efficient use of money in your view?
- Is UNDP more or less efficient in its activity than other international organisations engaged by the MoH in public procurement? Why?
- Is UNDP allocating money among its health interventions appropriately? What do you think would be the optimal use of money and resources by UNDP over the next year or two?
- Is UNDP efficiently managing the resources provided by the MoH for procurement under national programmes, to ensure timely delivery of good quality medicines and medical devices to Ukrainian patients?
- Do you find the UNDP management team and staff approachable and well-coordinated?

D. SUSTAINABILITY

- Are you aware about the shifting of the procurement function to the SoE MPU? What do you think?
- Will your needs be met by the SoE MPU?
- What kind of legislation and regulations on public procurement would secure sustainability of current procurement practices? How could UNDP contribute to this?

E. IMPACT

- To what extent has UNDP contributed to long-term changes in the Ukrainian healthcare system?
- Are you aware which areas are supported by UNDP and which by other partners? i.e. which organisation is supporting which part of the health reform?
- Are you aware that UNDP has other health initiatives apart from procurement for MoH?
- Have you heard about the TB-HIV response, autism, and gender issues activities? What was your source of information? Was it the UNDP web site?
- Is UNDP perceived in a positive or negative or neutral light by patient organisations? Please provide 2-3 arguments.
- Have you had any corruption-related/conflict of interest issues related to health procurement for your patients? For other patient groups? Was UNDP a source of support?
- What was the most important news about UNDP that you heard in the media or dealt with personally/as member of NGO?

F. FUTURE OUTLOOK

• Has procurement for your patients/ NGO improved over the last 3-5 years? What were the positive changes?

- Have medicines been delivered by UNDP in a timely manner? By other international organisations? What do you think hampers improvements in the field of public procurement of medicines?
- Are there any issues concerning your patient group that you expect to be resolved soon or regulated better?
- Do you expect patients to have a voice and be part of the decision-making process at the MoH and at regional authorities? Is UNDP supporting such expectations?

New medicines, registered under fast track registration procedure as of February 15, 2020⁴¹

| Nº | Disease programme | INN, pharmaceutical presentation, strength | Brand name | Manufacturer/ certificate holder | Country | Registration Certificate Number | Date of registration |
|-----|----------------------|--|---|---|-------------------|---------------------------------------|----------------------|
| 1. | Vaccines | Poliomyelitis oral, bivalent, live attenuated, ampule, vial, syringe, 0,1 ml | Polio Sabin™ One and Three (Oral) Bivalent Oral Poliomyelitis Vaccine Types 1 and 3 (live, attenuated) | GlaxoSmithKline | United Kingdom | UA/15130/01/01 | 4/26/2016 |
| 2. | Vaccines | Hemophilus influenzae B, purified antigen conjugated, ampule, vial, syringe, 0,5 ml, 19-33 mkg | Haemophilus b Conjugate Vaccines for Preventio n of Haemophilus influenzae Type b Disease | M. Biotech Limited | United Kingdom | UA/15192/01/01 | 5/12/2016 |
| 3. | Hepatitis C | Ombitasvir, Paritaprevir and ritonavir, tablet, capsule, pill, 50 mg | VILVIO | AbbVie Biopharmaceutical s GmbH | Switzerland | UA/15190/01/01 | 5/12/2016 |
| 4. | Hepatitis C | Dasabuvir, tablet, capsule, pill, 250 mg | VYRELAKIR | AbbVie Biopharmaceutical s GmbH | Switzerland | UA/15191/01/01 | 5/12/2016 |
| 5. | Vaccines | Rabies, inactivated, whole virus, ampule, vial, syringe, 2,5 UI | RABIPUR® | GlaxoSmithKline | United Kingdom | UA/15212/01/01 | 6/3/2016 |
| 6. | Vaccines | Tetanus toxoid, combinations with diphtheria toxoid, ampule, vial, syringe, 0,5 ml, 2UI/20UI | DIPHTHERIA AND TETANUS VACCINE ADSORBED (Pediatric) | M. Biotech Limited | United Kingdom | UA/15325/01/01 | 7/4/2016 |
| 7. | Vaccines | Pertussis, purified antigen, combinations with toxoids, ampule, vial, syringe, 0,5 ml, 30UI/40UI/4UI | Vaccine for the prevention of diphtheria, labor and pertussis, adsorbed, with whole-cell pertussis component | ERUM INSTITUTE OF INDIA PVT. LTD. | India | UA/15334/01/01 | 7/8/2016 |
| 8. | Vaccines | Tuberculosis, live attenuated, ampule, vial, syringe, 0,025 mg | BCG Vaccine, Lyophilized / BCG VACCINE FREEZE- DRIED | InterVac Co., Ltd. | Canada | UA/15350/01/01 | 7/13/2016 |
| 9. | Vaccines | Tetanus toxoid, combinations with diphtheria toxoid, ampule, vial, syringe, 40 UI | DIPHTHERIA AND TETANUS VACCINE ADSORBED (Pediatric) | InterVac Co., Ltd. | Canada | UA/15378/01/01 | 7/25/2016 |
| 10. | Tuberculosis | Ethambutol, tablet, capsule, pill, 400 mg | ETHAMBUTOL | Svizera Europe | Netherlands | UA/15373/01/01 | 7/25/2016 |
| 11. | Tuberculosis | Cycloserine, tablet, capsule, pill, 250 mg | Cycloserine 250mg capsules | M. BIOTEK LIMITED | United Kingdom | UA/15380/01/01 | 7/26/2016 |
| 12. | Haemophilia | Von Willebrand factor and coagulation factor VIII in combination, vials, powder and solvent for solution for injection, 190 UI | IMMUNATE | Baxter AG | Austria | UA/15805/01/01 | 2/1/2017 |
| 13. | Haemophilia | Von Willebrand factor and coagulation factor VIII in combination, vials, powder and solvent for solution for injection, 750 UI | IMMUNATE | Baxter AG | Austria | UA/15807/01/01 | 2/1/2017 |
| 14. | Haemophilia | Von Willebrand factor and coagulation factor VIII in combination, vials, powder and solvent for solution for injection, 375 UI | IMMUNATE | Baxter AG | Austria | UA/15806/01/01 | 2/1/2017 |
| 15. | Transplantation | Mycophenolic acid, tablet, capsule, pill, 192,35 mg/ 180 mg | MICOPHENOLIC ACID | Apotex Inc. | Canada | UA/15911/01/01 | 4/12/2017 |
| 16. | Haemophilia | Coagulation factor VIII, vials, powder and solvent for solution for injection, 1000 UI | Advate | Baxalta Innovations GmbH | Austria | UA/15950/01/03 | 5/4/2017 |

⁴¹ The list provides new medicines registered in Ukraine under fast track registration procedure for disease programmes, handled by UNDP

| Nº | Disease programme | INN, pharmaceutical presentation, strength | Brand name | Manufacturer/ certificate holder | Country | Registration Certificate Number | Date of registration |
|-----|---------------------------------------|---|--|-------------------------------------|-------------|---------------------------------------|-------------------------|
| 17. | Haemophilia | Coagulation factor VIII, vials, powder and solvent for solution for injection, 250 UI | Advate | Baxalta Innovations GmbH | Austria | UA/15950/01/01 | 5/4/2017 |
| 18. | Haemophilia | Coagulation factor VIII, vials, powder and solvent for solution for injection, 500 UI | Advate | Baxalta Innovations GmbH | Austria | UA/15950/01/02 | 5/4/2017 |
| 19. | Tuberculosis | Levofloxacin, tablet, capsule, pill, 250 mg | Levofloxacin | Hetero Labs Limited | India | UA/15931/01/01 | 5/4/2017 |
| 20. | Tuberculosis | Levofloxacin, tablet, capsule, pill, 500 mg | Levofloxacin | Hetero Labs Limited | India | UA/15931/01/02 | 5/4/2017 |
| 21. | Haemophilia | Coagulation factor VIII, ampule, vial, syringe, 1000 UI | Advate | Baxter AG | Austria | UA/16026/01/03 | 5/19/2017 |
| 22. | Haemophilia | Coagulation factor VIII, ampule, vial, syringe, 1500 UI | Advate | Baxter AG | Austria | UA/16026/01/04 | 5/19/2017 |
| 23. | Haemophilia | Coagulation factor VIII, ampule, vial, syringe, 2000 UI | Advate | Baxter AG | Austria | UA/16026/01/05 | 5/19/2017 |
| 24. | Haemophilia | Coagulation factor VIII, ampule, vial, syringe, 250 UI | Advate | Baxter AG | Austria | UA/16026/01/01 | 5/19/2017 |
| 25. | Haemophilia | Coagulation factor VIII, ampule, vial, syringe, 3000 UI | Advate | Baxter AG | Austria | UA/16026/01/06 | 5/19/2017 |
| 26. | Haemophilia | Coagulation factor VIII, ampule, vial, syringe, 500 UI | Advate | Baxter AG | Austria | UA/16026/01/02 | 5/19/2017 |
| 27. | Autism | Atomoxetine, tablet, capsule, pill, 10 mg | PMS-Atomoxetine | Pharmascience Inc. | Canada | UA/16027/01/01 | 5/19/2017 |
| 28. | Autism | Atomoxetine, tablet, capsule, pill, 18 mg | PMS-Atomoxetine | Pharmascience Inc. | Canada | UA/16027/01/02 | 5/19/2017 |
| 29. | Autism | Atomoxetine, tablet, capsule, pill, 25 mg | PMS-Atomoxetine | Pharmascience Inc. | Canada | UA/16027/01/03 | 5/19/2017 |
| 30. | Autism | Atomoxetine, tablet, capsule, pill, 40 mg | PMS-Atomoxetine | Pharmascience Inc. | Canada | UA/16027/01/04 | 5/19/2017 |
| 31. | Autism | Atomoxetine, tablet, capsule, pill, 60 mg | PMS-Atomoxetine | Pharmascience Inc. | Canada | UA/16027/01/05 | 5/19/2017 |
| 32. | Haemophilia | Coagulation factor IX, vials, powder and solvent for solution for injection, 1200 UI | AIMAFIX | Baxter AG | Austria | UA/16028/01/02 | 5/25/2017 |
| 33. | Haemophilia | Coagulation factor IX, vials, powder and solvent for solution for injection, 600 UI | AIMAFIX | Baxter AG | Austria | UA/16028/01/01 | 5/25/2017 |
| 34. | Tuberculosis | Rifampicin and isoniazid, tablet, capsule, pill, 150/75 mg | Rifampicin 150 mg / Isoniazid 75 mg | Svizera Europe | Netherlands | UA/16135/01/01 | 7/4/2017 |
| 35. | Tuberculosis | Rifampicin, pyrazinamide, ethambutol and isoniazid, tablet, capsule, pill, 150/75/400/275 mg | Rifampicin 150 mg /Isoniazid 75 mg / Pyrazinamide 400 mg / Ethambutol hydrochloride 275 mg | Svizera Europe | Netherlands | UA/16136/01/01 | 7/4/2017 |
| 36. | Tuberculosis | Clofazimine, tablet, capsule, pill, 100 mg | Lampren | Novartis Pharma AG | Switzerland | UA/16118/01/01 | 8/4/2017 |
| 37. | Haemophilia | Albumin, ampule, vial, syringe, 200 g | Flexbumin | Baxalta Innovations GmbH | Austria | UA/16283/01/01 | 9/14/2017 |
| 38. | Haemophilia | Coagulation factor IX, vials, powder and solvent for solution for injection, 1000 UI | AIMAFIX | Baxalta Innovations GmbH | Austria | UA/16453/01/03 | 11/21/2017 |
| 39. | Haemophilia | Coagulation factor IX, vials, powder and solvent for solution for injection, 250 UI | AIMAFIX | Baxalta Innovations GmbH | Austria | UA/16453/01/01 | 11/21/2017 |
| 40. | Haemophilia | Coagulation factor IX, vials, powder and solvent for solution for injection, 500 UI | AIMAFIX | Baxalta Innovations GmbH | Austria | UA/16453/01/02 | 11/21/2017 |
| 41. | Pulmonary Arterial Hypertension | Bosentan, tablet, capsule, pill, 125 mg | BOSENTAN SANDOZ® | Sandoz Pharmaceuticals e.d. | Slovenia | UA/16618/01/02 | 3/6/2018 |
| 42. | Pulmonary Arterial Hypertension | Bosentan, tablet, capsule, pill, 62,5 mg | BOSENTAN SANDOZ® | Sandoz Pharmaceuticals e.d. | Slovenia | UA/16618/01/01 | 3/6/2018 |
| 43. | Adult Cancer | Bosutinib, tablet, capsule, pill, 103,4 mg/ 100 mg | BOSULIF® | PFISER HSP CORPORATION | USA | UA/16652/01/01 | 4/4/2018 |
| 44. | Adult Cancer | Bosutinib, tablet, capsule, pill, 516,98 mg/500 mg | BOSULIF® | PFISER HSP CORPORATION | USA | UA/16652/01/02 | 4/4/2018 |
| 45. | Pediatric Oncology | Dactinomycin, ampule, vial, syringe, 0,5 mg | 'Cosmegen' Lyovac | Orphan-Europe Sarl | France | UA/16713/01/01 | 5/11/2018 |
| 46. | Tuberculosis | Clofazimine, tablet, capsule, pill, 100 mg | Lampren | Novartis Pharma AG | Switzerland | UA/16693/01/01 | 5/24/2018 |

| Nº | Disease programme | INN, pharmaceutical presentation, strength | Brand name | Manufacturer/ certificate holder | Country | Registration Certificate Number | Date of registration |
|-----|---|---|---|--|-------------------|---------------------------------------|----------------------|
| 47. | Haemophilia | Factor VIII inhibitor bypassing activity, vials, powder and solvent for solution for injection, 20-60 mg | FEIBA | Baxter AG | Austria | UA/16800/01/02 | 6/15/2018 |
| 48. | Haemophilia | Factor VIII inhibitor bypassing activity, vials, powder and solvent for solution for injection, 10-30 mg | FEIBA | Baxter AG | Austria | UA/16800/01/01 | 6/15/2018 |
| 49. | Pediatric Oncology | Pegaspargase, ampule, vial, syringe, 750 UI | Oncaspar | Baxalta Innovations GmbH | Austria | UA/16857/01/01 | 7/20/2018 |
| 50. | Hepatitis C | Sofosbuvir, tablet, capsule, pill, 400 mg | MYHEP | Mylan Laboratories Limited | India | UA/16642/01/01 | 8/31/2018 |
| 51. | Haemophilia | Coagulation factor VIII, vials, powder and solvent for solution for injection, 1500 UI | Advate | Novo Nordisk | Denmark | UA/16971/01/01 | 10/4/2018 |
| 52. | Mucopolysacchar idosis | ldursulfase, ampule, vial, syringe, 2,0 mg | Elaprase | Shyer Pharmaceuticals Island Co., Ltd. | Ireland | UA/16972/01/01 | 10/8/2018 |
| 53. | Autism | Risperidone, , 600 mg | Risperidone (Sandoz) | Sandoz S.A. | France | UA/16950/01/01 | 10/30/2018 |
| 54. | Haemophilia | Coagulation factor VIII, vials, powder and solvent for solution for injection, 2000 UI | Advate | Bayer | Germany | UA/17065/01/01 | 11/14/2018 |
| 55. | Haemophilia | Coagulation factor VIII, vials, powder and solvent for solution for injection, 3000 UI | Advate | Bayer | Germany | UA/17065/01/02 | 11/14/2018 |
| 56. | Pulmonary Arterial Hypertension | Bosentan, tablet, capsule, pill, 129,082 mg /125 mg | BOSENTAN SANDOZ® | Sandoz Pharmaceuticals e.d. | Slovenia | UA/17011/01/02 | 11/27/2018 |
| 57. | Pulmonary Arterial Hypertension | Bosentan, tablet, capsule, pill, 64,541 mg/62,5 mg | BOSENTAN SANDOZ® | Sandoz Pharmaceuticals e.d. | Slovenia | UA/17011/01/01 | 11/27/2018 |
| 58. | Haemophilia | Coagulation factor VIII, ampule, vial, syringe, 1000 UI | Advate | KEDRION S.P.A. | Italy | UA/17151/01/02 | 1/2/2019 |
| 59. | Haemophilia | Coagulation factor VIII, ampule, vial, syringe, 500 UI | Advate | KEDRION S.P.A. | Italy | UA/17151/01/01 | 1/2/2019 |
| 60. | Haemophilia | Coagulation factor IX, ampule, vial, syringe, 1000 UI | AIMAFIX | KEDRION S.P.A. | Italy | UA/17150/01/02 | 1/2/2019 |
| 61. | Haemophilia | Coagulation factor IX, ampule, vial, syringe, 500 UI | AIMAFIX | KEDRION S.P.A. | Italy | UA/17150/01/01 | 1/2/2019 |
| 62. | Adult Cancer | Nilotinib, tablet, capsule, pill, 220,60/1,103 mg | TASIGNA | Novartis Pharma AG | Switzerland | UA/17196/01/01 | 2/1/2019 |
| 63. | Hepatitis C | Sofosbuvir and ledipasvir, tablet, capsule, pill, 400 mg | Ledvir | Mylan Laboratories Limited | India | UA/17221/01/01 | 2/19/2019 |
| 64. | Hepatitis C | Daclatasvir, tablet, capsule, pill, 60 mg | MY DECLA | Mylan Laboratories Limited | India | UA/17222/01/01 | 2/19/2019 |
| 65. | Infectious diseases with high mortality | Botulinum antitoxin, ampule, vial, syringe | BAT® [BOTULISM ANTITOXIN HEPTAVALENT (A, B, C, D, E, F, G) - (EQUINE) | Emergent BioSolutions Canada Inc. | Canada | UA/17302/01/01 | 3/14/2019 |
| 66. | Pulmonary Arterial Hypertension | Ambrisentan, tablet, capsule, pill, 10 mg | Volibris | GlaxoSmithKline | United Kingdom | UA/17288/01/02 | 3/20/2019 |
| 67. | Pulmonary Arterial Hypertension | Ambrisentan, tablet, capsule, pill, 5 mg | Volibris | GlaxoSmithKline | United Kingdom | UA/17288/01/01 | 3/20/2019 |
| 68. | Hepatitis C | Sofosbuvir and velpatasvir, tablet, capsule, pill, 400 mg | MYHEP ALL™ | Mylan Laboratories Limited | India | UA/17344/01/01 | 4/16/2019 |
| 69. | Adult Cancer | Trastuzumab, ampule, vial, syringe, 150 mg | Ogivri | Mylan CAC | France | UA/17343/01/01 | 4/16/2019 |
| 70. | Tuberculosis | Rifampicin, ampule, vial, syringe, 600 mg | Rifampin | Mylan Laboratories Limited | India | UA/17301/01/01 | 4/16/2019 |
| 71. | ЮРА | HYRIMOZ, solution for injection, 40 mg/0.8 ml | Adalimumab | Sandoz GmbH Shaftenau | Austria | UA/17355/01/01 | 5/8/2019 |
| 72. | Pediatric Oncology | Vancomycin, ampule, vial, syringe, 500 mg | Vancotex | PHARMATEX ITALY S.L. | Italy | UA/17423/01/01 | 5/29/2019 |

| N≌ | Disease programme | INN, pharmaceutical presentation, strength | Brand name | Manufacturer/ certificate holder | Country | Registration Certificate Number | Date of registration |
|-----|---------------------------------------|--|--------------------------|---|-------------------|---------------------------------------|----------------------|
| 73. | Adult Cancer | Nilotinib, tablet, capsule, pill, 220,60/1,103 mg | TASIGNA | Novartis Pharma AG | Switzerland | UA/17491/01/01 | 6/12/2019 |
| 74. | Adult Cancer | Capecitabine, tablet, capsule, pill, 150 mg | Capecitabine Accord | Accord Healthcare | Spain | UA/17503/01/01 | 6/19/2019 |
| 75. | Adult Cancer | Capecitabine, tablet, capsule, pill, 300 mg | Capecitabine Accord | Accord Healthcare | Spain | UA/17503/01/02 | 6/19/2019 |
| 76. | Adult Cancer | Capecitabine, tablet, capsule, pill, 500 mg | Capecitabine Accord | Accord Healthcare | Spain | UA/17503/01/03 | 6/19/2019 |
| 77. | Adult Cancer | Trastuzumab, ampule, vial, syringe, 150 mg | Ogivri | PFISER HSP CORPORATION | USA | UA/17583/01/01 | 8/20/2019 |
| 78. | Pulmonary Arterial Hypertension | Ambrisentan, tablet, capsule, pill, 10 mg | Volibris | GlaxoSmithKline | United Kingdom | UA/17705/01/02 | 11/4/2019 |
| 79. | Pulmonary Arterial Hypertension | Ambrisentan, tablet, capsule, pill, 5 mg | Volibris | GlaxoSmithKline | United Kingdom | UA/17705/01/01 | 11/4/2019 |
| 80. | Oncohematology Adult | Daunorubicin, ampule, vial, syringe, 20,0 mg | DAUNOBLASTINA® | PFISER HSP CORPORATION | USA | UA/17757/01/01 | 11/4/2019 |
| 81. | Adult Cancer | Trastuzumab, ampule, vial, syringe, 150 mg | Ogivri | Mylan CAC | France | UA/17756/01/01 | 11/4/2019 |
| 82. | Adult Cancer | Trastuzumab, ampule, vial, syringe, 150 mg | Ogivri | PFISER HSC. CORPORATION | USA | UA/17708/01/01 | 11/4/2019 |
| 83. | Pediatric Oncology | Pegaspargase, ampule, vial, syringe, 3750 UI | Oncaspar | Le Laboratory Servier | France | UA/17734/01/01 | 11/4/2019 |
| 84. | Adult Cancer | Trastuzumab, ampule, vial, syringe, 150 mg | Ogivri | Samsung Bioepis NL B.V. | Netherlands | UA/17775/01/01 | 11/26/2019 |
| 85. | Adult Cancer | Hydroxycarbamide, tablet, capsule, pill, 500 mg | Hydroxycarbamide Teva | Ltd. Teva Pharmaceuticals Poland | Poland | UA/17651/01/01 | 12/5/2019 |
| 86. | Pediatric Oncology | Treosulfan, ampule, vial, syringe, 1000 mg | Ovastat | Medak Gesellschaft Für Clinic Spetsialpreparate MBH | Germany | UA/17696/01/01 | 12/10/2019 |
| 87. | Pediatric Oncology | Treosulfan, ampule, vial, syringe, 5000 mg | Ovastat | Medak Gesellschaft Für Clinic Spetsialpreparate MBH | Germany | UA/17696/01/02 | 12/10/2019 |
| 88. | Pulmonary Arterial Hypertension | Bosentan, tablet, capsule, pill, 62.500 mg/*64,54 mg | BOSENTAN SANDOZ® | Accord Healthcare Limited | United Kingdom | UA/17820/01/01 | 1/10/2020 |
| 89. | Pediatric Oncology | Pegfilgrastim, ampule, vial, syringe, 6 mg | ZIEXTENZO® 6 MG | Sandoz GmbH | Austria | UA/17821/01/01 | 1/10/2020 |

Price change and savings against MoH 2014 prices^{42/43/44}

| INN, pharmaceutical presentation, strength | Quantity ⁴⁵ , UOM | MoH price per UOM, 2014, USD | UNDP price per UOM, 2015, USD | Price change, % | Savings/ increased spending, USD | | |
|--|---------------------------------|--|---|-----------------------|--|--|--|
| Adult He | patitis B an | | | | | | |
| Average price change: 20% Total savings: 741,872.32 | | | | | | | |
| Peginterferon a-2b, | | | | | | | |
| amp. or vial, or syringe, or PFS, or syringe tube, 80 mg | 2,248 | 74.83 | 47.36 | 36% | 61,767.65 | | |
| Peginterferon a-2b, | 6,960 | 74.83 | 47.36 | 36% | 191,237.93 | | |
| amp. or vial, or syringe, or PFS, or syringe tube, 100 mg | 0,000 | 74.00 | -1.50 | 5070 | 101,207.00 | | |
| Peginterferon a-2b, amp. or vial, or syringe, or PFS, or syringe tube, 120 mg | 10,819 | 74.83 | 47.36 | 36% | 297,270.57 | | |
| Peqinterferon a-2b. | | | | | | | |
| amp. or vial, or syringe, or PFS, or syringe tube, 150 mg | 8,587 | 74.83 | 47.36 | 36% | 235,942.54 | | |
| Peginterferon a-2a, | 15,051 | 92.15 | 95.78 | -4% | -54,516.02 | | |
| amp. or vial, or syringe, or PFS, or syringe tube, 180 mg | 10,001 | 52.10 | 55.70 | - 70 | 04,010.02 | | |
| Tenofovir, tabl., cap., pill, 300 mg | 176,250 | 0.21 | 0.13 | 38% | 14,081.59 | | |
| Ribavirin. | | | | | | | |
| tabl., cap., pill, 200 mg ⁴⁶ | 2,843,090 | 0.02 | 0.08 | 300% | | | |
| Lamivudine, | 9,520 | 1.04 | 1.45 | -40% | -3,911.96 | | |
| tabl., cap., pill, 100 mg | | 1.04 | 1.40 | 4070 | 0,011.00 | | |
| ТВ | medicines | | | | | | |
| Average price change: 29% | Tota | l savings: 6 | ,253,852.96 | | | | |
| Isoniazid, | 20,115,000 | 0.01 | 0.01 | -39% | -53,185.72 | | |
| tabl, cap, pill,100 mg | 20,113,000 | 0.01 | 0.01 | -3976 | -55,165.72 | | |
| Isoniazid, | 82,000 | 2.77 | 3.17 | -14% | -32,568.73 | | |
| bottles, vials, (syrup),4000 mg Isoniazid, | | | | | | | |
| amp., vial, syringe, 500 mg | 78,000 | 1.52 | 0.09 | 94% | 111,893.87 | | |
| Rifampicin, | 23,045,200 | 0.02 | 0.03 | -77% | -308,698.06 | | |
| tabl., cap., pill, 150 mg | 23,043,200 | 0.02 | 0.03 | -11/0 | -300,090.00 | | |
| Pyrazinamide, tabl., cap., pill, 500 mg | 33,000,000 | 0.02 | 0.02 | 13% | 108,108.10 | | |
| Ethambutol. | | | | | | | |
| tabl., cap., pill, 400 mg | 14,000,000 | 0.03 | 0.03 | -4% | -14,601.95 | | |
| Ethambutol, | 55,000 | 2.79 | 2.62 | 6% | 9.588.33 | | |
| amp., vial, syringe, 2 000 mg | 55,000 | 2.15 | 2.02 | 0 /0 | 9,000.00 | | |
| Kanamycin, amp., vial, syringe, 1 000 mg | 442,000 | 0.49 | 0.39 | 20% | 44,170.69 | | |
| Protionamid. | | | | | | | |
| tabl., cap., pill, 250 mg | 5,890,000 | 0.12 | 0.08 | 31% | 223,579.07 | | |
| Levofloxacin, | 5,524,000 | 0.10 | 0.05 | 49% | 272,649.16 | | |
| tabl., cap., pill, 500 mg | 0,024,000 | 0.10 | 0.00 | -J /0 | 212,043.10 | | |
| Levofloxacin, | 3,365,000 | 0.06 | 0.03 | 51% | 104,285.18 | | |
| tabl., cap., pill, 250 mg | | | | | | | |
| Moxifloxacin, | 282,900 | 1.49 | 0.54 | 64% | 270,014.00 | | |

⁴²Hereinafter in Annexes 12-19 positive values stand for price decrease and savings, negative values stand for price increase and increased spending accordingly

⁴³ Hereinafter in Annexes 12-19 prices are indicated with two decimals for the ease of presentation, while all calculations in the present assignment were done with four decimals, therefore sums may differ because of the rounding error

⁴⁴ The present annex contains only those INNs, references for which in terms of 2014 MoH procurement were found

⁴⁵ Hereinafter in Annexes 12-15 the assigned quantity procured by UNDP, i.e. main procurement

⁴⁶ Ribavirin has been excluded from calculations due to unrealistic price declared by MoH in 2014

| INN, pharmaceutical presentation, strength Sodium aminosalicylate, powder, enteric granules, 1 000 mg Cycloserine, tabl., cap., pill, 250 mg Capreomycin, amp., vial, syringe, 1 000 mg Linezolid. | Quantity ⁴⁵ , UOM 7,775,000 4,958,000 152,500 | MoH price per UOM, 2014, USD 0.20 0.51 5.78 | UNDP price per UOM, 2015, USD 0.12 0.27 2.48 | Price change, % 37% 47% 57% | Savings/ increased spending, USD 569,087.45 1,190,883.57 503,417.75 | | |
|---|--|--|---|--|--|--|--|
| tabl., cap., pill, 600 mg | 310,550 | 2.35 | 0.33 | 86% | 627,833.47 | | |
| Terizidon, tabl., cap., pill, 250 mg | 707,470 | 4.82 | 1.11 | 77% | 2,627,396.76 | | |
| Childhoo | d Haemopl | hilia | | | | | |
| Average price change: 4% | • | | | | | | |
| Coagulation factor VIII (recombinant), vials, powder and solvent for solution for injection, 250 IU | 1,894 | 76.56 | 66.78 | 13% | 18,533.39 | | |
| Coagulation factor VIII (recombinant), vials, powder and solvent for solution for injection, 500 IU | 4,207 | 153.12 | 133.55 | 13% | 82,333.64 | | |
| Human coagulation factor VIII (plasma), vials, powder and solvent for solution for injection, 250 IU | 3,565 | 63.51 | 71.14 | -12% | -27,181.79 | | |
| Human coagulation factor VIII (plasma), vials, powder and solvent for solution for injection, 500 IU | 19,714 | 126.78 | 117.06 | 8% | 191,580.15 | | |
| Human coagulation factor IX, vials, powder and solvent for solution for injection, 500 and/or 600 IU | 5,556 | 133.29 | 139.41 | -5% | -34,004.27 | | |
| Human coagulation factor VIII and human Willebrand factor, vials, powder and solvent for solution for injection, 500 IU | 3,985 | 142.91 | 164.45 | -15% | -85,832.32 | | |
| Human coagulation factor VIII and human Willebrand factor, vials, powder and solvent for solution for injection, 1000 IU | 939 | 421.21 | 332.46 | 21% | 83,339.33 | | |
| Human coagulation factor VIII (plasma), vials, powder and solvent for solution for injection, 1000 IU | 1,828 | 291.29 | 279.23 | 4% | 22,048.08 | | |
| Eptacog alfa activated (recombinant factor VIIa), vials, powder and solvent for solution for injection, 2mg (100 KIU) | 121 | 2,168.48 | 1809.10 | 17% | 43,485.62 | | |
| Eptacog alfa activated (recombinant factor VIIa), vials, powder and solvent for solution for injection, 5 mg (250 KIU) | 31 | 5,367.33 | 4,522.74 | 16% | 26,182.03 | | |
| Anti-inhibitor coagulant complex, vials, powder and solvent for solution for injection, 500 IU | 812 | 631.20 | 658.10 | -4% | -21,842.70 | | |
| Anti-inhibitor coagulant complex, vials, powder and solvent for solution for injection, 1000 IU | 670 | 1,245.98 | 1,316.20 | -6% | -47,045.08 | | |
| Adult Cancer ⁴⁷ | | | | | | | |
| Average price change: 23% | Tota | I savings: 1 | 5,476,473.27 | 7 | | | |
| Anastrozole, tablet, capsule, pill, 1 mg | 42,420 | 2.15 | 0.32 | 85% | 77,600.57 | | |
| Asparaginase, ampule, vial, syringe, 10 000 IU | 230 | 100.70 | 99.38 | 1% | 302.94 | | |
| Bicalutamide, tablet, capsule, pill, 50 mg | 54,930 | 1.77 | 0.19 | 89% | 86,727.52 | | |
| Bleomycin, ampule, vial, syringe, 15 mg or 15 IU | 6,620 | 17.47 | 37.12 | -112% | -130,082.61 | | |
| Bortezomib, ampule, vial, syringe, 1 mg | 528 | 519.72 | 269.37 | 48% | 132,184.98 | | |
| Calcium folinate, ampule, vial, syringe, 100 mg | 4,850 | 16.53 | 3.71 | 78% | 62,181.23 | | |
| Calcium folinate, ampule, vial, syringe, 30 mg | 625 | 5.13 | 2.95 | 43% | 1,366.14 | | |

⁴⁷ For Adult Cancer UNDP prices for the 2016 budget year were taken for comparison as UNDP did not procure for this disease programme in the 2015 budget year

| INN, pharmaceutical presentation, strength | Quantity ⁴⁵ , UOM | MoH price per UOM, 2014, USD | UNDP price per UOM, 2015, USD | Price change, % | Savings/ increased spending, USD |
|---|---------------------------------|--|---|-----------------------|--|
| Capecitabine, tablet, capsule, pill, 500 mg | 170,280 | 2.28 | 1.34 | 41% | 161,198.40 |
| Carboplatin, | 1,441 | 35.43 | 11.91 | 66% | 33,881.79 |
| ampule, vial, syringe, 150 mg Carboplatin, | | | | | |
| ampule, vial, syringe, 450 mg | 3,184 | 85.81 | 29.50 | 66% | 179,290.85 |
| Caspofungin, vial, 50 mg | 140 | 408.16 | 392.39 | 4% | 2,208.86 |
| Cisplatin, ampule, vial, syringe, 50 mg | 11,874 | 16.33 | 6.82 | 58% | 112,872.46 |
| Cisplatin, ampule, vial, syringe, 100 mg | 12,490 | 34.64 | 9.55 | 72% | 313,401.65 |
| Cyclophosphamide, ampule, vial, syringe, 200 mg | 32,400 | 0.62 | 3.69 | -498% | -99,560.46 |
| Cyclophosphamide, ampule, vial, syringe, 500 mg | 20,145 | 7.60 | 7.46 | 2% | 2,898.78 |
| Cyclophosphamide, ampule, vial, syringe, 1 000 mg | 3,851 | 13.31 | 10.82 | 19% | 9,616.69 |
| Cytarabine, | 2,423 | 23.62 | 13.17 | 44% | 25,323.70 |
| ampule, vial, syringe, 1 000 mg Cytarabine, | 9,250 | 5.68 | 4.77 | 16% | 8,433.13 |
| ampule, vial, syringe, 100 mg Dacarbazine, | 11,760 | 10.54 | 9.44 | 10% | 13,004.68 |
| ampule, vial, syringe, 200 mg Docetaxel, | 4,659 | 72.47 | 23.33 | 68% | 228,941.98 |
| ampule, vial, syringe, 80 mg Docetaxel, | | | | | |
| ampule, vial, syringe, 20 mg | 3,009 | 118.09 | 9.33 | 92% | 327,256.42 |
| Doxorubicin, ampule, vial, syringe, 50 mg | 25,011 | 14.91 | 9.94 | 33% | 124,314.85 |
| Epirubicin, ampule, vial, syringe, 50 mg | 1,600 | 77.15 | 13.83 | 82% | 101,315.86 |
| Epirubicin, ampule, vial, syringe, 10 mg | 1,101 | 17.32 | 4.72 | 73% | 13,875.58 |
| Etoposide, ampule, vial, syringe, 200 mg | 3,069 | 19.50 | 3.82 | 80% | 48,125.30 |
| Exemestane, | 73,140 | 1.81 | 0.21 | 88% | 116,901.88 |
| tablet, capsule, pill, 25 mg Fludarabine, | 2,030 | 26.95 | 13.65 | 49% | 27,004.44 |
| ampule, vial, syringe, 50 mg Gemcitabine, | 4,570 | 7.96 | 5.83 | 27% | 9,721.31 |
| ampule, vial, syringe, 200 mg Gemcitabine, | 6,574 | 44.78 | 19.09 | 57% | 168,859.80 |
| ampule, vial, syringe, 1 000 mg Goserelin, | | | | | |
| ampule, vial, syringe, 10,8 mg Hydroxycarbamide, | 1,977 | 415.68 | 115.71 | 72% | 593,053.18 |
| tablet, capsule, pill, 500 mg | 183,700 | 0.45 | 0.51 | -12% | -10,201.19 |
| Idarubicin, ampule, vial, syringe, 5 mg | 640 | 76.82 | 64.75 | 16% | 7,726.00 |
| Imatinib, tablet, capsule, pill, 100 mg | 378,240 | 14.28 | 0.42 | 97% | 5,240,904.75 |
| Imatinib, tablet, capsule, pill, 400 mg | 34,200 | 92.62 | 1.43 | 98% | 3,118,644.81 |
| Irinotecan, ampule, vial, syringe, 100 mg | 2,411 | 29.85 | 11.27 | 62% | 44,788.91 |
| Irinotecan, ampule, vial, syringe, 300 mg | 1,539 | 330.66 | 33.94 | 90% | 456,652.02 |
| Lenograstim, ampule, vial, syringe, 33,6 million IU or 36 mln IU | 510 | 73.57 | 55.45 | 25% | 9,238.33 |
| Letrozole, | 82,980 | 0.80 | 0.18 | 77% | 51,339.69 |
| tablet, capsule, pill, 2,5 mg | · | | | | |

| INN, pharmaceutical presentation, strength | Quantity ⁴⁵ , UOM | MoH price per UOM, 2014, USD | UNDP price per UOM, 2015, USD | Price change, % | Savings/ increased spending, USD |
|--|---------------------------------|--|---|-----------------------|--|
| Lomustine, tablet, capsule, pill, 40 mg | 1,080 | 8.32 | 8.30 | 0% | 18.83 |
| Mesna, ampule, vial, syringe, 400 mg | 5,100 | 2.39 | 2.34 | 2% | 218.40 |
| Methotrexate, ampule, vial, syringe, 50 mg | 6,979 | 168.86 | 1.85 | 99% | 1,165,519.96 |
| Methotrexate, ampule, vial, syringe, 1 000 mg | 492 | 55.58 | 17.55 | 68% | 18,713.95 |
| Mitoxantrone, ampule, vial, syringe, 20 mg | 1,760 | 103.53 | 32.19 | 69% | 125,551.78 |
| Nilotinib, tablet, capsule, pill, 200 mg | 55,020 | 46.22 | 20.57 | 55% | 1,411,290.83 |
| Oxaliplatin, ampule, vial, syringe, 50 mg | 3,250 | 106.28 | 9.23 | 91% | 315,431.30 |
| Oxaliplatin, ampule, vial, syringe, 100 mg | 3,842 | 200.76 | 15.38 | 92% | 712,224.19 |
| Paclitaxel, ampule, vial, syringe, 100 mg | 5,162 | 133.84 | 13.52 | 90% | 621,071.60 |
| Paclitaxel, ampule, vial, syringe, 30 mg | 1,832 | 58.26 | 7.64 | 87% | 92,741.31 |
| Rituximab, ampule, vial, syringe, 100 mg | 1,200 | 175.19 | 218.84 | -25% | -52,387.15 |
| Rituximab, ampule, vial, syringe, 500 mg | 898 | 876.68 | 1,091.25 | -24% | -192,683.49 |
| Thalidomide, tablet, capsule, pill, 100 mg | 14,880 | 5.63 | 6.50 | -15% | -12,933.69 |
| Topotecan, ampule, vial, syringe, 4 mg | 670 | 133.84 | 25.73 | 81% | 72,430.20 |
| Toremifene, tablet, capsule, pill, 60 mg | 103,440 | 0.40 | 0.88 | -120% | -49,629.16 |
| Trastuzumab, ampule, vial, syringe, 150 mg | 2,203 | 461.60 | 536.27 | -16% | -164,497.07 |
| Triptorelin, ampule, vial, syringe, 11,25 mg | 2,656 | 27.16 | 185.06 | -581% | -419,373.72 |
| Vancomycin, ampule, vial, syringe, 500 mg | 802 | 4.78 | 3.51 | 27% | 1,016.82 |
| Vincristine, ampule, vial, syringe, 1 mg | 12,864 | 3.31 | 2.57 | 22% | 9,430.16 |
| Vinorelbine, ampule, vial, syringe, 50 mg | 1,411 | 64.59 | 25.45 | 61% | 55,226.67 |
| Voriconazole, tablet, capsule, pill, 200 mg | 182 | 13.49 | 10.10 | 25% | 616.89 |
| Voriconazole, vial, 200 mg | 107 | 57.77 | 111.35 | -93% | -5,733.62 |
| Zoledronic acid, ampule, vial, syringe, 4 mg | 5,477 | 25.62 | 7.20 | 72% | 100,893.03 |

Price change and savings against ProZorro^{48/49} 2016 budget year^{50/51}

| INN, pharmaceutical presentation, strength | Quantity ⁵² , UOM | Prozorro price per UOM, USD | UNDP price per UOM, USD | Price change, % | Savings/ increased spending, USD | | |
|--|---------------------------------|--------------------------------------|----------------------------------|-----------------------|---|--|--|
| Adult Cancer | | | | | | | |
| Average price change: 29% | Total savings | s for program | nme: 9,809,78 | 33.07 | | | |
| Asparaginase, ampule, vial, syringe, 10 000 IU | 230 | 93.57 | 99.38 | -6% | -1,335.96 | | |
| Bendamustine, | 174 | 46.29 | 114.53 | -147% | -11,874.96 | | |
| ampule, vial, syringe, 25 mg Bendamustine, | | | | | | | |
| ampule, vial, syringe, 100 mg | 373 | 188.43 | 485.71 | -158% | -110,886.10 | | |
| Bicalutamide, tablet, capsule, pill, 150 mg | 26,970 | 1.58 | 0.37 | 76% | 32,533.00 | | |
| Bicalutamide, | 54.000 | 0.50 | 0.40 | 000/ | 20.205.20 | | |
| tablet, capsule, pill, 50 mg | 54,930 | 0.56 | 0.19 | 66% | 20,205.28 | | |
| Bortezomib, ampule, vial, syringe, 1 mg | 528 | 125.30 | 269.37 | -115% | -76,067.31 | | |
| Calcium folinate, ampule, vial, syringe, 100 mg | 4,850 | 9.33 | 3.71 | 60% | 27,233.99 | | |
| Calcium folinate, | 5,190 | 5.65 | 3.18 | 44% | 12,830.74 | | |
| ampule, vial, syringe, 50 mg | 5,190 | 5.05 | 5.10 | 44 /0 | 12,030.74 | | |
| Capecitabine, tablet, capsule, pill, 150 mg | 110,100 | 0.58 | 0.56 | 2% | 1,537.60 | | |
| Capecitabine, tablet, capsule, pill, 500 mg | 170,280 | 1.47 | 1.34 | 9% | 23,445.69 | | |
| Carboplatin, ampule, vial, syringe, 150 mg | 1,441 | 20.30 | 11.91 | 41% | 12,088.49 | | |
| Carboplatin, | 3,184 | 55.79 | 29.50 | 47% | 83,692.19 | | |
| ampule, vial, syringe, 450 mg Caspofungin, | , | | | | | | |
| vial, 70 mg | 9 | 544.02 | 526.01 | 3% | 162.10 | | |
| Caspofungin, vial, 50 mg | 140 | 380.87 | 392.39 | -3% | -1,612.20 | | |
| Cisplatin, | 11,874 | 14.31 | 6.82 | 52% | 88,933.48 | | |
| ampule, vial, syringe, 50 mg | 11,074 | 14.01 | 0.02 | 52 /0 | 00,000.40 | | |
| Cisplatin, ampule, vial, syringe, 100 mg | 12,490 | 33.35 | 9.55 | 71% | 297,271.92 | | |
| Cyclophosphamide, | 2.054 | 07.00 | 10.00 | 609/ | 62 606 20 | | |
| ampule, vial, syringe, 1 000 mg | 3,851 | 27.33 | 10.82 | 60% | 63,606.20 | | |
| Cyclophosphamide, ampule, vial, syringe, 500 mg | 20,145 | 12.48 | 7.46 | 40% | 101,273.87 | | |
| Cyclophosphamide, | 32,400 | 8.76 | 3.69 | 58% | 164,242.78 | | |
| ampule, vial, syringe, 200 mg Cytarabine, | | | | | | | |
| ampule, vial, syringe, 1 000 mg | 2,423 | 18.95 | 13.17 | 31% | 14,009.22 | | |
| Cytarabine, ampule, vial, syringe, 100 mg | 9,250 | 5.94 | 4.77 | 20% | 10,755.36 | | |

⁴⁸ Please, refer to the General approach to assessment, assumptions and baselines section for more details on ProZorro prices

⁴⁹ Annexes 13-15 contain only those INNs, ProZorro references for which were found

⁵⁰ Hereinafter in Annexes 12-19 positive values stand for price decrease and savings, negative values stand for price increase and increased spending accordingly

⁵¹ Hereinafter in Annexes 12-19 prices are indicated with two decimals for the ease of presentation, while all calculations in the present assignment were done with four decimals, therefore sums may differ because of the rounding error

⁵² Hereinafter in Annexes 12-15 the assigned quantity procured by UNDP, i.e. main procurement

| INN, pharmaceutical presentation, strength | Quantity ⁵² , UOM | Prozorro price per UOM, USD | UNDP price per UOM, USD | Price change, % | Savings/ increased spending, USD |
|---|---------------------------------|--------------------------------------|----------------------------------|-----------------------|---|
| Dacarbazine, ampule, vial, syringe, 200 mg | 11,760 | 11.14 | 9.44 | 15% | 20,054.20 |
| Docetaxel, ampule, vial, syringe, 20 mg | 3,009 | 11.71 | 9.33 | 20% | 7,167.08 |
| Docetaxel, ampule, vial, syringe, 80 mg | 4,659 | 24.58 | 23.33 | 5% | 5,796.35 |
| Doxorubicin, | 5,005 | 41.23 | 15.91 | 61% | 126,719.50 |
| ampule, vial, syringe, 100 mg Doxorubicin, | 25,011 | 23.65 | 8.10 | 66% | 388,930.83 |
| ampule, vial, syringe, 50 mg Epirubicin, | 1,101 | 9.04 | 4.72 | 48% | 4,754.85 |
| ampule, vial, syringe, 10 mg Epirubicin, | | | | | |
| ampule, vial, syringe, 50 mg Etoposide, | 1,600 | 21.14 | 13.83 | 35% | 11,690.87 |
| ampule, vial, syringe, 200 mg Etoposide, | 3,069 | 22.31 | 3.82 | 83% | 56,733.55 |
| ampule, vial, syringe, 100 mg | 10,900 | 8.11 | 3.90 | 52% | 45,950.09 |
| Exemestane, tablet, capsule, pill, 25 mg | 73,140 | 0.51 | 0.21 | 59% | 22,014.18 |
| Filgrastim, ampule, vial, syringe, 48 million IU | 5,648 | 51.83 | 15.38 | 70% | 205,901.18 |
| Fludarabine, ampule, vial, syringe, 50 mg | 2,030 | 33.24 | 13.65 | 59% | 39,766.35 |
| Fluorouracil, ampule, vial, syringe, 500 mg | 64,291 | 4.54 | 2.23 | 51% | 148,873.22 |
| Gemcitabine, ampule, vial, syringe, 200 mg | 4,570 | 11.52 | 5.83 | 49% | 26,003.02 |
| Gemcitabine, | 6,574 | 33.01 | 19.09 | 42% | 91,523.35 |
| ampule, vial, syringe, 1 000 mg Goserelin, | 1,977 | 140.64 | 115.71 | 18% | 49,302.15 |
| ampule, vial, syringe, 10,8 mg Hydroxycarbamide, | 183,700 | 0.49 | 0.51 | -4% | -3,185.59 |
| tablet, capsule, pill, 500 mg Ifosfamide, | 1,947 | 38.40 | 23.54 | 39% | 28,929.04 |
| ampule, vial, syringe, 1 000 mg Imatinib, | | | | | |
| tablet, capsule, pill, 400 mg Imatinib, | 34,200 | 1.89 | 1.43 | 24% | 15,584.47 |
| tablet, capsule, pill, 100 mg Interferon alpha-2b, | 378,240 | 0.80 | 0.42 | 47% | 143,495.02 |
| ampule, vial, syringe, 3 million IU | 1,370 | 1.94 | 2.02 | -4% | -100.25 |
| Irinotecan, ampule, vial, syringe, 300 mg | 1,539 | 36.18 | 33.94 | 6% | 3,449.61 |
| Irinotecan, ampule, vial, syringe, 100 mg | 2,411 | 33.08 | 11.27 | 66% | 52,571.46 |
| Lenograstim, ampule, vial, syringe, 33,6 million IU or 36 mln IU | 510 | 64.09 | 55.45 | 13% | 4,402.79 |
| Letrozole, tablet, capsule, pill, 2,5 mg | 82,980 | 0.48 | 0.18 | 63% | 25,143.44 |
| Mesna, ampule, vial, syringe, 400 mg | 5,100 | 56.48 | 2.34 | 96% | 276,070.52 |
| Methotrexate, ampule, vial, syringe, 1 000 mg | 492 | 23.17 | 17.55 | 24% | 2,768.87 |
| Methotrexate, | 6,979 | 5.08 | 1.85 | 64% | 22,551.93 |
| ampule, vial, syringe, 50 mg Nilotinib, | 55,020 | 28.91 | 20.57 | 29% | 458,757.36 |
| tablet, capsule, pill, 200 mg Oxaliplatin, | 3,250 | 33.16 | 9.23 | 72% | 77,796.94 |
| ampule, vial, syringe, 50 mg Oxaliplatin, | 3,842 | | 15.38 | 31% | 26,038.41 |
| ampule, vial, syringe, 100 mg Paclitaxel, | | 22.15 | | | |
| ampule, vial, syringe, 30 mg | 1,832 | 12.88 | 7.64 | 41% | 9,616.70 |

| | Page | <u>131</u> |
|--|------|------------|
|--|------|------------|

| INN, pharmaceutical presentation, strength | Quantity ⁵² , UOM | Prozorro price per UOM, USD | UNDP price per UOM, USD | Price change, % | Savings/ increased spending, USD |
|--|---------------------------------|--------------------------------------|----------------------------------|-----------------------|---|
| Paclitaxel, ampule, vial, syringe, 100 mg | 5,162 | 40.10 | 13.52 | 66% | 137,202.19 |
| Piperacillin/Tazobactam, ampule, vial, syringe, 4000 mg/500 mg | 2,394 | 9.86 | 5.41 | 45% | 10,651.22 |
| Rituximab, ampule, vial, syringe, 500 mg | 898 | 900.05 | 1,091.25 | -21% | -171,699.19 |
| Rituximab, ampule, vial, syringe, 100 mg | 1,200 | 181.83 | 218.84 | -20% | -44,418.78 |
| Tegafur, tablet, capsule, pill, 400 mg | 64,300 | 103.94 | 1.21 | 99% | 6,605,495.33 |
| Topotecan, ampule, vial, syringe, 4 mg | 670 | 74.16 | 25.73 | 65% | 32,446.06 |
| Toremifene, tablet, capsule, pill, 60 mg | 103,440 | 0.82 | 0.88 | -7% | -6,292.61 |
| Trastuzumab, ampule, vial, syringe, 150 mg | 2,203 | 510.76 | 536.27 | -5% | -56,207.11 |
| Triptorelin, ampule, vial, syringe, 11,25 mg | 2,656 | 184.54 | 185.06 | 0% | -1,361.13 |
| Vancomycin, ampule, vial, syringe, 500 mg | 802 | 6.52 | 3.51 | 46% | 2,409.86 |
| Vincristine, ampule, vial, syringe, 1 mg | 12,864 | 3.99 | 2.57 | 36% | 18,230.74 |
| Vinorelbine, ampule, vial, syringe, 50 mg | 1,411 | 41.70 | 25.45 | 39% | 22,929.08 |
| Voriconazole, vial, 200 mg | 107 | 128.54 | 111.35 | 13% | 1,839.10 |
| Voriconazole, tablet, capsule, pill, 200 mg | 182 | 7.13 | 10.10 | -42% | -539.91 |
| Zoledronic acid, ampule, vial, syringe, 4 mg | 5,477 | 27.65 | 7.20 | 74% | 111,981.35 |
| Childh | ood Cystic Fit | orosis | | | |
| Average price change: -2% | Total saving | s for progra | mme: -68,534 | .82 | |
| Dornase alfa, solution for Inhalation, ampule, 2,5 mg/2,5 mL | 31,854 | 18.49 | 20.49 | -11% | -63,737.83 |
| Multienzymes (lipase, protease etc.), Gastroresistant granule/microgranules in one capsule, 25 000 Units | 373,300 | 0.46 | 0.53 | -16% | -27,503.64 |
| Multienzymes (lipase, protease etc.), Gastroresistant granule/microgranules in one capsule, 10 000 Units | 669,816 | 0.16 | 0.13 | 21% | 22,706.65 |
| | hood Haemop | hilia | | | |
| Average price change: -9% | Total saving | s for program | nme: -289,63 | 0.85 | |
| Anti-inhibitor coagulant complex, vial, 500 IU | 481 | 605.02 | 620.40 | -3% | -7,398.13 |
| Coagulation factor VIII (recombinant), vial, 500 IU | 3,815 | 125.27 | 132.55 | -6% | -27,760.66 |
| Desmopressin, ampule/vial/syringe, 15 μg/1 mL | 220 | 17.96 | 19.86 | -11% | -417.61 |
| Eptacog alfa (recombinant coagulation factor VIIa), vial, 2 mg (100 KIU) | 174 | 1,528.59 | 1,700.00 | -11% | -29,825.04 |
| Eptacog alfa (recombinant coagulation factor VIIa), vial, 5 mg (250 KIU) | 96 | 3,815.57 | 4,250.00 | -11% | -41,705.17 |
| Human coagulation factor IX, vial, 500 and/or 600 IU | 4,939 | 130.10 | 100.20 | 23% | 147,672.84 |
| Human coagulation factor VIII (plasma), vial, 250 IU | 2,261 | 65.15 | 60.98 | 6% | 9,447.15 |
| Human coagulation factor VIII (plasma), vial, 1000 IU | 1,595 | 179.97 | 243.90 | -36% | -101,971.92 |
| Human coagulation factor VIII (plasma), vial, 500 IU | 15,808 | 117.03 | 116.65 | 0% | 5,996.02 |

| INN, pharmaceutical presentation, strength | Quantity ⁵² , UOM | Prozorro price per UOM, USD | UNDP price per UOM, USD | Price change, % | Savings/ increased spending, USD |
|---|---------------------------------|--------------------------------------|----------------------------------|-----------------------|---|
| Human coagulation factor VIII and human von Willebrand factor, vial, 500 IU | 3,225 | 121.31 | 141.90 | -17% | -66,406.53 |
| Human coagulation factor VIII and human von Willebrand factor, vial, 1000 IU | 2,184 | 224.84 | 306.00 | -36% | -177,261.80 |
| | TB medicines | | | | |
| Average price change: 47% | Total savings | for program | me: 44,435,1 | 84.84 | |
| Capreomycin, ampule/vial/syringe, 1 000 mg | 559,556 | 5.84 | 2.26 | 61% | 2,005,931.96 |
| Cycloserine, tabs (blister package), 250 mg | 4,345,770 | 0.53 | 0.24 | 55% | 1,268,329.70 |
| Ethambutol, ampule/vial/syringe, 100 mg/mL (20 mL), another vial volume is possible with Qty re-calculation | 36,399 | 2.53 | 2.64 | -4% | -3,864.89 |
| Ethambutol, tabs (blister package), 400 mg | 5,792,100 | 1.40 | 0.02 | 98% | 7,983,673.51 |
| Isoniazid, ampule/vial/syringe, 100 mg/mL | 15,640 | 0.30 | 0.08 | 72% | 3,428.76 |
| Isoniazid, vial (syrup), 100 mg/5 mL (100 mL), another vial volume is possible with Qty re-calculation | 50,060 | 1.86 | 3.26 | -75% | -70,027.31 |
| Isoniazid, tabs (blister package), 300 mg | 2,926,800 | 0.86 | 0.01 | 98% | 2,479,297.44 |
| Kanamycin, ampule/vial/syringe, 1 000 mg | 844,310 | 0.46 | 0.35 | 24% | 94,872.98 |
| Levofloxacin, ampule/vial/syringe, 5 mg/mL (200 mL), another vial volume is possible with Qty re-calculation | 32,244 | 3.05 | 1.27 | 58% | 57,209.78 |
| Levofloxacin, tabs (blister package), 500 mg | 2,032,500 | 3.89 | 0.05 | 99% | 7,802,678.90 |
| Linezolid, ampule/vial/syringe, 2 mg/mL (300 mL), another vial volume is possible with Qty re-calculation | 17,135 | 20.13 | 4.77 | 76% | 263,210.09 |
| Linezolid, tabs (blister package), 600 mg | 675,090 | 32.04 | 0.26 | 99% | 21,458,213.96 |
| Sodium aminosalicylate, ampule/vial/syringe, 30 mg/mL (400 mL), another vial volume is possible with Qty re-calculation | 14,582 | 4.81 | 4.77 | 1% | 492.67 |
| Sodium aminosalicylate, powder, enteric granules, 1 000 mg | 6,204,100 | 0.13 | 0.08 | 36% | 289,604.98 |
| Moxifloxacin, ampule/vial/syringe, 400 mg | 16,549 | 24.69 | 21.78 | 12% | 48,160.92 |
| Moxifloxacin, tabs (blister package), 400 mg | 288,735 | 2.13 | 0.99 | 54% | 329,661.90 |
| Protionamid, tabs (blister package), 250 mg | 3,461,400 | 0.19 | 0.07 | 62% | 406,140.57 |
| Pyrazinamide, tabs (blister package), 500 mg | 1,013,000 | 0.04 | 0.02 | 45% | 16,921.84 |
| Rifampicin, tabs (blister package), 150 mg | 232,800 | 0.03 | 0.02 | 19% | 1,247.08 |

Price change and savings against ProZorro^{53/54} 2017 budget year^{55/56}

| INN, pharmaceutical presentation, strength | Quantity⁵7, UOM | Prozorro price per UOM, USD | UNDP price per UOM, USD | Price change, % | Savings/ increased spending, USD |
|---|--------------------|--------------------------------------|----------------------------------|-----------------------|---|
| | Adult Cancer | | | | |
| Average price change: 40% | Total savings | for program | nme: 18,508,1 | 48.18 | |
| Asparaginase, | 445 | 94.03 | 109.84 | -17% | -7,034.68 |
| ampule, vial, syringe, 10 000 IU Bendamustine, | | 04.00 | 100.04 | 17.70 | 7,004.00 |
| ampule, vial, syringe, 25 mg | 869 | 51.38 | 50.88 | 1% | 433.38 |
| Bendamustine, | 908 | 199.08 | 193.98 | 3% | 4,633.28 |
| ampule, vial, syringe, 100 mg | 908 | 199.00 | 193.90 | 370 | 4,033.20 |
| Bicalutamide, tablet, capsule, pill, 150 mg | 82,230 | 1.65 | 0.41 | 75% | 102,147.91 |
| Bicalutamide, | 279,180 | 1.20 | 0.23 | 80% | 268,739.46 |
| tablet, capsule, pill, 50 mg | 210,100 | 1.20 | 0.20 | 0070 | 200,700.10 |
| Bortezomib, ampule, vial, syringe, 3,5 mg | 315 | 256.96 | 111.30 | 57% | 45,883.02 |
| Bortezomib, | 1,741 | 117.43 | 127.20 | -8% | -17,008.45 |
| ampule, vial, syringe, 1 mg Calcium folinate, | , | - | | | , |
| ampule, vial, syringe, 30 mg | 195 | 3.13 | 2.86 | 9% | 52.80 |
| Calcium folinate, | 33,767 | 5.60 | 3.61 | 35% | 67,046.48 |
| ampule, vial, syringe, 50 mg Calcium folinate. | 00,101 | 0.00 | 0.01 | 0070 | 01,010.10 |
| ampule, vial, syringe, 100 mg | 40,878 | 10.26 | 4.96 | 52% | 216,834.56 |
| Capecitabine, | 208,200 | 0.58 | 0.60 | -5% | -5,718.22 |
| tablet, capsule, pill, 150 mg Capecitabine. | 200,200 | 0.00 | 0.00 | 0/0 | 0,110.22 |
| tablet, capsule, pill, 500 mg | 895,560 | 1.38 | 1.42 | -3% | -36,324.76 |
| Carboplatin, | 15,186 | 21.63 | 8.05 | 63% | 206,250.34 |
| ampule, vial, syringe, 150 mg | 10,100 | 21.00 | 0.00 | 0070 | 200,200.04 |
| Carboplatin, ampule, vial, syringe, 450 mg | 19,550 | 45.85 | 19.91 | 57% | 507,260.46 |
| Caspofungin, | 64 | 516.90 | 525.76 | -2% | -567.29 |
| vial, 70 mg | 04 | 510.50 | 525.70 | -2 /0 | -307.23 |
| Caspofungin, vial, 50 mg | 373 | 372.91 | 392.20 | -5% | -7,195.59 |
| Chlorambucil, | 31,075 | 2.75 | 2.93 | -6% | -5,381.70 |
| tablet, capsule, 2 mg in vial | 51,075 | 2.75 | 2.00 | 070 | -0,001.70 |
| Cisplatin, ampule, vial, syringe, 100 mg | 30,952 | 19.70 | 9.54 | 52% | 314,485.38 |
| Cisplatin, | 36,674 | 13.34 | 5.47 | 59% | 288,754.19 |
| ampule, vial, syringe, 50 mg | 30,074 | 13.34 | 5.47 | 09% | 200,704.19 |
| Cyclophosphamide, ampule, vial, syringe, 1000 mg | 7,587 | 25.38 | 10.81 | 57% | 110,526.47 |
| Cyclophosphamide, | 71,909 | 12.63 | 7.45 | 41% | 372,148.23 |
| ampule, vial, syringe, 500 mg | 11,909 | 12.05 | 1.40 | 41/0 | 572,140.25 |

⁵³ Please, refer to the General approach to assessment, assumptions and baselines section for more details on ProZorro prices

⁵⁴ Annexes 13-15 contain only those INNs, ProZorro references for which were found

⁵⁷ Hereinafter in Annexes 12-15 the assigned quantity procured by UNDP, i.e. main procurement

⁵⁵ Hereinafter in Annexes 12-19 positive values stand for price decrease and savings, negative values stand for price increase and increased spending accordingly

⁵⁶ Hereinafter in Annexes 12-19 prices are indicated with two decimals for the ease of presentation, while all calculations in the present assignment were done with four decimals, therefore sums may differ because of the rounding error

| INN, pharmaceutical presentation, strength | Quantity⁵ ⁷ , UOM | Prozorro price per UOM, USD | UNDP price per UOM, USD | Price change, % | Savings/ increased spending, USD |
|---|---------------------------------|--------------------------------------|----------------------------------|-----------------------|---|
| Cyclophosphamide, ampule, vial, syringe, 200 mg | 107,820 | 6.86 | 3.69 | 46% | 342,092.77 |
| Cytarabine, ampule, vial, syringe, 1000 mg | 5,446 | 23.04 | 8.27 | 64% | 80,425.88 |
| Cytarabine, ampule, vial, syringe, 100 mg | 15,282 | 5.83 | 3.82 | 35% | 30,851.34 |
| Dacarbazine, ampule, vial, syringe, 200 mg | 29,630 | 96.83 | 10.44 | 89% | 2,559,907.51 |
| Docetaxel, ampule, vial, syringe, 20 mg | 9,691 | 12.97 | 4.19 | 68% | 85,073.55 |
| Docetaxel, ampule, vial, syringe, 80 mg | 19,848 | 25.33 | 16.75 | 34% | 170,247.93 |
| Doxorubicin, ampule, vial, syringe, 100 mg | 17,231 | 41.14 | 12.76 | 69% | 488,924.61 |
| Doxorubicin, ampule, vial, syringe, 50 mg | 49,465 | 32.47 | 6.51 | 80% | 1,284,225.26 |
| Epirubicin, ampule, vial, syringe, 10 mg | 6,446 | 6.75 | 4.24 | 37% | 16,191.80 |
| Epirubicin, ampule, vial, syringe, 50 mg | 15,239 | 23.01 | 9.54 | 59% | 205,338.23 |
| Etoposide, ampule, vial, syringe, 200 mg | 4,444 | 18.95 | 4.57 | 76% | 63,900.05 |
| Etoposide, ampule, vial, syringe, 100 mg | 35,120 | 10.29 | 3.12 | 70% | 251,931.52 |
| Exemestane, tablet, capsule, pill, 25 mg | 398,850 | 0.71 | 0.19 | 73% | 205,855.15 |
| Filgrastim, ampule, vial, syringe, 48 mln IU | 28,380 | 40.12 | 10.38 | 74% | 844,074.85 |
| Fludarabine, ampule, vial, syringe, 50 mg | 4,793 | 22.52 | 22.90 | -2% | -1,820.44 |
| Fluorouracil, ampule, vial, syringe, 500 mg | 176,024 | 4.52 | 1.60 | 65% | 513,728.38 |
| Gemcitabine, ampule, vial, syringe, 1 000 mg | 29,377 | 41.17 | 13.71 | 67% | 806,757.61 |
| Goserelin, ampule, vial, syringe, 10.8 mg | 6,522 | 153.27 | 72.27 | 53% | 528,282.05 |
| Hydroxycarbamide, tablet, capsule, pill, 500 mg | 275,200 | 0.55 | 0.55 | -1% | -1,944.27 |
| lfosfamide, ampule, vial, syringe, 1 000 mg | 8,545 | 37.61 | 23.53 | 37% | 120,254.71 |
| Imatinib, tablet, capsule, pill, 400 mg | 168,480 | 1.89 | 1.34 | 29% | 92,072.01 |
| Imatinib, tablet, capsule, pill, 100 mg | 187,920 | 0.79 | 0.34 | 57% | 84,655.25 |
| Interferon alpha-2b, ampule, vial, syringe, 3 million IU | 28,860 | 1.77 | 1.80 | -2% | -1,061.04 |
| Irinotecan, ampule, vial, syringe, 300 mg | 10,544 | 96.23 | 29.68 | 69% | 701,664.98 |
| Irinotecan, ampule, vial, syringe, 100 mg | 13,322 | 52.84 | 9.54 | 82% | 576,865.51 |
| Lenograstim, ampule, vial, syringe, 33,6 mln IU | 890 | 63.93 | 55.43 | 13% | 7,566.44 |
| Letrozole, tablet, capsule, pill, 2,5 mg | 555,370 | 0.50 | 0.11 | 79% | 217,752.96 |
| Mesna, ampule, vial, syringe, 400 mg | 21,360 | 3.60 | 2.34 | 35% | 26,887.99 |
| Methotrexate, ampule, vial, syringe, 1000 mg | 939 | 23.17 | 13.99 | 40% | 8,620.75 |
| Methotrexate, ampule, vial, syringe, 50 mg | 16,347 | 3.69 | 1.84 | 50% | 30,218.79 |
| Nilotinib, tablet, capsule, pill, 200 mg | 231,476 | 21.52 | 22.07 | -3% | -127,446.25 |
| Oxaliplatin, ampule, vial, syringe, 50 mg | 16,764 | 33.91 | 6.63 | 80% | 457,427.72 |

| INN, pharmaceutical presentation, strength | Quantity ⁵⁷ , UOM | Prozorro price per UOM, USD | UNDP price per UOM, USD | Price change, % | Savings/ increased spending, USD | | |
|--|---------------------------------|--------------------------------------|----------------------------------|-----------------------|---|--|--|
| Oxaliplatin, ampule, vial, syringe, 100 mg | 24,492 | 57.72 | 11.03 | 81% | 1,143,497.78 | | |
| Paclitaxel, ampule, vial, syringe, 30 mg | 7,163 | 16.45 | 5.48 | 67% | 78,604.05 | | |
| Paclitaxel, ampule, vial, syringe, 100 mg | 33,014 | 44.02 | 9.71 | 78% | 1,132,831.58 | | |
| Piperacillin/Tazobactam, ampule, vial, syringe, 4500 (4000/500 mg) | 5,029 | 8.14 | 5.25 | 36% | 14,568.13 | | |
| Rituximab, ampule, vial, syringe, 500 mg | 6,163 | 879.03 | 569.95 | 35% | 1,904,840.21 | | |
| Rituximab, ampule, vial, syringe, 100 mg | 6,236 | 166.55 | 111.06 | 33% | 346,061.98 | | |
| Topotecan, ampule, vial, syringe, 4 mg | 4,131 | 54.89 | 77.61 | -41% | -93,844.62 | | |
| Toremifene, tablet, capsule, pill, 60 mg | 506,580 | 0.82 | 1.08 | -32% | -133,347.89 | | |
| Trastuzumab, ampule, vial, syringe, 150 mg | 9,815 | 519.42 | 519.40 | 0% | 217.39 | | |
| Triptorelin, ampule, vial, syringe, 11,25 mg | 7,894 | 181.90 | 178.91 | 2% | 23,599.76 | | |
| Vancomycin, ampule, vial, syringe, 500 mg | 2,630 | 5.85 | 6.13 | -5% | -730.41 | | |
| Vincristine, ampule, vial, syringe, 1 mg | 22,682 | 4.22 | 2.57 | 39% | 37,463.48 | | |
| Vinorelbine, ampule, vial, syringe, 50 mg | 6,571 | 57.04 | 22.83 | 60% | 224,751.89 | | |
| Voriconazole, vial, 200 mg | 418 | 65.00 | 41.02 | 37% | 10,020.87 | | |
| Voriconazole, tablet, capsule, pill, 200 mg | 1,554 | 13.41 | 3.50 | 74% | 15,396.58 | | |
| Zoledronic acid, ampule, vial, syringe, 4 mg | 34,602 | 26.67 | 6.19 | 77% | 708,728.53 | | |
| | t Hepatitis B a | nd C | | | | | |
| Average price change: 21% | Total saving | gs for progra | mme: 559,42 | 4.14 | | | |
| Dasabuvir, tablets, 250 mg | 83,832 | 1.29 | 1.39 | -8% | -8,479.30 | | |
| Lamivudin, tablets, capsules, pills, 100 mg | 56,448 | 1.37 | 1.54 | -13% | -10,047.59 | | |
| Ombitasvir/ Paritaprevir/ Ritonavir, tablets, 12,5 mg/75 mg/50 mg | 83,832 | 14.26 | 15.96 | -12% | -142,977.36 | | |
| Peginterferon alfa-2a, ampoules or vials or syringes or syringe pen or syringe tube, 180 µg | 3,221 | 115.77 | 95.40 | 18% | 65,615.36 | | |
| Ribavirin, tablets, capsules, pills, 200 mg | 271,320 | 0.26 | 0.31 | -20% | -13,795.47 | | |
| Sofosbuvir, tablets, 400 mg | 62,356 | 2.20 | 0.69 | 69% | 94,595.75 | | |
| Sofosbuvir/Ledipasvir, tablets, 400 mg/90 mg | 170,884 | 3.69 | 1.13 | 69% | 436,694.91 | | |
| Tenofovir, tablets, capsules, pills, 300 mg | 689,610 | 0.30 | 0.10 | 67% | 137,817.84 | | |
| Childhood Cystic Fibrosis | | | | | | | |
| Average price change: 14% Total savings for programme: 40,723.39 | | | | | | | |
| Colistimethate Sodium, powder for solution for injection, infusion or inhalation in vial, 2 million IU | 23,420 | 11.41 | 3.51 | 69% | 184,916.17 | | |
| Dornase alfa, solution for inhalation, 2,5 mg/2,5 mL in ampule | 79,260 | 18.24 | 20.48 | -12% | -177,716.42 | | |
| Pancreatin, minimicrospheres in gastroresistant granule, 10 000 Units in one capsule | 467,120 | 0.17 | 0.19 | -14% | -10,674.64 | | |

| INN, pharmaceutical presentation, strength | Quantity ⁵⁷ , UOM | Prozorro price per UOM, USD | UNDP price per UOM, USD | Price change, % | Savings/ increased spending, USD |
|--|---------------------------------|--------------------------------------|----------------------------------|-----------------------|---|
| Pancreatin, minimicrospheres in gastroresistant granule, 25 000 Units in one capsule | 838,300 | 0.49 | 0.44 | 11% | 44,198.28 |
| Child | hood Haemop | hilia | | | |
| Average price change: 10% | Total saving | s for progran | nme: 2,893,48 | 34.74 | |
| Anti-inhibitor coagulant complex, vial, 1000 IU | 963 | 1,357.28 | 1,240.20 | 9% | 112,746.88 |
| Anti-inhibitor coagulant complex, vial, 500 IU | 1,403 | 645.34 | 620.10 | 4% | 35,414.93 |
| Coagulation factor VIII (recombinant), vial, 1000 IU | 350 | 609.69 | 212.00 | 65% | 139,191.05 |
| Coagulation factor VIII (recombinant), vial, 500 IU | 6,238 | 149.52 | 106.00 | 29% | 271,447.34 |
| Desmopressin, ampule/vial/syringe, 15 mcg/ml, 1 ml | 530 | 17.97 | 22.46 | -25% | -2,376.72 |
| Eptacog alfa (recombinant coagulation factor VIIa), vial, 5 mg (250 KIU) | 149 | 4,088.85 | 4,240.00 | -4% | -22,521.34 |
| Eptacog alfa (recombinant coagulation factor VIIa), vial, 2 mg (100 KIU) | 158 | 1,521.10 | 1,696.00 | -11% | -27,633.97 |
| Human coagulation factor IX (plasma), vial, 500 IU and/or 600 IU | 4,416 | 138.51 | 127.20 | 8% | 49,938.82 |
| Human coagulation factor IX (recombinant), vial, 500 IU | 1,747 | 107.89 | 100.70 | 7% | 12,559.76 |
| Human coagulation factor VIII (plasma), vial, 250 IU | 2,563 | 65.15 | 58.30 | 11% | 17,565.03 |
| Human coagulation factor VIII (plasma), vial, 1000 IU | 5,030 | 209.97 | 233.20 | -11% | -116,838.69 |
| Human coagulation factor VIII (plasma), vial, 500 IU | 16,159 | 223.89 | 92.22 | 59% | 2,127,662.90 |
| Human coagulation factor VIII and human von Willebrand factor, vial, 1000 IU | 4,353 | 225.47 | 285.79 | -27% | -262,608.12 |
| Human coagulation factor VIII and human von Willebrand factor, vial, 500 IU | 8,656 | 213.40 | 148.82 | 30% | 558,936.87 |
| | TB medicines | 1 | | 1 | L |
| Average price change: 45% | Total savings | for program | me: 17,802,5 | 98.52 | |
| Amoxicillin/Clavulanic acid, powder for solution in vials, 1000 mg/200 mg | 6,400 | 1.26 | 0.78 | 38% | 3,057.13 |
| Amoxicillin/Clavulanic acid, tablets, 500 mg/125 mg | 373,870 | 0.17 | 0.11 | 37% | 23,362.31 |
| Capreomycin, ampoules, vials, syringes, 1 000 mg | 1,743,694 | 5.05 | 1.94 | 62% | 5,418,722.99 |
| Cycloserine, tablets, capsules, pills, 250 mg | 2,590,800 | 0.48 | 0.21 | 56% | 687,010.32 |
| Ethambutol, ampoules, vials, syringes, 100 mg/mL | 41,044 | 2.49 | 2.69 | -8% | -8,502.29 |
| Ethambutol, tablets, capsules, pills, 400 mg | 166,000 | 0.04 | 0.03 | 26% | 1,719.04 |
| Imipenem/Cilastatin, powder for infusion on in vials, 500 mg/500 mg | 365,960 | 8.39 | 3.60 | 57% | 1,751,204.59 |
| Isoniazid, ampoules, vials, syringes, 100 mg/mL | 61,710 | 0.20 | 0.08 | 59% | 7,286.38 |
| Isoniazid, tablets, capsules, pills, 300 mg | 9,477,250 | 0.03 | 0.01 | 52% | 146,786.59 |
| Kanamycin, ampoules, vials, syringes, 1 000 mg | 155,010 | 0.47 | 0.31 | 34% | 24,455.27 |
| Levofloxacin, ampoules, vials, syringes, 5 mg/mL | 6,212 | 2.81 | 0.37 | 87% | 15,177.74 |
| Levofloxacin, tablets, capsules, pills, 500 mg | 716,820 | 0.42 | 0.05 | 88% | 263,264.46 |
| Linezolid, ampoules, vials, syringes, 2 mg/mL | 8,567 | 22.65 | 4.13 | 82% | 158,590.83 |

| INN, pharmaceutical presentation, strength | Quantity ⁵⁷ , UOM | Prozorro price per UOM, USD | UNDP price per UOM, USD | Price change, % | Savings/ increased spending, USD |
|--|---------------------------------|--------------------------------------|----------------------------------|-----------------------|---|
| Linezolid, tablets, capsules, pills, 600 mg | 2,747,495 | 2.08 | 0.27 | 87% | 4,965,568.81 |
| Meropenem, vials, 1000 mg | 186,341 | 9.74 | 2.54 | 74% | 1,341,095.43 |
| Moxifloxacin, ampoules, vials, syringes, 400 mg | 2,118 | 9.16 | 11.66 | -27% | -5,304.31 |
| Moxifloxacin, tablets, capsules, pills, 400 mg | 1,242,370 | 2.27 | 0.27 | 88% | 2,496,825.67 |
| Protionamid, tablets, capsules, pills, 250 mg | 2,519,400 | 0.14 | 0.07 | 49% | 175,441.07 |
| Pyrazinamide, tablets, capsules, pills, 500 mg | 10,169,300 | 0.02 | 0.02 | 21% | 53,380.26 |
| Rifampicin, tablets, capsules, pills, 150 mg | 7,548,100 | 0.03 | 0.03 | 13% | 33,301.37 |
| Sodium aminosalicylate, ampoules, vials, syringes, 30 mg/mL | 790 | 4.68 | 4.85 | -4% | -140.32 |
| Sodium aminosalicylate, powder, enteric granules, 1 000 mg | 6,108,400 | 0.13 | 0.09 | 30% | 250,295.18 |

Price change and savings against ProZorro^{58/59} 2018 budget year^{60/61}

| INN, pharmaceutical presentation, strength | Quantity ⁶² , UOM | Prozorro price per UOM, USD | UNDP price per UOM, USD | price change, % | Savings/ increased spending, USD |
|--|---------------------------------|--------------------------------------|----------------------------------|-----------------------|---|
| | Adult Cancer | | | | |
| Average price change: 56% | Total savings | for program | nme: 52,543,3 | 77.00 | |
| Anastrozole, | 155,910 | 0.62 | 0.18 | 71% | 68,355.85 |
| tablet, capsule, pill, 1 mg | 100,010 | 0.02 | 0.10 | 7170 | 00,000.00 |
| Bendamustine, ampules, vials, syringes, 100 mg | 4,750 | 255.88 | 34.86 | 86% | 1,049,840.86 |
| Bendamustine, | 0.504 | 07.40 | 45.05 | 700/ | 000.047.04 |
| ampules, vials, syringes, 25 mg | 6,561 | 67.16 | 15.85 | 76% | 336,647.31 |
| Bicalutamide, tablet, capsule, pill, 150 mg | 64,092 | 1.75 | 0.22 | 87% | 97,883.77 |
| Bicalutamide, | 265,356 | 0.97 | 0.11 | 89% | 228,038.84 |
| tablet, capsule, pill, 50 mg | | | | | |
| Bortezomib, ampules, vials, syringes, 3.5 mg | 1,574 | 114.14 | 45.79 | 60% | 107,577.68 |
| Bortezomib, | 2,214 | 139.05 | 36.63 | 74% | 226,748.10 |
| ampules, vials, syringes, 1 mg Calcium folinate, | , | | | | |
| ampules, vials, syringes, 30 mg | 265 | 3.56 | 2.86 | 20% | 183.82 |
| Calcium folinate, | 12,425 | 5.39 | 3.08 | 43% | 28,586.99 |
| ampules, vials, syringes, 50 mg | 12,425 | 5.55 | 5.00 | 4370 | 20,300.33 |
| Calcium folinate, ampule, vial, syringe, 100 mg | 47,321 | 11.98 | 4.19 | 65% | 368,595.70 |
| Capecitabine, | 222.200 | 0.59 | 0.16 | 700/ | 07 440 25 |
| tablet, capsule, pill, 150 mg | 233,280 | 0.58 | 0.16 | 72% | 97,449.35 |
| Capecitabine, | 1,230,000 | 1.20 | 0.30 | 75% | 1,103,238.20 |
| tablet, capsule, pill, 500 mg Carboplatin, | | | | | |
| ampule, vial, syringe, 150 mg | 9,917 | 26.80 | 8.05 | 70% | 185,958.21 |
| Carboplatin, | 14,364 | 49.74 | 19.91 | 60% | 428,516.91 |
| ampule, vial, syringe, 450 mg Caspofungin, | , | | | | , |
| vials, 50 mg | 600 | 395.18 | 392.20 | 1% | 1,789.36 |
| Chlorambucil, | 28,675 | 2.85 | 2.75 | 4% | 2,895.49 |
| tablets, capsules, pills, 2 mg No. 25 per vial | 20,075 | 2.00 | 2.75 | 4 70 | 2,095.49 |
| Cisplatin, | 23,378 | 19.78 | 9.54 | 52% | 239,377.88 |
| ampule, vial, syringe, 100 mg Cisplatin, | | | | | |
| ampule, vial, syringe, 50 mg | 25,086 | 9.97 | 5.47 | 45% | 112,826.21 |
| Cyclophosphamide, | 127,965 | 15.98 | 6.51 | 59% | 1,212,022.32 |
| ampules, vials, syringes, 500 mg | 127,300 | 10.00 | 0.01 | 5570 | 1,212,022.02 |
| Cyclophosphamide, ampules, vials, syringes, 1000 mg | 4,885 | 26.00 | 10.57 | 59% | 75,391.02 |
| Cyclophosphamide, | 132,180 | 8.33 | 3.69 | 56% | 613,516.51 |
| ampule, vial, syringe, 200 mg | , | 0.00 | 0.00 | 0070 | 1.0,0.001 |

⁵⁸ Please, refer to the General approach to assessment, assumptions and baselines section for more details on ProZorro prices

⁵⁹ Annexes 13-15 contain only those INNs, ProZorro references for which were found

⁶² Hereinafter in Annexes 12-15 the assigned quantity procured by UNDP, i.e. main procurement

⁶⁰ Hereinafter in Annexes 12-19 positive values stand for price decrease and savings, negative values stand for price increase and increased spending accordingly

⁶¹ Hereinafter in Annexes 12-19 prices are indicated with two decimals for the ease of presentation, while all calculations in the present assignment were done with four decimals, therefore sums may differ because of the rounding error

| INN, pharmaceutical presentation, strength | Quantity ⁶² , UOM | Prozorro price per UOM, USD | UNDP price per UOM, USD | price change, % | Savings/ increased spending, USD |
|---|---------------------------------|--------------------------------------|----------------------------------|-----------------------|---|
| Cytarabine, ampules, vials, syringes, 1000 mg | 2,261 | 30.16 | 8.27 | 73% | 49,508.30 |
| Cytarabine, ampules, vials, syringes, 100 mg | 5,485 | 6.27 | 3.82 | 39% | 13,438.91 |
| Dacarbazine, ampules, vials, syringes, 200 mg | 17,350 | 13.06 | 10.28 | 21% | 48,272.61 |
| Docetaxel, ampule, vial, syringe, 20 mg | 10,127 | 28.65 | 4.19 | 85% | 247,724.57 |
| Docetaxel, ampule, vial, syringe, 80 mg | 11,502 | 50.80 | 16.75 | 67% | 391,683.07 |
| Doxorubicin, ampule, vial, syringe, 100 mg | 13,570 | 26.85 | 12.76 | 52% | 191,127.77 |
| Doxorubicin, ampule, vial, syringe, 50 mg | 33,048 | 16.67 | 5.30 | 68% | 375,912.78 |
| Epirubicin, ampule, vial, syringe, 10 mg | 6,822 | 7.72 | 4.24 | 45% | 23,711.94 |
| Epirubicin, ampule, vial, syringe, 50 mg | 10,720 | 27.41 | 9.54 | 65% | 191,560.61 |
| Etoposide, ampules, vials, syringes, 200 mg | 2,597 | 20.54 | 4.57 | 78% | 41,483.31 |
| Etoposide, ampule, vial, syringe, 100 mg | 14,173 | 9.92 | 3.12 | 69% | 96,447.86 |
| Exemestane, tablet, capsule, pill, 25 mg | 263,520 | 1.29 | 0.19 | 85% | 287,482.35 |
| Filgrastim, ampule, vial, syringe, 48 mln IU | 23,305 | 31.99 | 10.38 | 68% | 503,646.67 |
| Fluorouracil, ampule, vial, syringe, 500 mg | 140,980 | 4.85 | 1.60 | 67% | 457,965.04 |
| Gemcitabine, ampule, vial, syringe, 200 mg | 17,027 | 10.29 | 4.19 | 59% | 103,869.81 |
| Gemcitabine, ampule, vial, syringe, 1000 mg | 22,353 | 35.98 | 13.71 | 62% | 497,873.61 |
| Goserelin, ampule, vial, syringe, 10,8 mg | 7,582 | 120.25 | 72.27 | 40% | 363,812.78 |
| Hydroxycarbamide, tablets, capsules, pills, 500 mg | 278,800 | 68.73 | 0.54 | 99% | 19,010,624.75 |
| Idarubicin, ampules, vials, syringes, 5 mg | 1,644 | 76.39 | 43.99 | 42% | 53,257.50 |
| Ifosfamide, ampule, vial, syringe, 1000 mg | 5,447 | 40.37 | 23.53 | 42% | 91,693.46 |
| Imatinib, tablets, capsules, pills, 400 mg | 96,780 | 2.61 | 1.35 | 48% | 122,227.87 |
| Imatinib, tablets, capsules, pills, 100 mg | 257,760 | 0.49 | 0.25 | 49% | 62,953.84 |
| Interferon alpha-2b, ampule, vial, syringe, 3 million IU | 16,050 | 2.22 | 2.08 | 7% | 2,330.13 |
| Irinotecan, ampule, vial, syringe, 100 mg | 11,359 | 35.00 | 9.54 | 73% | 289,167.28 |
| Letrozole, tablet, capsule, pill, 2,5 mg | 273,630 | 0.54 | 0.11 | 81% | 119,814.12 |
| Lomustine, tablets, capsules, pills, 40 mg | 1,160 | 7.22 | 8.87 | -23% | -1,916.74 |
| Mesna, ampule, vial, syringe, 400 mg | 17,880 | 4.45 | 2.32 | 48% | 38,120.29 |
| Methotrexate, ampule, vial, syringe, 50 mg | 15,962 | 7.05 | 1.84 | 74% | 83,072.27 |
| Mitoxantrone, ampule, vial, syringe, 20 mg | 1,964 | 92.46 | 17.00 | 82% | 148,190.97 |
| Oxaliplatin, ampule, vial, syringe, 50 mg | 9,209 | 24.89 | 6.63 | 73% | 168,212.56 |
| Oxaliplatin, ampule, vial, syringe, 100 mg | 14,234 | 21.55 | 11.03 | 49% | 149,695.15 |
| Paclitaxel, ampule, vial, syringe, 30 mg | 15,658 | 16.33 | 5.48 | 66% | 169,848.48 |

| INN, pharmaceutical presentation, strength | Quantity ⁶² , UOM | Prozorro price per UOM, USD | UNDP price per UOM, USD | price change, % | Savings/ increased spending, USD |
|---|---------------------------------|--------------------------------------|----------------------------------|-----------------------|---|
| Paclitaxel, ampule, vial, syringe, 100 mg | 26,206 | 32.91 | 9.71 | 70% | 607,972.75 |
| Piperacillin/Tazobactam, ampules, vials, syringes, 4500 (4000/500 mg) | 3,647 | 9.45 | 3.39 | 64% | 22,093.60 |
| Rituximab, ampules, vials, syringes, 500 mg | 8,441 | 1062.39 | 401.98 | 62% | 5,574,550.15 |
| Rituximab, ampules, vials, syringes, 100 mg | 15,034 | 211.20 | 38.29 | 82% | 2,599,523.03 |
| Tamoxifen, | 210,840 | 0.17 | 0.09 | 47% | 16,388.87 |
| tablet, capsule, pill, 20 mg Toremifene, | 209,460 | 0.99 | 1.08 | -9% | -19,451.42 |
| tablet, capsule, pill, 60 mg Trastuzumab, | 32,169 | 535.58 | 164.30 | 69% | 11,943,645.86 |
| ampule, vial, syringe, 150 mg Triptorelin, | 8,467 | 179.36 | 178.91 | 0% | 3,841.62 |
| ampule, vial, syringe, 11,25 mg Vancomycin, | 4,560 | 4.67 | 3.59 | 23% | 4,907.24 |
| ampules, vials, syringes, 500 mg Vincristine, | | | | | |
| ampule, vial, syringe, 1 mg Vinorelbine, | 10,742 | 4.33 | 2.57 | 41% | 18,935.45 |
| ampule, vial, syringe, 50 mg Voriconazole, | 5,280 | 39.91 | 22.83 | 43% | 90,190.34 |
| tablets, capsules, pills, 200 mg Voriconazole, | 2,240 | 7.39 | 3.50 | 53% | 8,710.58 |
| vials, 200 mg Zoledronic acid, | 3,438 | 17.12 | 14.10 | 18% | 10,397.63 |
| ampule, vial, syringe, 4 mg | 26,129 | 32.09 | 5.94 | 82% | 683,417.00 |
| Adul Average price change: -12% | t Hepatitis B ai | | nme: 710,53 | 7 24 | |
| Dasabuvir, | - | | | | 0.000.05 |
| tablets, 250 mg Lamivudine, | 104,384 | 1.42 | 1.39 | 2% | 2,889.65 |
| tablets, capsules, pills, 100 mg Ombitasvir/ Paritaprevir/ Ritonavir, | 45,724 | 1.36 | 1.54 | -14% | -8,400.98 |
| tablets, 12.5 mg/ 75 mg/ 50 mg | 104,384 | 16.15 | 15.96 | 1% | 19,021.29 |
| PEG- interferon α-2a, ampules, vials, syringe, pen injector, syringe-tube, 180 μg | 2,881 | 110.00 | 95.40 | 13% | 42,074.61 |
| Ribavirin, tablets, capsules, pills, 200 mg | 105,504 | 0.09 | 0.31 | -228% | -22,530.82 |
| Sofosbuvir, tablets, 400 mg | 27,132 | 0.52 | 0.69 | -33% | -4,590.93 |
| Sofosbuvir/Ledipasvir, tablets, 400 mg/90 mg | 51,716 | 3.74 | 1.13 | 70% | 135,010.42 |
| Tenofovir, tablets, capsules, pills, 300 mg | 449,520 | 1.32 | 0.10 | 92% | 547,064.00 |
| | ood Cystic Fit | orosis | | | |
| Average price change: 15% | Total saving | gs for progra | amme: 30,099 | .71 | |
| Colistimethate Sodium, powder for solution for injection, infusion or inhalation in vial, 2 million IU | 17,170 | 15.66 | 3.27 | 79% | 212,763.17 |
| Dornase alfa, solution for inhalation, 2,5 mg/2,5 mL in ampule | 88,302 | 18.41 | 20.48 | -11% | -182,278.96 |
| Pancreatin, minimicrospheres in gastro-resistant shell, 10 000 Units in one capsule | 231,100 | 0.18 | 0.19 | -9% | -3,707.34 |
| Pancreatin, minimicrospheres in gastro-resistant shell, 25 000 Units in one capsule | 364,000 | 0.45 | 0.44 | 2% | 3,322.84 |
| · · · · · | hood Haemop | hilia | | | • |
| Average price change: 17% | Total saving | s for progra | mme: 980,48 | 5.11 | |
| Blood coagulation factor VIII (recombinant), vials, 1,000 IU | 1,915 | 234.24 | 212.00 | 9% | 42,580.80 |

| INN, pharmaceutical presentation, strength | Quantity ⁶² , UOM | Prozorro price per UOM, USD | UNDP price per UOM, USD | price change, % | Savings/ increased spending, USD |
|---|---------------------------------|--------------------------------------|----------------------------------|-----------------------|---|
| Coagulation factor VIII (recombinant), vials, 500 IU | 6,036 | 125.10 | 106.00 | 15% | 115,277.13 |
| Human blood coagulation factor IX (plasma), vials, 500 IU and/or 600 IU | 2,391 | 150.29 | 79.50 | 47% | 169,269.05 |
| Human blood coagulation factor IX (recombinant), vials, 500 IU | 2,677 | 177.77 | 143.10 | 20% | 92,818.35 |
| Human blood coagulation factor VIII (plasma), vials, 1,000 IU | 3,366 | 234.24 | 147.30 | 37% | 292,624.58 |
| Human blood coagulation factor VIII (plasma), vials, 500 IU | 7,363 | 141.40 | 92.20 | 35% | 362,231.82 |
| Human blood coagulation factor VIII and Von Willebrand factor, vials, 500 IU | 2,268 | 101.56 | 143.15 | -41% | -94,316.62 |
| | TB medicines | | | | |
| Average price change: 48% | Total saving | s for progra | mme: 4,279,7 | 59.9 | |
| Amoxicillin/Clavulanic acid, powder for solution for injection in vials, 1000 mg/200 mg | 6,483 | 0.98 | 0.78 | 20% | 1,269.59 |
| Cycloserine, tablets, capsules, pills, 250 mg | 500,000 | 0.56 | 0.21 | 63% | 176,653.96 |
| Delamanid, tablets, 50 mg | 1,086,624 | 4.03 | 2.67 | 34% | 1,482,032.94 |
| Ethambutol, ampoules, vials, syringes, 100 mg/mL | 18,318 | 2.26 | 2.69 | -19% | -7,967.84 |
| Ethambutol, tablets, capsules, pills, 100 mg | 207,850 | 0.05 | 0.03 | 38% | 3,819.19 |
| Ethambutol, tablets, capsules, pills, 400 mg | 31,110 | 0.11 | 0.08 | 30% | 1,065.03 |
| Isoniazid, ampoules, vials, syringes, 100 mg/mL | 1,091,800 | 0.02 | 0.02 | 4% | 701.81 |
| Isoniazid, tablets, capsules, pills, 100 mg | 1,320 | 2.92 | 0.37 | 87% | 3,370.53 |
| Isoniazid, tablets, capsules, pills, 300 mg | 137,900 | 0.23 | 0.02 | 90% | 28,938.16 |
| Levofloxacin, ampoules, vials, syringes, 5 mg/mL | 467,300 | 0.49 | 0.04 | 92% | 210,250.04 |
| Levofloxacin, tablets, capsules, pills, 250 mg | 7,100 | 21.81 | 4.13 | 81% | 125,513.98 |
| Levofloxacin, tablets, capsules, pills, 500 mg | 1,133,400 | 1.79 | 0.21 | 89% | 1,792,567.20 |
| Linezolid, ampoules, vials, syringes, 2 mg/mL | 3,541 | 18.64 | 11.66 | 37% | 24,705.46 |
| Linezolid, tablets, capsules, pills, 600 mg | 168,760 | 2.12 | 0.27 | 87% | 312,224.55 |
| Moxifloxacin, ampoules, vials, syringes, 400 mg | 4,444,150 | 0.03 | 0.02 | 40% | 56,000.33 |
| Moxifloxacin, tablets, capsules, pills, 400 mg | 2,841,600 | 0.06 | 0.03 | 42% | 68,583.40 |
| Pyrazinamide, tablets, capsules, pills, 500 mg | 2,775 | 4.87 | 4.85 | 0% | 31.57 |
| Rifampicin, tablets, capsules, pills, 150 mg | 6,483 | 0.98 | 0.78 | 20% | 1,269.59 |
| Sodium aminosalicylate, ampoules, vials, syringes, 30 mg/mL | 500,000 | 0.56 | 0.21 | 63% | 176,653.96 |

Price change and savings against MoH TOR prices 2016 budget year^{63/64}

| INN, pharmaceutical presentation, strength | MoH TOR price per UOM, USD | Quantity ⁶⁵ , UOM | Expected contract amount | UNDP price per UOM, USD | Actual contract amount, USD | Price change, USD | Price change % | Savings / increased spending, USD |
|---|-------------------------------------|---------------------------------|--------------------------------|----------------------------------|--------------------------------------|-------------------------|----------------------|---|
| Adult Cancer Allocated programme budget Total expected contract amount Total actual contract amount Average price change Total savings | | | | | | | | |
| Anastrozole, tablet, capsule, pill, 1 mg | 0.83 | 42,420 | 35,308.56 | 0.32 | 13,498.04 | 0.51 | 62% | 6,938,841.89 21,810.51 |
| Asparaginase, ampule, vial, syringe, 10 000 IU | 98.90 | 230 | 22,746.63 | 99.38 | 22,857.29 | -0.48 | 0% | -110.65 |
| Bendamustine, ampule, vial, syringe, 100 mg | 461.96 | 373 | 172,309.24 | 485.71 | 181,169.46 | -23.75 | -5% | -8,860.22 |
| Bendamustine, ampule, vial, syringe, 25 mg | 111.65 | 174 | 19,427.21 | 114.53 | 19,928.92 | -2.88 | -3% | -501.70 |
| Bicalutamide, tablet, capsule, pill, 150 mg | 1.75 | 26,970 | 47,110.55 | 0.37 | 10,011.26 | 1.38 | 79% | 37,099.29 |
| Bicalutamide, tablet, capsule, pill, 50 mg | 1.43 | 54,930 | 78,563.42 | 0.19 | 10,486.14 | 1.24 | 87% | 68,077.29 |
| Bortezomib, ampule, vial, syringe, 1 mg | 304.90 | 528 | 160,984.91 | 269.37 | 142,225.78 | 35.53 | 12% | 18,759.13 |
| Calcium folinate, ampule, vial, syringe, 100 mg | 9.28 | 4,850 | 44,991.85 | 3.71 | 18,002.23 | 5.56 | 60% | 26,989.62 |
| Calcium folinate, ampule, vial, syringe, 30 mg | 4.06 | 625 | 2,540.05 | 2.95 | 1,842.63 | 1.12 | 27% | 697.43 |
| Calcium folinate, ampule, vial, syringe, 50 mg | 4.85 | 5,190 | 25,189.45 | 3.18 | 16,511.99 | 1.67 | 34% | 8,677.46 |
| Capecitabine, tablet, capsule, pill, 150 mg | 0.56 | 110,100 | 61,224.03 | 0.56 | 61,887.21 | -0.01 | -1% | -663.18 |
| Capecitabine, tablet, capsule, pill, 500 mg | 1.31 | 170,280 | 223,646.38 | 1.34 | 227,528.14 | -0.02 | -2% | -3,881.76 |
| Carboplatin, ampule, vial, syringe, 150 mg | 16.81 | 1,441 | 24,218.82 | 11.91 | 17,169.08 | 4.89 | 29% | 7,049.74 |
| Carboplatin, ampule, vial, syringe, 450 mg | 44.37 | 3,184 | 141,280.51 | 29.50 | 93,937.87 | 14.87 | 34% | 47,342.64 |
| Caspofungin, vial, 50 mg | 382.61 | 140 | 53,565.62 | 392.39 | 54,933.90 | -9.77 | -3% | -1,368.28 |
| Caspofungin, vial, 70 mg | 512.91 | 9 | 4,616.16 | 526.01 | 4,734.07 | -13.10 | -3% | -117.91 |
| Chlorambucil, tablet, capsule, 2 mg | 1.57 | 26,650 | 41,854.77 | 2.85 | 75,968.49 | -1.28 | -82% | -34,113.72 |
| Cisplatin, ampule, vial, syringe, 100 mg | 28.20 | 12,490 | 352,170.17 | 9.55 | 119,259.52 | 18.65 | 66% | 232,910.65 |
| Cisplatin, ampule, vial, syringe, 50 mg | 17.27 | 11,874 | 205,050.38 | 6.82 | 81,016.30 | 10.45 | 60% | 124,034.08 |
| Cladribine, solution for injection, 2 mg/ml, 5 ml vial | 280.55 | 110 | 30,860.27 | 403.61 | 44,396.56 | -123.06 | -44% | -13,536.30 |
| Cyclophosphamide, ampule, vial, syringe, 1 000 mg | 28.12 | 3,851 | 108,288.49 | 10.82 | 41,656.65 | 17.30 | 62% | 66,631.84 |
| Cyclophosphamide, ampule, vial, syringe, 200 mg | 6.92 | 32,400 | 224,267.76 | 3.69 | 119,572.20 | 3.23 | 47% | 104,695.56 |
| Cyclophosphamide, ampule, vial, syringe, 500 mg | 14.06 | 20,145 | 283,321.04 | 7.46 | 150,187.02 | 6.61 | 47% | 133,134.02 |
| Cytarabine, ampule, vial, syringe, 1 000 mg | 21.27 | 2,423 | 51,537.28 | 13.17 | 31,902.67 | 8.10 | 38% | 19,634.60 |

⁶³ Hereinafter in Annexes 12-19 positive values stand for price decrease and savings, negative values stand for price increase and increased spending accordingly

⁶⁴ Hereinafter in Annexes 12-19 prices are indicated with two decimals for the ease of presentation, while all calculations in the present assignment were done with four decimals, therefore sums may differ because of the rounding error

⁶⁵ Hereinafter in Annexes 16-18 the assigned quantity to be procured according to the TOR, i.e. main procurement

| INN, pharmaceutical presentation, strength | MoH TOR price per UOM, USD | Quantity ⁶⁵ , UOM | Expected contract amount | UNDP price per UOM, USD | Actual contract amount, USD | Price change, USD | Price change % | Savings / increased spending, USD |
|--|-------------------------------------|---------------------------------|--------------------------------|----------------------------------|--------------------------------------|-------------------------|----------------------|---|
| Cytarabine, ampule, vial, syringe, 100 mg | 6.01 | 9,250 | 55,546.99 | 4.77 | 44,143.78 | 1.23 | 21% | 11,403.22 |
| Dacarbazine, ampule, vial, syringe, 200 mg | 9.47 | 11,760 | 111,308.70 | 9.44 | 110,996.76 | 0.03 | 0% | 311.94 |
| Daunorubicin, vial, 20 mg | 26.04 | 921 | 23,981.63 | 39.24 | 36,138.66 | -13.20 | -51% | -12,157.03 |
| Docetaxel, ampule, vial, syringe, 20 mg | 19.44 | 3,009 | 58,483.25 | 9.33 | 28,081.19 | 10.10 | 52% | 30,402.06 |
| Docetaxel, ampule, vial, syringe, 80 mg | 51.41 | 4,659 | 239,524.31 | 23.33 | 108,699.13 | 28.08 | 55% | 130,825.18 |
| Doxorubicin, ampule, vial, syringe, 100 mg | 38.69 | 5,005 | 193,628.37 | 15.91 | 79,617.04 | 22.78 | 59% | 114,011.33 |
| Doxorubicin, ampule, vial, syringe, 50 mg | 21.11 | 25,011 | 528,094.71 | 8.10 | 202,704.15 | 13.01 | 62% | 325,390.56 |
| Epirubicin, ampule, vial, syringe, 10 mg | 9.01 | 1,101 | 9,920.19 | 4.72 | 5,194.08 | 4.29 | 48% | 4,726.11 |
| Epirubicin, | 34.30 | 1,600 | 54,878.31 | 13.83 | 22,129.44 | 20.47 | 60% | 32,748.87 |
| ampule, vial, syringe, 50 mg Etoposide, ampule, vial, syringe, 100 mg | 9.34 | 10,900 | 101,767.41 | 3.90 | 42,472.94 | 5.44 | 58% | 59,294.47 |
| ampule, vial, syringe, 100 mg Etoposide, ampule, vial, syringe, 200 mg | 11.90 | 3,069 | 36,531.77 | 3.82 | 11,726.34 | 8.08 | 68% | 24,805.43 |
| ampule, vial, syringe, 200 mg Exemestane, | 1.08 | 73,140 | 79,170.69 | 0.21 | 15,564.19 | 0.87 | 80% | 63,606.50 |
| tablet, capsule, pill, 25 mg Filgrastim, | 39.78 | 5,648 | 224,684.02 | 15.38 | 86,850.99 | 24.40 | 61% | 137,833.03 |
| ampule, vial, syringe, 48 million IU Fludarabine, | 72.94 | 2,030 | 148,074.18 | 13.65 | 27,701.58 | 59.30 | 81% | 120,372.60 |
| ampule, vial, syringe, 50 mg Fluorouracil, | 6.67 | 64,291 | 428,757.41 | 2.23 | 143,182.49 | 4.44 | 67% | 285,574.92 |
| ampule, vial, syringe, 500 mg Gemcitabine, | 52.73 | 6,574 | 346,662.25 | 19.09 | 125,491.09 | 33.64 | 64% | 221,171.17 |
| ampule, vial, syringe, 1 000 mg Gemcitabine, | 24.15 | 4,570 | 110,376.48 | 5.83 | 26,655.90 | 18.32 | 76% | 83,720.59 |
| ampule, vial, syringe, 200 mg Goserelin, | 221.79 | 1,977 | 438,483.77 | 115.71 | 228,750.56 | 106.09 | 48% | 209,733.20 |
| ampule, vial, syringe, 10,8 mg Hydroxycarbamide, | 0.73 | 183,700 | 133,880.62 | 0.51 | 93,503.30 | 0.22 | 30% | 40,377.32 |
| tablet, capsule, pill, 500 mg Idarubicin, | 62.77 | 640 | 40,175.44 | 64.75 | 41,438.14 | -1.97 | -3% | -1,262.70 |
| ampule, vial, syringe, 5 mg Ifosfamide, | 36.78 | 1,947 | 71,619.77 | 23.54 | 45,838.42 | 13.24 | 36% | 25,781.36 |
| ampule, vial, syringe, 1 000 mg Imatinib, | 1.19 | 378,240 | 450,222.37 | 0.42 | 160,449.41 | 0.77 | 64% | 289,772.96 |
| tablet, capsule, pill, 100 mg Imatinib, | | 34,200 | , | | | | | |
| tablet, capsule, pill, 400 mg Interferon alpha-2b, | 5.30 | , | 181,370.93 | 1.43 | 48,964.14 | 3.87 | 73% | 132,406.79 |
| ampule, vial, syringe, 3 million IU Irinotecan, | 45.62 | 1,370 | 62,493.20 | 2.02 | 2,760.55 | 43.60 | 96% | 59,732.65 |
| ampule, vial, syringe, 100 mg Irinotecan. | 103.51 | 2,411 | 249,562.53 | 11.27 | 27,179.44 | 92.24 | 89% | 222,383.08 |
| ampule, vial, syringe, 300 mg Lenograstim, | 220.65 | 1,539 | 339,587.36 | 33.94 | 52,227.50 | 186.72 | 85% | 287,359.85 |
| ampule, vial, syringe, 33,6 million IU or 36 mln IU | 56.68 | 510 | 28,904.98 | 55.45 | 28,281.29 | 1.22 | 2% | 623.70 |
| Letrozole, tablet, capsule, pill, 2,5 mg | 1.08 | 82,980 | 89,822.04 | 0.18 | 14,961.29 | 0.90 | 83% | 74,860.75 |
| Leuprorelin, ampule, vial, syringe, 45 mg | 423.41 | 410 | 173,598.87 | 391.31 | 160,437.18 | 32.10 | 8% | 13,161.69 |
| Lomustine, tablet, capsule, pill, 40 mg | 14.45 | 1,080 | 15,601.13 | 8.30 | 8,968.00 | 6.14 | 43% | 6,633.13 |
| Melphalan, tablet, capsule, pill, 2 mg | 2.64 | 15,600 | 41,136.69 | 2.73 | 42,527.16 | -0.09 | -3% | -1,390.47 |
| Mesna, ampule, vial, syringe, 400 mg | 5.16 | 5,100 | 26,321.10 | 2.34 | 11,952.87 | 2.82 | 55% | 14,368.23 |
| Methotrexate, ampule, vial, syringe, 1 000 mg | 72.04 | 492 | 35,441.69 | 17.55 | 8,632.14 | 54.49 | 76% | 26,809.55 |
| Methotrexate, ampule, vial, syringe, 50 mg | 4.38 | 6,979 | 30,547.78 | 1.85 | 12,925.11 | 2.53 | 58% | 17,622.68 |
| Mitoxantrone, | 120.10 | 1,760 | 211,376.07 | 32.19 | 56,655.28 | 87.91 | 73% | 154,720.79 |
| ampule, vial, syringe, 20 mg Nilotinib, tablet, capsule, pill, 200 mg | 59.53 | 55,020 | 3,275,506.80 | 20.57 | 1,131,909.95 | 38.96 | 65% | 2,143,596.84 |

| INN, pharmaceutical presentation, strength | MoH TOR price per UOM, USD | Quantity ⁶⁵ , UOM | Expected contract amount | UNDP price per UOM, USD | Actual contract amount, USD | Price change, USD | Price change % | Savings / increased spending, USD |
|---|-------------------------------------|---------------------------------|--------------------------------|----------------------------------|--------------------------------------|-------------------------|----------------------|---|
| Oxaliplatin, ampule, vial, syringe, 100 mg | 149.23 | 3,842 | 573,330.29 | 15.38 | 59,079.59 | 133.85 | 90% | 514,250.71 |
| Oxaliplatin, ampule, vial, syringe, 50 mg | 81.08 | 3,250 | 263,519.25 | 9.23 | 29,985.80 | 71.86 | 89% | 233,533.45 |
| Paclitaxel, ampule, vial, syringe, 100 mg | 71.05 | 5,162 | 366,758.18 | 13.52 | 69,797.47 | 57.53 | 81% | 296,960.72 |
| Paclitaxel, ampule, vial, syringe, 30 mg | 27.33 | 1,832 | 50,067.51 | 7.64 | 13,988.42 | 19.69 | 72% | 36,079.09 |
| Piperacillin/Tazobactam, ampule, vial, syringe, 4000 mg/500 mg | 7.79 | 2,394 | 18,658.98 | 5.41 | 12,948.19 | 2.39 | 31% | 5,710.79 |
| Radiopharmaceuticals Sodium iodide Na131I for injection, solution for injection, 4000 MBq | 314.19 | 107 | 33,617.82 | 278.02 | 29,748.19 | 36.16 | 12% | 3,869.63 |
| Radiopharmaceuticals Sodium iodide Na131I POLATOM, hard capsule, 4000 MBq | 314.19 | 57 | 17,908.56 | 203.22 | 11,583.39 | 110.97 | 35% | 6,325.17 |
| Radiopharmaceuticals Technetium (99mTc) pertechnetate, radionuclide generator (solution in a vial is obtained from the generator 99mTc by means of elution), 15000 MBq | 1,706.92 | 26 | 44,379.84 | 1,584.09 | 41,186.21 | 122.83 | 7% | 3,193.63 |
| Rituximab, ampule, vial, syringe, 100 mg | 92.63 | 1,200 | 111,159.20 | 218.84 | 262,613.76 | -126.21 | -136% | -151,454.56 |
| Rituximab, ampule, vial, syringe, 500 mg | 463.16 | 898 | 415,920.33 | 1091.25 | 979,946.54 | -628.09 | -136% | -564,026.21 |
| Tegafur, tablet, capsule, pill, 400 mg | 0.65 | 64,300 | 41,962.09 | 1.21 | 77,738.70 | -0.56 | -85% | -35,776.61 |
| Thalidomide, tablet, capsule, pill, 100 mg | 4.52 | 14,880 | 67,259.46 | 6.50 | 96,733.39 | -1.98 | -44% | -29,473.93 |
| Topotecan, ampule, vial, syringe, 4 mg | 85.53 | 670 | 57,306.08 | 25.73 | 17,240.91 | 59.80 | 70% | 40,065.17 |
| Toremifene, tablet, capsule, pill, 60 mg | 0.95 | 103,440 | 98,063.87 | 0.88 | 91,047.89 | 0.07 | 7% | 7,015.98 |
| Trastuzumab, ampule, vial, syringe, 150 mg | 488.47 | 2,203 | 1,076,103.95 | 536.27 | 1,181,410.74 | -47.80 | -10% | -105,306.79 |
| Triptorelin, ampule, vial, syringe, 11,25 mg | 232.51 | 2,656 | 617,553.73 | 185.06 | 491,512.19 | 47.46 | 20% | 126,041.54 |
| Vancomycin, ampule, vial, syringe, 500 mg | 5.47 | 802 | 4,387.34 | 3.51 | 2,815.26 | 1.96 | 36% | 1,572.08 |
| Vincristine, ampule, vial, syringe, 1 mg | 3.74 | 12,864 | 48,123.12 | 2.57 | 33,102.93 | 1.17 | 31% | 15,020.19 |
| Vinorelbine, ampule, vial, syringe, 50 mg | 78.19 | 1,411 | 110,319.91 | 25.45 | 35,912.77 | 52.73 | 67% | 74,407.14 |
| Voriconazole, tablet, capsule, pill, 200 mg | 37.88 | 182 | 6,894.73 | 10.10 | 1,837.47 | 27.79 | 73% | 5,057.26 |
| Voriconazole, vial, 200 mg | 152.06 | 107 | 16,270.27 | 111.35 | 11,914.72 | 40.71 | 27% | 4,355.55 |
| Zoledronic acid, ampule, vial, syringe, 4 mg | 52.06 | 5,477 | 285,138.18 | 7.20 | 39,438.78 | 44.86 | 86% | 245,699.40 |

Childhood Cystic Fibrosis

| | | Allocated Total expec Total act A Total | 1,259,386.48 839,896.97 935,546.02 2% 95,649.05 | | | | | |
|---|-------|---|---|-------|------------|-------|------|-------------|
| Dornase alfa (desoxyribonuclease), solution for Inhalation, ampule, 2,5 mg/2,5 mL | 15.58 | 31,854 | 496,419.51 | 20.49 | 652,653.42 | -4.90 | -31% | -156,233.91 |
| Multienzymes (lipase, protease etc.), Gastroresistant granule/microgranules in one capsule, 10 000 Units | 0.25 | 669,816 | 167,257.69 | 0.13 | 85,267.58 | 0.12 | 49% | 81,990.11 |
| Multienzymes (lipase, protease etc.), Gastroresistant granule/microgranules in one capsule, 25 000 Units | 0.47 | 373,300 | 176,219.77 | 0.53 | 197,625.02 | -0.06 | -12% | -21,405.25 |

Childhood Haemophilia

Allocated programme budget6,443,435.22Total expected contract amount6,437,303.96Total actual contract amount6,237,275.78Average price change0%

| INN, pharmaceutical presentation, strength | MoH TOR price per UOM, USD | Quantity ⁶⁵ , UOM | Expected contract amount | UNDP price per UOM, USD | Actual contract amount, USD | Price change, USD | Price change % | Savings / increased spending, USD | | |
|---|-------------------------------------|---------------------------------|--------------------------------|----------------------------------|--------------------------------------|--|------------------------------------|--|--|--|
| Anti inhibitor operulant complex | | | | | | Tota | I savings | 200,028.20 | | |
| Anti-inhibitor coagulant complex, vial, 1000 IU | 1,257.93 | 445 | 559,778.37 | 1,240.80 | 552,156.00 | 17.13 | 1% | 7,622.37 | | |
| Anti-inhibitor coagulant complex, vial, 500 IU | 628.96 | 481 | 302,531.91 | 620.40 | 298,412.40 | 8.56 | 1% | 4,119.51 | | |
| Coagulation factor VIII (recombinant), vial, 250 IU | 64.10 | 2,732 | 175,121.51 | 66.28 | 181,063.30 | -2.17 | -3% | -5,941.79 | | |
| Coagulation factor VIII (recombinant), vial, 500 IU | 128.20 | 3,815 | 489,083.87 | 132.55 | 505,678.25 | -4.35 | -3% | -16,594.38 | | |
| Desmopressin, ampule/vial/syringe, 15 mg/1 mL | 13.72 | 220 | 3,017.96 | 19.86 | 4,368.74 | -6.14 | -45% | -1,350.78 | | |
| Eptacog alfa (recombinant coagulation factor VIIa), vial, 2 mg (100 KIU) | 1,643.10 | 174 | 285,899.89 | 1,700.00 | 295,800.00 | -56.90 | -3% | -9,900.11 | | |
| Eptacog alfa (recombinant coagulation factor VIIa), vial, 5 mg (250 KIU) | 4,203.29 | 96 | 403,515.48 | 4,250.00 | 408,000.00 | -46.71 | -1% | -4,484.52 | | |
| Human coagulation factor IX, vial, 500 and/or 600 IU | 133.93 | 4,939 | 661,490.06 | 100.20 | 494,887.80 | 33.73 | 25% | 166,602.26 | | |
| Human coagulation factor VIII (plasma), vial, 1000 IU | 266.72 | 1,595 | 425,414.60 | 243.90 | 389,020.50 | 22.82 | 9% | 36,394.10 | | |
| Human coagulation factor VIII (plasma), vial, 250 IU | 68.02 | 2,261 | 153,786.01 | 60.98 | 137,864.48 | 7.04 | 10% | 15,921.54 | | |
| Human coagulation factor VIII (plasma), vial, 500 IU | 113.30 | 15,808 | 1,791,009.55 | 116.65 | 1,844,003.20 | -3.35 | -3% | -52,993.65 | | |
| Human coagulation factor VIII and human von Willebrand factor, vial, 1000 IU | 317.92 | 2,184 | 694,340.08 | 306.01 | 668,324.05 | 11.91 | 4% | 26,016.03 | | |
| Human coagulation factor VIII and human von Willebrand factor, vial, 500 IU | 152.66 | 3,225 | 492,314.67 | 141.92 | 457,697.06 | 10.73 | 7% | 34,617.62 | | |
| TB medicines | | | | | | | | | | |
| | | | | | Total expec Total act A | l programm ted contrac ual contrac verage pric increased | et amount et amount e change | 8,027,128.39 7,818,136.15 7,867,232.60 -20% -49,096.45 | | |
| Capreomycin, ampule/vial/syringe, 1 000 mg | 1.92 | 559,556 | 1,074,447.66 | 2.26 | 1,263,981.05 | -0.34 | -18% | -189,533.39 | | |
| Clofazimine, tabs (blister package), 100 mg | 1.02 | 1,639,000 | 1,674,160.41 | 0.58 | 942,588.90 | 0.45 | 44% | 731,571.51 | | |
| Cycloserine, tabs (blister package), 250 mg | 0.19 | 4,345,770 | 824,366.72 | 0.24 | 1,036,900.72 | -0.05 | -26% | -212,534.00 | | |
| Ethambutol, ampule/vial/syringe, 100 mg/mL (20 mL), another vial volume is possible with Qty re-calculation | 2.03 | 36,399 | 73,792.18 | 2.64 | 96,115.20 | -0.61 | -30% | -22,323.02 | | |
| Ethambutol, tabs (blister package), 400 mg | 0.02 | 5,792,100 | 89,446.26 | 0.02 | 134,376.72 | -0.01 | -50% | -44,930.46 | | |
| Isoniazid, ampule/vial/syringe, 100 mg/mL | 0.07 | 15,640 | 1,056.67 | 0.08 | 1,310.63 | -0.02 | -24% | -253.96 | | |
| Isoniazid, tabs (blister package), 100 mg | 0.01 | 31,683,600 | 185,833.68 | 0.01 | 272,478.96 | 0.00 | -47% | -86,645.28 | | |
| Isoniazid, tabs (blister package), 300 mg | 0.01 | 2,926,800 | 32,377.41 | 0.01 | 41,560.56 | 0.00 | -28% | -9,183.15 | | |
| Isoniazid, vial (syrup), 100 mg/5 mL (100 mL), another vial volume is possible with Qty re-calculation | 2.46 | 50,060 | 122,939.91 | 3.26 | 162,980.34 | -0.80 | -33% | -40,040.43 | | |
| Kanamycin, ampule/vial/syringe, 1 000 mg | 0.29 | 844,310 | 247,010.87 | 0.35 | 295,508.50 | -0.06 | -20% | -48,497.63 | | |
| Levofloxacin, ampule/vial/syringe, 5 mg/mL (200 mL), another vial volume is possible with Qty re-calculation | 2.04 | 32,244 | 65,629.63 | 1.27 | 41,033.71 | 0.76 | 37% | 24,595.92 | | |
| Levofloxacin, tabs (blister package), 250 mg | 0.02 | 1,151,390 | 26,115.39 | 0.03 | 31,087.53 | 0.00 | -19% | -4,972.14 | | |
| Levofloxacin, tabs (blister package), 500 mg | 0.04 | 2,032,500 | 79,600.51 | 0.05 | 100,812.00 | -0.01 | -27% | -21,211.49 | | |
| Linezolid, ampule/vial/syringe, 2 mg/mL (300 mL), another vial volume is possible with Qty re-calculation | 15.37 | 17,135 | 263,314.82 | 4.77 | 81,773.36 | 10.59 | 69% | 181,541.46 | | |

| INN, pharmaceutical presentation, strength | MoH TOR price per UOM, USD | Quantity ⁶⁵ , UOM | Expected contract amount | UNDP price per UOM, USD | Actual contract amount, USD | Price change, USD | Price change % | Savings / increased spending, USD |
|--|-------------------------------------|---------------------------------|--------------------------------|----------------------------------|--------------------------------------|-------------------------|----------------------|---|
| Linezolid, tabs (blister package), 600 mg | 0.26 | 675,090 | 172,418.13 | 0.26 | 173,970.69 | 0.00 | -1% | -1,552.56 |
| Moxifloxacin, ampule/vial/syringe, 400 mg | 14.50 | 16,549 | 239,958.87 | 21.78 | 360,402.47 | -7.28 | -50% | -120,443.60 |
| Moxifloxacin, tabs (blister package), 400 mg | 0.42 | 288,735 | 119,950.25 | 0.99 | 284,779.33 | -0.57 | -137% | -164,829.09 |
| Protionamid, tabs (blister package), 250 mg | 0.06 | 3,461,400 | 222,552.51 | 0.07 | 247,490.10 | -0.01 | -11% | -24,937.59 |
| Pyrazinamide, tabs (blister package), 500 mg | 0.02 | 1,013,000 | 16,734.10 | 0.02 | 20,665.20 | 0.00 | -23% | -3,931.10 |
| Rifabutin, tabs (blister package), 150 mg | 0.71 | 76,900 | 54,607.39 | 1.05 | 80,652.72 | -0.34 | -48% | -26,045.33 |
| Rifampicin, tabs (blister package), 150 mg | 0.02 | 232,800 | 5,150.65 | 0.02 | 5,400.96 | 0.00 | -5% | -250.31 |
| Rifampicin/Isoniazid, tabs (blister package), 150 mg/75 mg | 0.03 | 8,991,360 | 225,634.18 | 0.03 | 261,648.58 | 0.00 | -16% | -36,014.39 |
| Rifampicin/Isoniazid, tabs (blister package), 75 mg/50 mg | 0.03 | 54,600 | 1,461.37 | 0.04 | 1,954.68 | -0.01 | -34% | -493.31 |
| Rifampicin/Isoniazid/Pyrazinamide, tabs (blister package), 75 mg/50 mg/150 mg | 0.03 | 27,216 | 891.10 | 0.04 | 1,183.90 | -0.01 | -33% | -292.80 |
| Rifampicin/Isoniazid/Pyrazinamide/Etha mbutol, tabs (blister package), 150 mg/75 mg/400 mg/275 mg | 0.05 | 4,499,712 | 246,048.25 | 0.06 | 278,082.20 | -0.01 | -13% | -32,033.95 |
| Sodium aminosalicylate, ampule/vial/syringe, 30 mg/mL (400 mL), another vial volume is possible with Qty re-calculation | 3.54 | 14,582 | 51,587.30 | 4.77 | 69,589.68 | -1.23 | -35% | -18,002.38 |
| Sodium aminosalicylate, powder, enteric granules, equivalent to 1 g of aminosalicylic acid/Sodium aminosalicylate | 0.12 | 6,204,100 | 741,596.16 | 0.08 | 515,560.71 | 0.04 | 30% | 226,035.45 |
| Terizidon, tabs (blister package), 250 mg | 0.86 | 1,115,200 | 959,453.77 | 0.95 | 1,063,343.20 | -0.09 | -11% | -103,889.43 |

Price change and savings against MoH TOR prices 2017 budget year^{66/67}

| INN, pharmaceutical presentation, strength | MoH TOR price per UOM, USD | Quantity ⁶⁸ , UOM | Expected contract amount | UNDP price per UOM, USD | Actual contract amount, USD | Price change, USD | Price change, % | Savings / increased spending, USD |
|--|-------------------------------|---------------------------------|--------------------------------|----------------------------------|--------------------------------------|--------------------------|-----------------------|---|
| | | Adı | ult Cancer | | Total expec Total act | ual contractiverage pric | t amount amount | 33,710,890.36 31,920,116.66 29,671,416.76 -11% 2,248,699.91 |
| Anastrozole, tablet, capsule, pill, 1 mg | 0.30 | 173,320 | 52,414.22 | 0.20 | 34,906.65 | 0.10 | 33% | 17,507.57 |
| Asparaginase, ampule, vial, syringe, 10 000 IU | 94.48 | 1,753 | 165,625.24 | 109.84 | 192,549.52 | -15.36 | -16% | -26,924.28 |
| Bendamustine, ampule, vial, syringe, 100 mg | 461.77 | 908 | 419,284.95 | 193.98 | 176,133.84 | 267.79 | 58% | 243,151.11 |
| Bendamustine, ampule, vial, syringe, 25 mg | 108.88 | 869 | 94,620.44 | 50.88 | 44,214.72 | 58.00 | 53% | 50,405.72 |
| Bicalutamide, tablet, capsule, pill, 150 mg | 0.35 | 82,230 | 29,022.17 | 0.41 | 33,558.06 | -0.06 | -16% | -4,535.89 |
| Bicalutamide, tablet, capsule, pill, 50 mg | 0.18 | 279,180 | 50,615.11 | 0.23 | 65,104.78 | -0.05 | -29% | -14,489.67 |
| Bleomycin, ampule, vial, syringe, 15 mg | 9.78 | 16,977 | 166,087.65 | 37.10 | 629,846.70 | -27.32 | -279% | -463,759.05 |
| Bortezomib, ampule, vial, syringe, 1 mg | 256.09 | 1,741 | 445,855.82 | 127.20 | 221,455.20 | 128.89 | 50% | 224,400.62 |
| Bortezomib, ampule, vial, syringe, 3,5 mg | 1019.71 | 315 | 321,208.15 | 111.30 | 35,059.50 | 908.41 | 89% | 286,148.65 |
| Bosutinib, tablet, capsule, pill, 100 mg | 52.84 | 11,400 | 602,382.18 | 9.89 | 112,783.62 | 42.95 | 81% | 489,598.56 |
| Bosutinib, tablet, capsule, pill, 500 mg | 50.49 | 5,190 | 262,021.72 | 49.47 | 256,732.17 | 1.02 | 2% | 5,289.55 |
| Calcium folinate, ampule, vial, syringe, 100 mg | 3.53 | 40,878 | 144,244.03 | 4.96 | 202,693.56 | -1.43 | -41% | -58,449.53 |
| Calcium folinate, ampule, vial, syringe, 30 mg | 2.80 | 195 | 546.89 | 2.86 | 558.09 | -0.06 | -2% | -11.20 |
| Calcium folinate, ampule, vial, syringe, 50 mg | 3.22 | 33,767 | 108,563.90 | 3.61 | 122,027.18 | -0.40 | -12% | -13,463.29 |
| Capecitabine, tablet, capsule, pill, 150 mg | 0.40 | 208,200 | 83,769.37 | 0.60 | 125,794.44 | -0.20 | -50% | -42,025.07 |
| Capecitabine, tablet, capsule, pill, 500 mg | 0.93 | 895,560 | 832,117.07 | 1.42 | 1,272,053.42 | -0.49 | -53% | -439,936.35 |
| Carboplatin, ampule, vial, syringe, 150 mg | 1.25 | 15,186 | 18,911.39 | 8.05 | 122,177.44 | -6.80 | -546% | -103,266.05 |
| Carboplatin, ampule, vial, syringe, 450 mg | 28.05 | 19,550 | 548,350.52 | 19.91 | 389,177.94 | 8.14 | 29% | 159,172.58 |
| Caspofungin, vial, 50 mg | 373.05 | 373 | 139,146.76 | 392.20 | 146,290.60 | -19.15 | -5% | -7,143.84 |
| Caspofungin, vial, 70 mg | 500.08 | 64 | 32,005.19 | 525.76 | 33,648.64 | -25.68 | -5% | -1,643.45 |
| Chlorambucil, tablet, capsule, 2 mg in vial | 2.71 | 31,075 | 84,196.38 | 2.93 | 90,962.74 | -0.22 | -8% | -6,766.36 |
| Cisplatin, ampule, vial, syringe, 100 mg | 9.08 | 30,952 | 281,084.59 | 9.54 | 295,282.08 | -0.46 | -5% | -14,197.49 |
| Cisplatin, ampule, vial, syringe, 50 mg | 6.49 | 36,674 | 237,891.31 | 5.47 | 200,592.11 | 1.02 | 16% | 37,299.20 |
| Cladribine, solution for injection, 2 mg/mL, 5 mL in vial | 383.71 | 180 | 69,068.62 | 403.41 | 72,614.66 | -19.70 | -5% | -3,546.05 |

⁶⁶ Hereinafter in Annexes 12-19 positive values stand for price decrease and savings, negative values stand for price increase and increased spending accordingly

⁶⁷ Hereinafter in Annexes 12-19 prices are indicated with two decimals for the ease of presentation, while all calculations in the present assignment were done with four decimals, therefore sums may differ because of the rounding error

⁶⁸ Hereinafter in Annexes 16-18 the assigned quantity to be procured according to the TOR, i.e. main procurement

| INN, pharmaceutical presentation, strength | MoH TOR price per UOM, USD | Quantity ⁶⁸ , UOM | Expected contract amount | UNDP price per UOM, USD | Actual contract amount, USD | Price change, USD | Price change, % | Savings / increased spending, USD |
|---|-------------------------------|---------------------------------|--------------------------------|----------------------------------|--------------------------------------|-------------------------|-----------------------|--------------------------------------|
| Cyclophosphamide, ampule, vial, syringe, 1000 mg | 10.29 | 7,587 | 78,043.68 | 10.81 | 82,030.64 | -0.53 | -5% | -3,986.97 |
| Cyclophosphamide, ampule, vial, syringe, 200 mg | 3.23 | 107,820 | 348,493.46 | 3.69 | 397,726.42 | -0.46 | -14% | -49,232.96 |
| Cyclophosphamide, ampule, vial, syringe, 500 mg | 6.59 | 71,909 | 473,821.74 | 7.45 | 535,851.49 | -0.86 | -13% | -62,029.75 |
| Cytarabine, ampule, vial, syringe, 100 mg | 4.53 | 15,282 | 69,299.42 | 3.82 | 58,316.11 | 0.72 | 16% | 10,983.31 |
| Cytarabine, ampule, vial, syringe, 1000 mg | 12.52 | 5,446 | 68,188.22 | 8.27 | 45,027.53 | 4.25 | 34% | 23,160.69 |
| Dacarbazine, ampule, vial, syringe, 200 mg | 8.81 | 29,630 | 261,175.38 | 10.44 | 309,192.01 | -1.62 | -18% | -48,016.64 |
| Daunorubicin, vial, 20 mg | 10.97 | 4,052 | 44,455.31 | 39.22 | 158,919.44 | -28.25 | -257% | -114,464.13 |
| Docetaxel, ampule, vial, syringe, 20 mg | 8.87 | 9,691 | 85,983.54 | 4.19 | 40,576.22 | 4.69 | 53% | 45,407.33 |
| Docetaxel, ampule, vial, syringe, 80 mg | 22.18 | 19,848 | 440,246.82 | 16.75 | 332,414.30 | 5.43 | 24% | 107,832.52 |
| Doxorubicin, ampule, vial, syringe, 100 mg | 4.32 | 17,231 | 74,456.67 | 12.76 | 219,908.91 | -8.44 | -195% | -145,452.25 |
| Doxorubicin, ampule, vial, syringe, 50 mg | 7.05 | 49,465 | 348,831.77 | 6.51 | 322,022.10 | 0.54 | 8% | 26,809.68 |
| Epirubicin, ampule, vial, syringe, 10 mg | 4.48 | 6,446 | 28,909.83 | 4.24 | 27,331.04 | 0.24 | 5% | 1,578.79 |
| Epirubicin, ampule, vial, syringe, 50 mg | 13.15 | 15,239 | 200,377.94 | 9.54 | 145,380.06 | 3.61 | 27% | 54,997.88 |
| Etoposide, ampule, vial, syringe, 100 mg | 3.71 | 35,120 | 130,175.88 | 3.12 | 109,447.97 | 0.59 | 16% | 20,727.91 |
| Etoposide, ampule, vial, syringe, 200 mg | 3.63 | 4,444 | 16,138.64 | 4.57 | 20,302.86 | -0.94 | -26% | -4,164.22 |
| Exemestane, tablet, capsule, pill, 25 mg | 0.20 | 398,850 | 77,793.79 | 0.19 | 77,496.56 | 0.00 | 0% | 297.24 |
| Filgrastim, ampule, vial, syringe, 48 million IU | 14.62 | 28,380 | 414,890.20 | 10.38 | 294,451.01 | 4.24 | 29% | 120,439.19 |
| Fludarabine, ampule, vial, syringe, 50 mg | 12.98 | 4,793 | 62,198.81 | 22.90 | 109,740.53 | -9.92 | -76% | -47,541.72 |
| Fluorouracil, ampule, vial, syringe, 500 mg | 2.03 | 176,024 | 357,713.45 | 1.60 | 281,744.01 | 0.43 | 21% | 75,969.43 |
| Gemcitabine, ampule, vial, syringe, 1 000 mg | 18.15 | 29,377 | 533,137.43 | 13.71 | 402,635.29 | 4.44 | 24% | 130,502.14 |
| Gemcitabine, ampule, vial, syringe, 200 mg | 5.55 | 18,489 | 102,525.74 | 4.19 | 77,413.44 | 1.36 | 24% | 25,112.30 |
| Goserelin, ampule, vial, syringe, 10,8 mg | 110.00 | 6,522 | 717,434.16 | 72.27 | 471,350.16 | 37.73 | 34% | 246,084.01 |
| Hydroxycarbamide, t ablet, capsule, pill, 500 mg | 0.42 | 275,200 | 115,123.21 | 0.55 | 152,103.04 | -0.13 | -32% | -36,979.83 |
| Idarubicin, ampule, vial, syringe, 5 mg | 61.56 | 1,324 | 81,502.97 | 43.99 | 58,242.76 | 17.57 | 29% | 23,260.21 |
| Ifosfamide, ampule, vial, syringe, 1 000 mg | 22.38 | 8,545 | 191,259.73 | 23.53 | 201,080.94 | -1.15 | -5% | -9,821.21 |
| Imatinib, tablet, capsule, pill, 100 mg | 0.40 | 187,920 | 75,051.18 | 0.34 | 64,381.39 | 0.06 | 14% | 10,669.79 |
| Imatinib, tablet, capsule, pill, 400 mg | 1.36 | 168,480 | 229,027.07 | 1.34 | 225,914.83 | 0.02 | 1% | 3,112.24 |
| Interferon alpha-2b, ampule, vial, syringe, 3 million IU | 1.96 | 28,860 | 56,611.71 | 1.80 | 52,005.72 | 0.16 | 8% | 4,605.99 |
| Irinotecan, ampule, vial, syringe, 100 mg | 10.72 | 13,322 | 142,777.97 | 9.54 | 127,091.88 | 1.18 | 11% | 15,686.09 |
| Irinotecan, ampule, vial, syringe, 300 mg | 32.26 | 10,544 | 340,181.95 | 29.68 | 312,945.92 | 2.58 | 8% | 27,236.03 |
| Lenalidomide, tablet, capsule, pill, 10 mg | 22.37 | 1,239 | 27,716.45 | 13.25 | 16,416.75 | 9.12 | 41% | 11,299.70 |
| Lenalidomide, tablet, capsule, pill, 25 mg | 18.73 | 4,221 | 79,062.11 | 18.92 | 79,865.54 | -0.19 | -1% | -803.43 |
| Lenograstim, ampule, vial, syringe, 33,6 mln IU | 52.72 | 890 | 46,917.98 | 55.43 | 49,330.39 | -2.71 | -5% | -2,412.41 |
| Letrozole, tablet, capsule, pill, 2,5 mg | 0.17 | 555,370 | 95,117.27 | 0.11 | 58,869.22 | 0.07 | 38% | 36,248.05 |
| Leuprorelin, ampule, vial, syringe, 45 mg | 372.02 | 733 | 272,691.48 | 391.13 | 286,697.85 | -19.11 | -5% | -14,006.37 |
| Lomustine, tablet, capsule, pill, 40 mg | 7.89 | 1,280 | 10,100.45 | 8.92 | 11,423.62 | -1.03 | -13% | -1,323.17 |
| Melphalan, tablet, capsule, pill, 2 mg | 2.60 | 37,050 | 96,159.64 | 3.49 | 129,234.11 | -0.89 | -34% | -33,074.46 |

| INN, pharmaceutical presentation, strength | MoH TOR price per UOM, USD | Quantity ⁶⁸ , UOM | Expected contract amount | UNDP price per UOM, USD | Actual contract amount, USD | Price change, USD | Price change, % | Savings / increased spending, USD |
|---|-------------------------------|---------------------------------|--------------------------------|----------------------------------|--------------------------------------|-------------------------|-----------------------|-----------------------------------|
| Mesna, ampule, vial, syringe, 400 mg | 2.22 | 21,360 | 47,518.10 | 2.34 | 50,037.94 | -0.12 | -5% | -2,519.83 |
| Methotrexate, ampule, vial, syringe, 1000 mg | 16.68 | 939 | 15,666.96 | 13.99 | 13,138.49 | 2.69 | 16% | 2,528.47 |
| Methotrexate, ampule, vial, syringe, 50 mg | 1.76 | 16,347 | 28,750.30 | 1.84 | 30,150.41 | -0.09 | -5% | -1,400.11 |
| Mitoxantrone, ampule, vial, syringe, 20 mg | 30.60 | 5,575 | 170,612.59 | 17.00 | 94,788.38 | 13.60 | 44% | 75,824.21 |
| Nilotinib, tablet, capsule, pill, 200 mg | 19.56 | 231,476 | 4,526,782.74 | 22.07 | 5,108,490.14 | -2.51 | -13% | -581,707.40 |
| Oxaliplatin, ampule, vial, syringe, 100 mg | 14.62 | 24,492 | 358,051.12 | 11.03 | 270,259.42 | 3.58 | 25% | 87,791.70 |
| Oxaliplatin, ampule, vial, syringe, 50 mg | 8.77 | 16,764 | 147,044.81 | 6.63 | 111,061.50 | 2.15 | 24% | 35,983.31 |
| Paclitaxel, ampule, vial, syringe, 100 mg | 12.85 | 33,014 | 424,387.76 | 9.71 | 320,552.73 | 3.15 | 24% | 103,835.03 |
| Paclitaxel, ampule, vial, syringe, 30 mg | 7.26 | 7,163 | 51,999.07 | 5.48 | 39,254.67 | 1.78 | 25% | 12,744.40 |
| Piperacillin/Tazobactam, ampule, vial, syringe, 4500 (4000/500 mg) | 5.14 | 5,029 | 25,865.40 | 5.25 | 26,387.16 | -0.10 | -2% | -521.76 |
| Radiopharmaceuticals Sodium iodide Na1311 for injection, solution for injection, 4000 MBq | 282.45 | 207 | 58,467.62 | 303.36 | 62,794.86 | -20.90 | -7% | -4,327.24 |
| Radiopharmaceuticals Sodium iodide Na1311 POLATOM, hard capsule, 4000 MBq | 203.62 | 160 | 32,578.99 | 217.87 | 34,859.97 | -14.26 | -7% | -2,280.98 |
| Radiopharmaceuticals Technetium (99mTc) pertechnetate, radionuclide generator (solution in a vial is obtained from the generator 99mTc by means of elution), 15000 MBq | 1587.21 | 50 | 79,360.69 | 1773.65 | 88,682.35 | -186.43 | -12% | -9,321.65 |
| Rituximab, ampule, vial, syringe, 100 mg | 208.05 | 6,236 | 1,297,416.72 | 111.06 | 692,573.28 | 96.99 | 47% | 604,843.45 |
| Rituximab, ampule, vial, syringe, 500 mg | 905.39 | 6,163 | 5,579,893.21 | 569.95 | 3,512,601.85 | 335.44 | 37% | 2,067,291.36 |
| Thalidomide, tablet, capsule, pill, 100 mg | 6.18 | 23,970 | 148,129.24 | 6.47 | 155,040.36 | -0.29 | -5% | -6,911.12 |
| Topotecan, ampule, vial, syringe, 4 mg | 24.46 | 4,131 | 101,061.80 | 77.61 | 320,615.59 | -53.15 | -217% | -219,553.79 |
| Toremifene, tablet, capsule, pill, 60 mg | 0.65 | 506,580 | 330,859.01 | 1.08 | 547,714.30 | -0.43 | -66% | -216,855.29 |
| Trastuzumab, ampule, vial, syringe, 150 mg | 469.18 | 9,815 | 4,604,972.76 | 519.40 | 5,097,911.00 | -50.22 | -11% | -492,938.24 |
| Triptorelin, ampule, vial, syringe, 11,25 mg | 175.94 | 7,894 | 1,388,832.98 | 178.91 | 1,412,290.28 | -2.97 | -2% | -23,457.30 |
| Vancomycin, ampule, vial, syringe, 500 mg | 3.34 | 2,630 | 8,785.94 | 6.13 | 16,113.48 | -2.79 | -83% | -7,327.55 |
| Vincristine, ampule, vial, syringe, 1 mg | 2.44 | 22,682 | 55,422.39 | 2.57 | 58,183.87 | -0.12 | -5% | -2,761.48 |
| Vinorelbine, ampule, vial, syringe, 50 mg | 24.20 | 6,571 | 159,001.76 | 22.83 | 150,031.70 | 1.37 | 6% | 8,970.06 |
| Voriconazole, tablet, capsule, pill, 200 mg | 9.60 | 1,554 | 14,921.77 | 3.50 | 5,435.89 | 6.10 | 64% | 9,485.88 |
| Voriconazole, vial, 200 mg | 105.86 | 418 | 44,250.01 | 41.02 | 17,147.20 | 64.84 | 61% | 27,102.81 |
| Zoledronic acid, ampule, vial, syringe, 4 mg | 6.85 | 34,602 | 236,856.20 | 6.19 | 214,200.22 | 0.65 | 10% | 22,655.98 |
| | | | natitis B ar | nd C | | | | |

Adult Hepatitis B and C

 Line
 Allocated programme budget
 4,867,895.81

 Total expected contract amount
 6,004,968.74

 Total actual contract amount
 2,812,575.97

 Average price change
 -125%

 Total axings
 3,192,392.76

 0.44
 23,291.63
 0.82
 65%
 43,28

 1.39
 116,367.20
 0.02
 1%
 1,687

| | | | | | | 1012 | il savings | 3,192,392.70 |
|--|-------|---------|--------------|-------|--------------|-------|------------|--------------|
| Daclatasvir, tablet, capsule, pill, 60 mg | 1.26 | 52,696 | 66,578.43 | 0.44 | 23,291.63 | 0.82 | 65% | 43,286.80 |
| Dasabuvir, tablet, capsule, pill, 250 mg | 1.41 | 83,832 | 118,048.35 | 1.39 | 116,367.20 | 0.02 | 1% | 1,681.15 |
| Lamivudin, tablet, capsule, pill, 100 mg | 1.31 | 56,448 | 73,961.06 | 1.54 | 87,155.71 | -0.23 | -18% | -13,194.65 |
| Ombitasvir/ Paritaprevir/ Ritonavir, tablet, capsule, pill, 12.5 mg/ 75 mg/ 50 mg | 16.28 | 83,832 | 1,365,119.37 | 15.96 | 1,338,226.98 | 0.32 | 2% | 26,892.38 |
| Peginterferon alfa-2a, ampule, vial, syringe, 180 mg | 88.12 | 3,221 | 283,848.97 | 95.40 | 307,283.40 | -7.28 | -8% | -23,434.43 |
| Ribavirin, tablet, capsule, pill, 200 mg | 0.02 | 271,320 | 5,041.14 | 0.31 | 83,403.77 | -0.29 | -1554% | -78,362.63 |

| INN, pharmaceutical presentation, strength | MoH TOR price per UOM, USD | Quantity ⁶⁸ , UOM | Expected contract amount | UNDP price per UOM, USD | Actual contract amount, USD | Price change, USD | Price change, % | Savings / increased spending, USD |
|--|-------------------------------|---------------------------------|--------------------------------|----------------------------------|--------------------------------------|----------------------------|-----------------------|---|
| Sofosbuvir, tablet, capsule, pill, 400 mg | 8.61 | 62,356 | 536,599.82 | 0.69 | 42,763.74 | 7.92 | 92% | 493,836.07 |
| Sofosbuvir/Ledipasvir, tablet, capsule, pill, 400 mg/90 mg | 10.33 | 170,884 | 1,764,586.27 | 1.13 | 193,269.80 | 9.20 | 89% | 1,571,316.47 |
| Sofosbuvir/Velpatasvir, tablet, capsule, pill, 400 mg/100 mg | 10.56 | 162,064 | 1,711,843.34 | 3.40 | 551,438.97 | 7.16 | 68% | 1,160,404.38 |
| Tenofovir, tablet, capsule, pill, 300 mg | 0.12 | 689,610 | 79,341.99 | 0.10 | 69,374.77 | 0.01 | 13% | 9,967.22 |
| | | Childhood | d Cystic Fik | prosis | Total expec Total act | ual contrac verage pric | ct amount | 2,449,203.57 2,230,478.53 2,163,336.54 18% 67,141.99 |
| Colistimethate Sodium, powder for solution for injection, infusion or inhalation in vial, 2 million IU | 11.24 | 23,420 | 263,240.80 | 3.51 | 82,253.38 | 7.73 | 69% | 180,987.42 |
| Dornase alfa, solution for inhalation, 2,5 mg/2,5 mL in ampule | 18.40 | 79,260 | 1,458,384.00 | 20.48 | 1,623,244.80 | -2.08 | -11% | -164,860.80 |
| Pancreatin, minimicrospheres in gastroresistant granule, 10 000 Units in one capsule | 0.192 | 467,120 | 89,703.73 | 0.191 | 88,986.36 | 0.002 | 1% | 717.37 |
| Pancreatin, minimicrospheres in gastroresistant granule, 25 000 Units in one capsule | 0.50 | 838,300 | 419,150.00 | 0.44 | 368,852.00 | 0.06 | 12% | 50,298.00 |
| Childhood Haemophilia Allocated programme budget Total expected contract amount Total actual contract amount Average price change Total savings | | | | | | | | 10,459,508.75 10,321,480.98 9,860,574.83 5% 460,906.15 |
| Anti-inhibitor coagulant complex, <i>v</i> ial, 1000 IU | 1,208.41 | 963 | 1,163,699.67 | 1,240.20 | 1,194,312.60 | -31.79 | -3% | -30,612.93 |
| Anti-inhibitor coagulant complex, <i>i</i> ial, 500 IU | 604.21 | 1,403 | 847,700.22 | 620.10 | 870,000.30 | -15.89 | -3% | -22,300.08 |
| Coagulation factor VIII (recombinant), vial, 1000 IU | 691.02 | 350 | 241,856.90 | 212.00 | 74,200.00 | 479.02 | 69% | 167,656.90 |
| Coagulation factor VIII (recombinant), vial, 250 IU | 64.57 | 1,258 | 81,229.25 | 53.00 | 66,674.00 | 11.57 | 18% | 14,555.25 |
| Coagulation factor VIII (recombinant), vial, 500 IU | 129.14 | 6,238 | 805,577.22 | 106.00 | 661,228.00 | 23.14 | 18% | 144,349.22 |
| Desmopressin, ampule/vial/syringe, 15 mcg/ml, 1 ml | 16.36 | 530 | 8,672.12 | 22.46 | 11,902.32 | -6.09 | -37% | -3,230.20 |
| Eptacog alfa (recombinant coagulation factor /IIa), rial, 2 mg (100 KIU) | 1,589.96 | 158 | 251,213.12 | 1,696.00 | 267,968.00 | -106.04 | -7% | -16,754.88 |
| Eptacog alfa (recombinant coagulation factor /IIa), rial, 5 mg (250 KIU) | 4,058.45 | 149 | 604,708.65 | 4,240.00 | 631,760.00 | -181.55 | -4% | -27,051.35 |
| Human coagulation factor IX (plasma), rial, 500 IU and/or 600 IU | 117.23 | 4,416 | 517,692.59 | 127.20 | 561,715.20 | -9.97 | -9% | -44,022.61 |
| luman coagulation factor IX (recombinant), ial, 500 IU | 150.00 | 1,747 | 262,053.25 | 100.70 | 175,922.90 | 49.30 | 33% | 86,130.35 |
| Human coagulation factor VIII (plasma), <i>r</i> ial, 1000 IU | 262.50 | 5,030 | 1,320,390.91 | 233.20 | 1,172,996.00 | 29.30 | 11% | 147,394.91 |
| Human coagulation factor VIII (plasma), rial, 250 IU | 59.36 | 2,563 | 152,139.37 | 58.30 | 149,422.90 | 1.06 | 2% | 2,716.47 |
| Human coagulation factor VIII (plasma), rial, 500 IU | 113.70 | 16,159 | 1,837,206.74 | 92.22 | 1,490,182.98 | 21.48 | 19% | 347,023.76 |
| Iuman coagulation factor VIII and human von Villebrand factor, ial, 1000 IU | 254.21 | 4,353 | 1,106,596.75 | 285.79 | 1,244,063.89 | -31.58 | -12% | -137,467.14 |
| Human coagulation factor VIII and human von Willebrand factor, <i>v</i> ial, 500 IU | 129.48 | 8,656 | 1,120,744.22 | 148.82 | 1,288,225.74 | -19.35 | -15% | -167,481.52 |
| | | ТВ | medicines | | Total expec Total act | ual contrac | ct amount | 11,845,618.22 13,926,240.58 11,759,258.47 -87% 2,166,982.10 |

| INN, pharmaceutical presentation, strength | MoH TOR price per UOM, USD | Quantity ⁶⁸ , UOM | Expected contract amount | UNDP price per UOM, USD | Actual contract amount, USD | Price change, USD | Price change, % | Savings / increased spending, USD |
|---|-------------------------------|---------------------------------|--------------------------------|----------------------------------|--------------------------------------|-------------------------|-----------------------|--------------------------------------|
| Amoxicillin/Clavulanic acid, powder for solution for injection in vials, 1000 mg/200 mg | 0.12 | 6,400 | 795.80 | 0.78 | 5,020.16 | -0.66 | -531% | -4,224.36 |
| Amoxicillin/Clavulanic acid, tablets, 500 mg/125 mg | 0.85 | 373,870 | 316,334.07 | 0.11 | 39,630.22 | 0.74 | 87% | 276,703.85 |
| Capreomycin, ampoules, vials, syringes, 1 000 mg | 2.30 | 1,743,694 | 4,016,097.30 | 1.94 | 3,382,417.62 | 0.36 | 16% | 633,679.68 |
| Clofazimine, tablets, capsules, pills, 100 mg | 1.05 | 2,174,800 | 2,274,187.90 | 0.63 | 1,360,119.92 | 0.42 | 40% | 914,067.98 |
| Cycloserine, tablets, capsules, pills, 250 mg | 0.24 | 2,590,800 | 612,545.95 | 0.21 | 544,586.16 | 0.03 | 11% | 67,959.79 |
| Ethambutol, ampoules, vials, syringes, 100 mg/mL | 0.12 | 41,044 | 4,914.37 | 2.69 | 110,506.87 | -2.57 | -2149% | -105,592.50 |
| Ethambutol, tablets, capsules, pills, 400 mg | 0.03 | 166,000 | 4,347.66 | 0.03 | 5,013.20 | 0.00 | -15% | -665.54 |
| Imipenem/Cilastatin, powder for infusion on in vials, 500 mg/500 mg | 3.35 | 365,960 | 1,225,881.66 | 3.60 | 1,318,919.84 | -0.25 | -8% | -93,038.18 |
| Isoniazid, ampoules, vials, syringes, 100 mg/mL | 0.08 | 61,710 | 5,212.51 | 0.08 | 4,973.83 | 0.00 | 5% | 238.68 |
| Isoniazid, bottles, vial (syrup), 100 mg/5 mL | 1.45 | 6,961 | 10,096.89 | 3.48 | 24,202.00 | -2.03 | -140% | -14,105.11 |
| Isoniazid, tablets, capsules, pills, 100 mg | 0.01 | 1,218,700 | 10,015.40 | 0.01 | 12,308.87 | 0.00 | -23% | -2,293.47 |
| Isoniazid, tablets, capsules, pills, 300 mg | 0.01 | 9,477,250 | 131,049.98 | 0.01 | 136,472.40 | 0.00 | -4% | -5,422.42 |
| Kanamycin, ampoules, vials, syringes, 1 000 mg | 0.36 | 155,010 | 56,161.84 | 0.31 | 47,650.07 | 0.05 | 15% | 8,511.77 |
| Levofloxacin, ampoules, vials, syringes, 5 mg/mL | 1.96 | 6,212 | 12,170.08 | 0.37 | 2,304.65 | 1.59 | 81% | 9,865.43 |
| Levofloxacin, tablets, capsules, pills, 250 mg | 0.03 | 89,370 | 2,337.47 | 0.03 | 2,332.56 | 0.00 | 0% | 4.92 |
| Levofloxacin, tablets, capsules, pills, 500 mg | 0.04 | 716,820 | 32,118.21 | 0.05 | 34,622.41 | 0.00 | -8% | -2,504.20 |
| Linezolid, ampoules, vials, syringes, 2 mg/mL | 14.79 | 8,567 | 126,715.81 | 4.13 | 35,415.98 | 10.66 | 72% | 91,299.83 |
| Linezolid, | 0.29 | 2,747,495 | 810,396.66 | 0.27 | 736,878.16 | 0.03 | 9% | 73,518.50 |
| tablets, capsules, pills, 600 mg Meropenem, | 3.92 | 186,341 | 731,262.09 | 2.54 | 474,051.50 | 1.38 | 35% | 257,210.58 |
| vials, 1000 mg Moxifloxacin, | 13.96 | 2,118 | 29,559.82 | 11.66 | 24,695.88 | 2.30 | 16% | 4,863.94 |
| ampoules, vials, syringes, 400 mg Moxifloxacin, | 0.48 | 1,242,370 | 591,554.03 | 0.27 | 329,228.05 | 0.21 | 44% | 262,325.98 |
| tablets, capsules, pills, 400 mg Protionamid, | 0.06 | 2,519,400 | 163,026.88 | 0.07 | 183,664.26 | -0.01 | -13% | -20,637.38 |
| tablets, capsules, pills, 250 mg Pyrazinamide, | 0.02 | 10,169,300 | 188,582.80 | 0.02 | 200,335.21 | 0.00 | -6% | -11,752.41 |
| tablets, capsules, pills, 500 mg Rifabutin, | 0.83 | 51,700 | 42,921.70 | 1.06 | 54,926.08 | -0.23 | -28% | -12.004.38 |
| tablets, capsules, pills, 150 mg Rifampicin, | 9.77 | 91,807 | 896,911.78 | 11.54 | 1,059,764.92 | -1.77 | -18% | -162,853.15 |
| ampoules, 600 mg Rifampicin, | 0.03 | 7,548,100 | 203,084.26 | 0.03 | 224,178.57 | 0.00 | -10% | -21,094.31 |
| tablets, capsules, pills, 150 mg Rifampicin/Isoniazid, | 0.02 | 4,417,056 | 106,689.89 | 0.03 | 147,971.38 | -0.01 | -39% | -41,281.49 |
| tablets, capsules, pills, 150 mg/75 mg Rifampicin/Isoniazid, | 0.02 | 197,500 | 5,087.99 | 0.05 | 11,968.50 | -0.03 | -135% | -6,880.51 |
| tablets, capsules, pills, 75 mg/50 mg Rifampicin/Isoniazid/Pyrazinamide, | | | | | | | | |
| tablets, capsules, pills, 75 mg/50 mg/150 mg Rifampicin/Isoniazid/Pyrazinamide/Ethambutol, tablets, capsules, pills, 150 mg/75 mg/400 | 0.03 | 104,200 2,965,536 | 3,283.82 156,080.84 | 0.07 | 7,544.08 200,470.23 | -0.04 -0.01 | -130% -28% | -4,260.26 -44,389.39 |
| mg/275 mg Sodium aminosalicylate, | 3.41 | 790 | 2,690.07 | 4.85 | 3,835.29 | -1.45 | -43% | -1,145.22 |
| ampoules, vials, syringes, 30 mg/mL Sodium aminosalicylate, | 0.41 | 190 | 2,090.07 | 4.00 | 3,033.28 | -1.40 | -43% | -1,140.22 |
| powder, enteric granules, equivalent to 1 g of aminosalicylic acid/Sodium aminosalicylate Terizidon, | 0.10 | 6,108,400 | 634,695.65 | 0.09 | 572,967.92 | 0.01 | 10% | 61,727.73 |
| tablets, capsules, pills, 250 mg | 0.96 | 543,490 | 519,429.40 | 0.85 | 460,281.68 | 0.11 | 11% | 59,147.72 |

Price change and savings against MoH TOR prices 2018 budget year^{69/70}

| INN, pharmaceutical presentation, strength | MoH TOR price per UOM, USD | Quantity ⁷¹ , UOM | Expected contract amount | UNDP price per UOM, USD | Actual contract amount, USD | Price change, USD | Price change, % | Savings / increased spending, USD |
|--|--|---------------------------------|--------------------------------|----------------------------------|--------------------------------------|----------------------------|-----------------------|--|
| | | | Adult Cance | er | | | | |
| | | | | | Total expec Total act | ual contrac verage pric | t amount amount | 58,758,515.40 53,821,150.43 27,169,531.25 5% 26,651,619.24 |
| 6-Mercaptopurine, tablet, capsule, pill, 50 mg | 2.82 | 10,250 | 28,954.48 | 2.72 | 27,923.05 | 0.10 | 4% | 1,031.43 |
| Anastrozole, tablet, capsule, pill, 1 mg | 0.20 | 155,910 | 30,484.88 | 0.18 | 28,094.98 | 0.02 | 8% | 2,389.90 |
| Asparaginase, ampule, vial, syringe, 10,000 IU | 106.63 | 1,428 | 152,273.69 | 663.98 | 948,169.15 | -557.35 | -523% | -795,895.46 |
| Bendamustine, ampule, vial, syringe, 100 mg | 188.31 | 4,750 | 894,448.81 | 34.86 | 165,601.15 | 153.44 | 81% | 728,847.66 |
| Bendamustine, ampule, vial, syringe, 25 mg | 49.39 | 6,561 | 324,057.57 | 15.85 | 103,972.17 | 33.54 | 68% | 220,085.40 |
| Bicalutamide, tablet, capsule, pill, 150 mg | 0.22 | 64,092 | 13,857.08 | 0.22 | 14,266.88 | -0.01 | -3% | -409.80 |
| Bicalutamide, tablet, capsule, pill, 50 mg | 0.11 | 265,356 | 30,033.45 | 0.11 | 28,127.74 | 0.01 | 6% | 1,905.71 |
| Bleomycin, ampule, vial, syringe, 15 mg | 36.01 | 7,155 | 257,684.77 | 37.10 | 265,450.50 | -1.09 | -3% | -7,765.73 |
| Bortezomib, ampule, vial, syringe, 1 mg | 123.48 | 2,214 | 273,381.90 | 36.63 | 81,106.79 | 86.85 | 70% | 192,275.11 |
| Bortezomib, ampule, vial, syringe, 3.5 mg | 108.04 | 1,574 | 170,061.15 | 45.79 | 72,076.61 | 62.25 | 58% | 97,984.54 |
| Bosutinib, tablet, capsule, pill, 100 mg | 9.60 | 75,000 | 720,037.12 | 9.89 | 741,997.50 | -0.29 | -3% | -21,960.38 |
| Bosutinib, tablet, capsule, pill, 500 mg | 48.02 | 24,360 | 1,169,835.15 | 49.47 | 1,205,008.81 | -1.44 | -3% | -35,173.66 |
| Calcium folinate, ampule, vial, syringe, 100 mg | 4.94 | 47,321 | 233,718.61 | 4.19 | 198,133.03 | 0.75 | 15% | 35,585.58 |
| Calcium folinate, ampule, vial, syringe, 30 mg | 2.78 | 265 | 736.27 | 2.86 | 758.43 | -0.08 | -3% | -22.16 |
| Calcium folinate, ampule, vial, syringe, 50 mg | 3.59 | 12,425 | 44,622.44 | 3.08 | 38,326.16 | 0.51 | 14% | 6,296.29 |
| Capecitabine, tablet, capsule, pill, 150 mg | 0.64 | 233,280 | 148,855.56 | 0.16 | 37,954.66 | 0.48 | 75% | 110,900.91 |
| Capecitabine, tablet, capsule, pill, 500 mg | 1.49 | 1,230,000 | 1,835,209.07 | 0.30 | 371,583.00 | 1.19 | 80% | 1,463,626.07 |
| Carboplatin, ampule, vial, syringe, 150 mg | 7.81 | 9,917 | 77,450.80 | 8.05 | 79,786.23 | -0.24 | -3% | -2,335.43 |
| Carboplatin, ampule, vial, syringe, 450 mg | 19.32 | 14,364 | 277,574.66 | 19.91 | 285,941.28 | -0.58 | -3% | -8,366.61 |
| Caspofungin, vials, 50 mg | 380.73 | 600 | 228,435.55 | 392.20 | 235,320.00 | -11.47 | -3% | -6,884.45 |
| Caspofungin, vials, 70 mg | 510.38 | 779 | 397,584.85 | 525.76 | 409,567.04 | -15.38 | -3% | -11,982.19 |
| Chlorambucil, tablet, capsule, pill, 2 mg No. 25 per vial | 2.85 | 28,675 | 81,730.08 | 2.75 | 78,724.35 | 0.10 | 4% | 3,005.73 |
| Cisplatin, ampule, vial, syringe, 100 mg | 9.26 | 23,378 | 216,502.48 | 9.54 | 223,026.12 | -0.28 | -3% | -6,523.64 |
| Cisplatin, ampule, vial, syringe, 50 mg | 5.31 | 25,086 | 133,200.30 | 5.47 | 137,210.39 | -0.16 | -3% | -4,010.08 |

⁶⁹ Hereinafter in Annexes 12-19 positive values stand for price decrease and savings, negative values stand for price increase and increased spending accordingly

⁷⁰ Hereinafter in Annexes 12-19 prices are indicated with two decimals for the ease of presentation, while all calculations in the present assignment were done with four decimals, therefore sums may differ because of the rounding error

⁷¹ Hereinafter in Annexes 16-18 the assigned quantity to be procured according to the TOR, i.e. main procurement

| INN, pharmaceutical presentation, strength | MoH TOR price per UOM, USD | Quantity ⁷¹ , UOM | Expected contract amount | UNDP price per UOM, USD | Actual contract amount, USD | Price change, USD | Price change, % | Savings / increased spending, USD |
|---|--|---------------------------------|--------------------------------|----------------------------------|--------------------------------------|-------------------------|-----------------------|-----------------------------------|
| Cladribine, solution for injection, 2 mg/ml, 5 ml per vial | 391.61 | 410 | 160,561.09 | 403.41 | 165,400.07 | -11.80 | -3% | -4,838.98 |
| Cyclophosphamide, ampule, vial, syringe, 1000 mg | 10.50 | 4,885 | 51,271.94 | 10.57 | 51,625.66 | -0.07 | -1% | -353.72 |
| Cyclophosphamide, ampule, vial, syringe, 200 mg | 3.58 | 132,180 | 473,313.21 | 3.69 | 487,585.58 | -0.11 | -3% | -14,272.37 |
| Cyclophosphamide, ampule, vial, syringe, 500 mg | 7.23 | 127,965 | 925,677.83 | 6.51 | 832,847.41 | 0.73 | 10% | 92,830.42 |
| Cytarabine, ampule, vial, syringe, 100 mg | 3.70 | 5,485 | 20,319.32 | 3.82 | 20,930.76 | -0.11 | -3% | -611.44 |
| Cytarabine, ampule, vial, syringe, 1000 mg | 8.03 | 2,261 | 18,147.03 | 8.27 | 18,693.95 | -0.24 | -3% | -546.92 |
| Dacarbazine, ampule, vial, syringe, 200 mg | 10.14 | 17,350 | 175,852.12 | 10.28 | 178,288.60 | -0.14 | -1% | -2,436.48 |
| Daunorubicin, vials, 20 mg | 38.07 | 7,542 | 287,143.49 | 34.98 | 263,819.16 | 3.09 | 8% | 23,324.33 |
| Docetaxel, ampule, vial, syringe, 20 mg | 4.06 | 10,127 | 41,160.03 | 4.19 | 42,401.75 | -0.12 | -3% | -1,241.72 |
| Docetaxel, ampule, vial, syringe, 80 mg | 16.26 | 11,502 | 186,998.39 | 16.75 | 192,635.50 | -0.49 | -3% | -5,637.10 |
| Doxorubicin, ampule, vial, syringe, 100 mg | 12.39 | 13,570 | 168,119.36 | 12.76 | 173,185.77 | -0.37 | -3% | -5,066.41 |
| Doxorubicin, ampule, vial, syringe, 50 mg | 6.56 | 33,048 | 216,956.91 | 5.30 | 175,154.40 | 1.26 | 19% | 41,802.51 |
| Epirubicin, ampule, vial, syringe, 10 mg | 4.12 | 6,822 | 28,078.65 | 4.24 | 28,925.28 | -0.12 | -3% | -846.63 |
| Epirubicin, ampule, vial, syringe, 50 mg | 9.26 | 10,720 | 99,277.38 | 9.54 | 102,268.80 | -0.28 | -3% | -2,991.42 |
| Etoposide, ampule, vial, syringe, 100 mg | 3.03 | 14,173 | 42,874.34 | 3.12 | 44,168.74 | -0.09 | -3% | -1,294.39 |
| Etoposide, ampule, vial, syringe, 200 mg | 4.43 | 2,597 | 11,517.08 | 4.57 | 11,864.65 | -0.13 | -3% | -347.57 |
| Exemestane, tablet, capsule, pill, 25 mg | 0.20 | 263,520 | 51,525.72 | 0.19 | 51,201.94 | 0.00 | 1% | 323.78 |
| Filgrastim, ampule, vial, syringe, 48 mln IU | 10.07 | 23,305 | 234,772.22 | 10.38 | 241,796.37 | -0.30 | -3% | -7,024.14 |
| Fluorouracil, ampule, vial, syringe, 500 mg | 1.55 | 140,980 | 219,041.96 | 1.60 | 225,652.59 | -0.05 | -3% | -6,610.63 |
| Gemcitabine, ampule, vial, syringe, 1000 mg | 13.30 | 22,353 | 297,399.00 | 13.71 | 306,365.75 | -0.40 | -3% | -8,966.74 |
| Gemcitabine, ampule, vial, syringe, 200 mg | 4.06 | 17,027 | 69,204.28 | 4.19 | 71,292.05 | -0.12 | -3% | -2,087.77 |
| Goserelin, ampule, vial, syringe, 10,8 mg | 70.16 | 7,582 | 531,925.42 | 72.27 | 547,957.21 | -2.11 | -3% | -16,031.78 |
| Hydroxycarbamide, tablet, capsule, pill, 500 mg | 0.55 | 278,800 | 152,010.46 | 0.54 | 150,775.04 | 0.00 | 1% | 1,235.42 |
| Idarubicin, ampule, vial, syringe, 5 mg | 42.70 | 1,644 | 70,203.54 | 43.99 | 72,319.56 | -1.29 | -3% | -2,116.02 |
| lfosfamide, ampule, vial, syringe, 1000 mg | 22.84 | 5,447 | 124,428.45 | 23.53 | 128,178.80 | -0.69 | -3% | -3,750.35 |
| Imatinib, tablet, capsule, pill, 100 mg | 0.34 | 257,760 | 87,521.17 | 0.25 | 64,491.55 | 0.09 | 26% | 23,029.61 |
| Imatinib, tablet, capsule, pill, 400 mg | 1.31 | 96,780 | 126,459.38 | 1.35 | 130,285.24 | -0.04 | -3% | -3,825.85 |
| Interferon alpha-2b, ampule, vial, syringe, 3 million IU | 1.75 | 16,050 | 28,075.27 | 2.08 | 33,345.48 | -0.33 | -19% | -5,270.21 |
| Irinotecan, ampule, vial, syringe, 100 mg | 9.26 | 11,359 | 105,195.13 | 9.54 | 108,364.86 | -0.28 | -3% | -3,169.73 |
| Irinotecan, ampule, vial, syringe, 300 mg | 28.81 | 7,043 | 202,920.40 | 29.68 | 209,036.24 | -0.87 | -3% | -6,115.84 |
| Lenalidomide, tablet, capsule, pill, 10 mg | 345.12 | 7,392 | 2,551,119.81 | 13.25 | 97,944.00 | 331.87 | 96% | 2,453,175.81 |
| Lenalidomide, tablet, capsule, pill, 25 mg | 394.62 | 8,568 | 3,381,079.86 | 18.92 | 162,115.13 | 375.70 | 95% | 3,218,964.73 |
| Lenograstim, ampule, vial, syringe, 33.6 mln. IU | 53.81 | 2,395 | 128,865.23 | 55.43 | 132,748.62 | -1.62 | -3% | -3,883.40 |
| Letrozole, tablet, capsule, pill, 2,5 mg | 0.10 | 273,630 | 28,190.56 | 0.11 | 29,004.78 | 0.00 | -3% | -814.22 |
| Leuprorelin, ampule, vial, syringe, 45 mg | 383.33 | 1,057 | 405,178.86 | 361.14 | 381,727.09 | 22.19 | 6% | 23,451.77 |
| Lomustine, tablet, capsule, pill, 40 mg | 8.66 | 1,160 | 10,050.48 | 8.87 | 10,293.84 | -0.21 | -2% | -243.36 |

| INN, pharmaceutical presentation, strength | MoH TOR price per UOM, USD | Quantity ⁷¹ , UOM | Expected contract amount | UNDP price per UOM, USD | Actual contract amount, USD | Price change, USD | Price change, % | Savings / increased spending, USD |
|--|--|---------------------------------|--------------------------------|----------------------------------|--------------------------------------|----------------------------|------------------------|---|
| Melphalan, tablet, capsule, pill, 2 mg | 3.40 | 17,300 | 58,747.59 | 3.28 | 56,664.42 | 0.12 | 4% | 2,083.17 |
| Mesna, ampule, vial, syringe, 400 mg | 2.27 | 17,880 | 40,661.89 | 2.32 | 41,506.63 | -0.05 | -2% | -844.75 |
| Methotrexate, ampule, vial, syringe, 1000 mg | 13.58 | 1,075 | 14,601.22 | 13.99 | 15,041.40 | -0.41 | -3% | -440.18 |
| Methotrexate, ampule, vial, syringe, 50 mg | 1.79 | 15,962 | 28,581.45 | 1.84 | 29,440.31 | -0.05 | -3% | -858.87 |
| Mitoxantrone, ampule, vial, syringe, 20 mg | 16.50 | 1,964 | 32,415.71 | 17.00 | 33,392.71 | -0.50 | -3% | -977.01 |
| Nilotinib, tablet, capsule, pill, 200 mg | 21.42 | 138,684 | 2,971,115.04 | 18.92 | 2,624,026.10 | 2.50 | 12% | 347,088.94 |
| Oxaliplatin, ampule, vial, syringe, 100 mg | 10.71 | 14,234 | 152,469.41 | 11.03 | 157,066.50 | -0.32 | -3% | -4,597.09 |
| Oxaliplatin, ampule, vial, syringe, 50 mg | 6.43 | 9,209 | 59,223.48 | 6.63 | 61,009.63 | -0.19 | -3% | -1,786.14 |
| Paclitaxel, ampule, vial, syringe, 100 mg | 9.43 | 26,206 | 247,008.42 | 9.71 | 254,449.78 | -0.28 | -3% | -7,441.36 |
| Paclitaxel, | 5.32 | 15,658 | 83,299.06 | 5.48 | 85,808.97 | -0.16 | -3% | -2,509.92 |
| ampule, vial, syringe, 30 mg Piperacillin/Tazobactam, | 5.09 | 3,647 | 18,576.14 | 3.39 | 12,379.01 | 1.70 | 33% | 6,197.13 |
| ampule, vial, syringe, 4500 (4000/500 mg) Radiopharmaceuticals Sodium iodide Na1311 | | , | - | | | | | |
| for injection, solution for injection, 4000 MBq | 273.52 | 216 | 59,079.37 | 329.31 | 71,130.77 | -55.79 | -20% | -12,051.39 |
| Radiopharmaceuticals Sodium iodide Na1311 POLATOM, hard capsule, 4000 MBq | 197.17 | 706 | 139,205.48 | 241.31 | 170,365.42 | -44.14 | -22% | -31,159.94 |
| Radiopharmaceuticals Technetium (99mTc) pertechnetate, radionuclide generator (solution in a vial is obtained from the generator 99mTc by means of elution), 15000 MBq | 1,537.02 | 91.00 | 139,868.90 | 1,783.04 | 162,256.69 | -246.02 | -16% | -22,387.79 |
| Rituximab, ampule, vial, syringe, 100 mg | 212.34 | 15,034.00 | 3,192,349.35 | 38.29 | 575,609.76 | 174.05 | 82% | 2,616,739.58 |
| Rituximab, ampule, vial, syringe, 500 mg | 998.90 | 8,441.00 | 8,431,676.90 | 401.98 | 3,393,100.52 | 596.92 | 60% | 5,038,576.38 |
| Tamoxifen, tablet, capsule, pill, 20 mg | 0.19 | 210,840.00 | 39,466.12 | 0.09 | 18,596.09 | 0.10 | 53% | 20,870.03 |
| Thalidomide, tablet, capsule, pill, 100 mg | 6.31 | 26,970.00 | 170,118.80 | 6.50 | 175,245.67 | -0.19 | -3% | -5,126.87 |
| Topotecan, ampule, vial, syringe, 4 mg | 75.34 | 1,373.00 | 103,445.10 | 77.99 | 107,081.37 | -2.65 | -4% | -3,636.26 |
| Toremifene, tablet, capsule, pill, 60 mg | 1.05 | 209,460.00 | 219,822.05 | 1.08 | 226,468.15 | -0.03 | -3% | -6,646.10 |
| Trastuzumab, ampule, vial, syringe, 150 mg | 504.20 | 32,169.00 | 16,219,747.61 | 164.30 | 5,285,366.70 | 339.90 | 67% | 10,934,380.91 |
| Triptorelin, ampule, vial, syringe, 11,25 mg | 173.67 | 8,467.00 | 1,470,486.29 | 178.91 | 1,514,803.88 | -5.23 | -3% | -44,317.58 |
| Vancomycin, ampule, vial, syringe, 500 mg | 5.95 | 4,560.00 | 27,120.52 | 3.59 | 16,385.90 | 2.35 | 40% | 10,734.61 |
| Vincristine, ampule, vial, syringe, 1 mg | 2.49 | 10,742.00 | 26,747.56 | 2.57 | 27,555.38 | -0.08 | -3% | -807.82 |
| Vinorelbine, ampule, vial, syringe, 50 mg | 22.16 | 5,280.00 | 117,027.99 | 22.83 | 120,555.07 | -0.67 | -3% | -3,527.08 |
| Voriconazole, tablet, capsule, pill, 200 mg | 5.00 | 2,240.00 | 11,202.32 | 3.50 | 7,835.52 | 1.50 | 30% | 3,366.80 |
| Voriconazole, vials, 200 mg | 39.82 | 3,438.00 | 136,907.45 | 14.10 | 48,468.92 | 25.72 | 65% | 88,438.53 |
| Zoledronic acid, ampule, vial, syringe, 4 mg | 6.01 | 26,129.00 | 157,013.12 | 5.94 | 155,101.74 | 0.07 | 1% | 1,911.38 |
| ampure, vici, synnige, 4 ing | ı | Adul | t Hepatitis B | and C | Total expect Total act | ual contrac verage pric | et amount et amount | 4,898,843.77 4,783,552.65 2,902,977.08 10% 1,880,575.58 |
| Daclatasvir, tablets, 60 mg | 1.27 | 28,336 | 36,028.95 | 0.44 | 12,524.51 | 0.83 | 65% | 23,504.43 |
| Dasabuvir, | 1.34 | 104,384 | 140,267.73 | 1.39 | 144,884.99 | -0.04 | -3% | -4,617.26 |

| INN, pharmaceutical presentation, strength | MoH TOR price per UOM, | Quantity ⁷¹ , UOM | Expected contract amount | UNDP price per UOM, | Actual contract amount, | Price change, USD | Price change, % | Savings / increased spending, USD | |
|---|---------------------------------|---------------------------------|--------------------------------|---------------------------|-------------------------------|----------------------------|-----------------------|---|--|
| | USD | | anount | USD | USD | 000 | 70 | | |
| Lamivudine, tablet, capsule, pill, 100 mg | 1.36 | 45,724 | 62,330.23 | 1.54 | 70,597.86 | -0.18 | -13% | -8,267.62 | |
| Ombitasvir/ Paritaprevir/ Ritonavir, tablets, 12.5 mg/ 75 mg/ 50 mg | 15.44 | 104,384 | 1,612,196.88 | 15.96 | 1,666,302.67 | -0.52 | -3% | -54,105.79 | |
| PEG- interferon α-2a, ampules, vials, syringe, pen injector, syringe- tube, 180 μg | 90.22 | 2,881 | 259,925.05 | 95.40 | 274,847.40 | -5.18 | -6% | -14,922.35 | |
| Ribavirin, tablet, capsule, pill, 200 mg | 0.10 | 105,504 | 10,584.59 | 0.31 | 32,431.93 | -0.21 | -206% | -21,847.34 | |
| Sofosbuvir, tablets, 400 mg | 8.96 | 27,132 | 242,998.72 | 0.69 | 18,607.13 | 8.27 | 92% | 224,391.59 | |
| Sofosbuvir/Ledipasvir, tablets, 400 mg/ 90 mg | 10.75 | 51,716 | 556,009.66 | 1.13 | 58,490.80 | 9.62 | 89% | 497,518.87 | |
| Sofosbuvir/Velpatasvir, tablets, 400 mg/ 100 mg | 10.63 | 170,184 | 1,809,061.32 | 3.40 | 579,068.08 | 7.23 | 68% | 1,229,993.25 | |
| Tenofovir, tablet, capsule, pill, 300 mg | 0.12 | 449,520 | 54,149.52 | 0.10 | 45,221.71 | 0.02 | 16% | 8,927.80 | |
| | | Childh | nood Cystic | Fibrosis | | | | | |
| Allocated programme budget 2,341,859.41 Total expected contract amount 1,956,166.34 Total actual contract amount 2,071,045.00 Average price change 14% Total increased spending -114,878.65 | | | | | | | | | |
| Colistimethate Sodium, powder for solution for injection, infusion or inhalation in vial, 2 million IU | 10.75 | 17,170 | 184,572.56 | 3.27 | 56,202.56 | 7.48 | 70% | 128,370.00 | |
| Dornase alfa, solution for inhalation, 2,5 mg/2,5 mL in ampule | 17.59 | 88,302 | 1,553,513.69 | 20.48 | 1,808,354.32 | -2.89 | -16% | -254,840.62 | |
| Pancreatin, microgranules in gastroresistant shell, 10 000 Units in one capsule | 0.18 | 231,100 | 42,435.03 | 0.19 | 44,690.12 | -0.01 | -5% | -2,255.09 | |
| Pancreatin, microgranules in gastroresistant shell, 25 000 Units in one capsule | 0.48 | 364,000 | 175,645.06 | 0.44 | 161,798.00 | 0.04 | 8% | 13,847.06 | |
| | | Child | hood Haem | ophilia | | | | | |
| | | | | | Total expec Total act | ual contrac verage pric | amount amount | 9,176,125.34 8,118,089.35 8,081,695.94 1% 36,393.41 | |
| Anti-inhibitor coagulant complex, vials, 1000 IU | 1,199.81 | 907 | 1,088,225.98 | 1,303.80 | 1,182,546.60 | -103.99 | -9% | -94,320.62 | |
| Anti-inhibitor coagulant complex, vials, 500 IU | 599.90 | 2,409 | 1,445,168.89 | 651.90 | 1,570,427.10 | -52.00 | -9% | -125,258.21 | |
| Blood coagulation factor VIII (recombinant), vials, 1,500 IU | 385.50 | 1,824 | 703,147.01 | 302.10 | 551,030.40 | 83.40 | 22% | 152,116.61 | |
| Blood coagulation factor VIII (recombinant), vials, 1000 IU | 202.99 | 1,915 | 388,723.34 | 212.00 | 405,980.00 | -9.01 | -4% | -17,256.66 | |
| Blood coagulation factor VIII (recombinant), vials, 250 IU | 50.75 | 2,408 | 122,199.19 | 53.00 | 127,624.00 | -2.25 | -4% | -5,424.81 | |
| Blood coagulation factor VIII (recombinant), vials, 500 IU | 101.49 | 6,036 | 612,619.86 | 106.00 | 639,816.00 | -4.51 | -4% | -27,196.14 | |
| Desmopressin, ampule, vial, syringe, 15 µg/ml, 1 ml | 21.78 | 130 | 2,831.82 | 22.46 | 2,919.44 | -0.67 | -3% | -87.62 | |
| Eptacog alpha (recombinant blood coagulation factor VIIa), vials, 2 mg (100 KIU) | 1,631.16 | 204 | 332,756.45 | 1,700.00 | 346,800.00 | -68.84 | -4% | -14,043.55 | |
| Eptacog alpha (recombinant blood coagulation factor VIIa), vials, 5 mg (250 KIU) | 4,077.90 | 165 | 672,853.13 | 4,250.00 | 701,250.00 | -172.10 | -4% | -28,396.87 | |
| Human blood coagulation factor IX (plasma), vials, 500 IU and/or 600 IU | 126.87 | 2,391 | 303,341.22 | 79.50 | 190,084.50 | 47.37 | 37% | 113,256.72 | |
| Human blood coagulation factor IX (recombinant), vials, 500 IU | 96.06 | 2,677 | 257,144.98 | 143.10 | 383,078.70 | -47.04 | -49% | -125,933.72 | |
| Human blood coagulation factor VIII (plasma), vials, 1000 IU | 224.74 | 3,366 | 756,466.34 | 147.30 | 495,811.80 | 77.44 | 34% | 260,654.54 | |

| INN, pharmaceutical presentation, strength | MoH TOR price per UOM, USD | Quantity ⁷¹ , UOM | Expected contract amount | UNDP price per UOM, USD | Actual contract amount, USD | Price change, USD | Price change, % | Savings / increased spending, USD |
|---|--|---------------------------------|--------------------------------|----------------------------------|--------------------------------------|-------------------------|-----------------------|-----------------------------------|
| Human blood coagulation factor VIII (plasma), vials, 250 IU | 56.18 | 1,934 | 108,660.57 | 34.45 | 66,626.30 | 21.73 | 39% | 42,034.27 |
| Human blood coagulation factor VIII (plasma), vials, 500 IU | 88.81 | 7,363 | 653,889.99 | 92.20 | 678,868.60 | -3.39 | -4% | -24,978.61 |
| Human blood coagulation factor VIII and Von Willebrand factor, vials, 1000 IU | 248.66 | 1,521 | 378,213.60 | 272.30 | 414,168.30 | -23.64 | -10% | -35,954.70 |
| Human blood coagulation factor VIII and Von Willebrand factor, vials, 500 IU | 128.68 | 2,268 | 291,846.98 | 143.15 | 324,664.20 | -14.47 | -11% | -32,817.22 |
| | | | TB medicin | es | | programm | | L |
| | 16,172,081.51 4,539,336.36 4,695,305.38 -76% -155,969.01 | | | | | | | |
| Amoxicillin/Clavulanic acid, powder for solutions in vial, 1000 mg/200 mg | 0.76 | 6,483 | 4,923.59 | 0.78 | 5,085.27 | -0.02 | -3% | -161.68 |
| Clofazimine, tablet, capsule, pill, 100 mg | 0.56 | 514,800 | 288,123.14 | 0.53 | 272,844.00 | 0.03 | 5% | 15,279.14 |
| Cycloserine, tablet, capsule, pill, 125 mg | 0.20 | 174,700 | 35,728.31 | 1.06 | 185,880.80 | -0.86 | -420% | -150,152.49 |
| Cycloserine, tablet, capsule, pill, 250 mg | 0.23 | 500,000 | 116,084.43 | 0.21 | 105,100.00 | 0.02 | 9% | 10,984.43 |
| Delamanid, tablets, 50 mg | 2.61 | 1,086,624 | 2,835,977.92 | 2.67 | 2,900,199.46 | -0.06 | -2% | -64,221.53 |
| Ethambutol, ampule, vial, syringe, 100 mg/mL | 2.57 | 18,318 | 47,081.53 | 2.69 | 49,319.38 | -0.12 | -5% | -2,237.86 |
| Ethambutol, tablet, capsule, pill, 100 mg | 0.03 | 128,900 | 3,752.55 | 0.23 | 29,144.29 | -0.20 | -677% | -25,391.74 |
| Ethambutol, tablet, capsule, pill, 400 mg | 0.02 | 207,850 | 4,689.48 | 0.03 | 6,173.15 | -0.01 | -32% | -1,483.66 |
| Ethionamide, tablet, capsule, pill, 125 mg | 0.11 | 175,700 | 18,797.60 | 0.22 | 37,775.50 | -0.11 | -101% | -18,977.90 |
| Isoniazid, ampule, vial, syringe, 100 mg/mL | 0.08 | 31,110 | 2,535.90 | 0.08 | 2,507.47 | 0.00 | 1% | 28.43 |
| Isoniazid, bottles, vial (syrup), 100 mg/5 mL | 3.17 | 20,672 | 65,506.47 | 3.48 | 71,872.41 | -0.31 | -10% | -6,365.94 |
| Isoniazid, tablet, capsule, pill, 100 mg | 0.01 | 631,800 | 5,287.99 | 0.02 | 9,919.26 | -0.01 | -88% | -4,631.27 |
| Isoniazid, tablet, capsule, pill, 300 mg | 0.01 | 1,091,800 | 15,097.67 | 0.02 | 16,922.90 | 0.00 | -12% | -1,825.23 |
| Levofloxacin, ampule, vial, syringe, 5 mg/mL | 1.24 | 1,320 | 1,635.11 | 0.37 | 489.72 | 0.87 | 70% | 1,145.39 |
| Levofloxacin, tablet, capsule, pill, 250 mg | 0.03 | 137,900 | 3,613.10 | 0.02 | 3,185.49 | 0.00 | 12% | 427.61 |
| Levofloxacin, tablet, capsule, pill, 500 mg | 0.05 | 467,300 | 22,616.78 | 0.04 | 17,617.21 | 0.01 | 22% | 4,999.57 |
| Linezolid, ampule, vial, syringe, 2 mg/mL | 4.64 | 7,100 | 32,978.31 | 4.13 | 29,351.40 | 0.51 | 11% | 3,626.91 |
| Linezolid, tablet, capsule, pill, 600 mg | 0.25 | 1,133,400 | 284,174.89 | 0.21 | 232,800.36 | 0.05 | 18% | 51,374.53 |
| Moxifloxacin, ampule, vial, syringe, 100 mg | 0.26 | 48,900 | 12,865.61 | 1.06 | 52,010.04 | -0.80 | -304% | -39,144.43 |
| Moxifloxacin, ampule, vial, syringe, 400 mg | 21.19 | 3,541 | 75,038.79 | 11.66 | 41,288.06 | 9.53 | 45% | 33,750.73 |
| Moxifloxacin, tablet, capsule, pill, 400 mg | 0.96 | 168,760 | 162,004.69 | 0.27 | 44,721.40 | 0.69 | 72% | 117,283.29 |
| Protionamide, tablet, capsule, pill, 250 mg | 0.07 | 775,900 | 53,929.00 | 0.12 | 95,978.83 | -0.05 | -78% | -42,049.83 |
| Pyrazinamide, tablet, capsule, pill, 150 mg | 0.02 | 234,600 | 4,610.04 | 0.20 | 45,747.00 | -0.18 | -892% | -41,136.96 |
| Pyrazinamide, tablet, capsule, pill, 500 mg | 0.02 | 4,444,150 | 87,330.46 | 0.02 | 85,772.10 | 0.00 | 2% | 1,558.36 |
| Rifabutin, tablet, capsule, pill, 150 mg | 1.02 | 6,400 | 6,532.75 | 1.01 | 6,483.84 | 0.01 | 1% | 48.91 |
| Rifampicin, ampoules, 600 mg | 11.24 | 16,707 | 187,747.04 | 9.54 | 159,384.78 | 1.70 | 15% | 28,362.26 |
| Rifampicin, tablet, capsule, pill, 150 mg | 0.03 | 2,841,600 | 82,724.89 | 0.03 | 94,625.28 | 0.00 | -14% | -11,900.39 |
| Rifampicin/Isoniazid, tablet, capsule, pill, 150 mg/75 mg | 0.03 | 850,080 | 24,128.91 | 0.04 | 31,282.94 | -0.01 | -30% | -7,154.04 |

| INN, pharmaceutical presentation, strength | MoH TOR price per UOM, USD | Quantity ⁷¹ , UOM | Expected contract amount | UNDP price per UOM, USD | Actual contract amount, USD | Price change, USD | Price change, % | Savings / increased spending, USD |
|---|--|---------------------------------|--------------------------------|----------------------------------|--------------------------------------|-------------------------|-----------------------|-----------------------------------|
| Rifampicin/Isoniazid, tablet, capsule, pill, 75 mg/50 mg | 0.03 | 20,200 | 705.68 | 0.05 | 1,028.18 | -0.02 | -46% | -322.50 |
| Rifampicin/Isoniazid/Pyrazinamide, tablet, capsule, pill, 75 mg/50 mg/150 mg | 0.04 | 15,000 | 633.19 | 0.06 | 946.50 | -0.02 | -49% | -313.31 |
| Rifampicin/Isoniazid/Pyrazinamide/Ethambutol, tablet, capsule, pill, 150 mg/75 mg/400 mg | 0.06 | 294,336 | 17,673.01 | 0.09 | 26,372.51 | -0.03 | -49% | -8,699.49 |
| Sodium aminosalicylate, ampule, vial, syringe, 30 mg/mL | 4.64 | 2,775 | 12,889.41 | 4.85 | 13,472.07 | -0.21 | -5% | -582.66 |
| Terizidon, tablet, capsule, pill, 250 mg | 0.93 | 23,620 | 21,918.12 | 0.85 | 20,003.78 | 0.08 | 9% | 1,914.34 |

Average year-on-year price change, %72/73

| INN, pharmaceutical presentation, strength | 2015 price per | 2016 price, | 2017 price per | 2018 price per | 2016/ 2015 price | 2017/ 2016 price | 2018/ 2017 price | | | | |
|--|----------------------|----------------|----------------------|----------------------|------------------------|------------------------|------------------------|--|--|--|--|
| | UOM, | USD | UOM, | UOM, | change, | change, | change, | | | | |
| USD USD USD % % % Adult Cancer | | | | | | | | | | | |
| 6-Mercaptopurine, | - | _ | - | 2.72 | - | - | _ | | | | |
| tablet, capsule, pill, 50 mg | | | | 2.12 | | | | | | | |
| Anastrozole, tablet, capsule, pill, 1 mg | - | 0.32 | 0.20 | 0.18 | - | 37% | 11% | | | | |
| Asparaginase, ampule, vial, syringe, 10000 IU | - | 99.38 | 459.09 | 663.98 | - | -362% | -45% | | | | |
| Bendamustine, | - | 485.71 | 193.98 | 34.86 | - | 60% | 82% | | | | |
| ampule, vial, syringe, 100 mg | | | | | | | | | | | |
| Bendamustine, ampule, vial, syringe, 25 mg | - | 114.53 | 50.88 | 15.85 | - | 56% | 69% | | | | |
| Bicalutamide, | | 0.07 | 0.44 | 0.00 | | 4.00/ | 450/ | | | | |
| tablet, capsule, pill, 150 mg | - | 0.37 | 0.41 | 0.22 | - | -10% | 45% | | | | |
| Bicalutamide, tablet, capsule, pill, 50 mg | - | 0.19 | 0.23 | 0.11 | - | -22% | 55% | | | | |
| Bleomycin, ampule, vial, syringe, 15 mg | - | 37.12 | 37.10 | 37.10 | - | 0% | 0% | | | | |
| Bortezomib, ampule, vial, syringe, 1 mg | - | 269.37 | 127.20 | 36.63 | - | 53% | 71% | | | | |
| Bortezomib, | - | _ | 111.30 | 45.79 | - | - | 59% | | | | |
| ampule, vial, syringe, 3.5 mg Bosutinib. | | | | | | | | | | | |
| tablet, capsule, pill, 100 mg | - | - | 9.89 | 9.89 | - | - | 0% | | | | |
| Bosutinib, tablet, capsule, pill, 500 mg | - | - | 49.47 | 49.47 | - | - | 0% | | | | |
| Calcium folinate, | - | 3.71 | 4.96 | 4.19 | - | -34% | 16% | | | | |
| ampule, vial, syringe, 100 mg Calcium folinate, | | | | | | | | | | | |
| ampule, vial, syringe, 30 mg | - | 2.95 | 2.86 | 2.86 | - | 3% | 0% | | | | |
| Calcium folinate, ampule, vial, syringe, 50 mg | - | 3.18 | 3.61 | 3.08 | - | -14% | 15% | | | | |
| Capecitabine, tablet, capsule, pill, 150 mg | - | 0.56 | 0.60 | 0.16 | - | -7% | 73% | | | | |
| Capecitabine, tablet, capsule, pill, 500 mg | - | 1.34 | 1.42 | 0.30 | - | -6% | 79% | | | | |
| Carboplatin, | | 11.91 | 8.05 | 8.05 | - | 32% | 0% | | | | |
| ampule, vial, syringe, 150 mg | | | 0.00 | 0.00 | | 0270 | 0,10 | | | | |
| Carboplatin, ampule, vial, syringe, 450 mg | - | 29.50 | 19.91 | 19.91 | - | 33% | 0% | | | | |
| Caspofungin, | | 392.39 | 392.20 | 392.20 | - | 0% | 0% | | | | |
| Vial, 50 mg Caspofungin, | | | | | | | | | | | |
| Vial, 70 mg | - | 526.01 | 525.76 | 525.76 | - | 0% | 0% | | | | |
| Chlorambucil, tablet, capsule, pill, 2 mg | - | 2.85 | 2.93 | 2.75 | - | -3% | 6% | | | | |
| Cisplatin, ampule, vial, syringe, 100 mg | - | 9.55 | 9.54 | 9.54 | - | 0% | 0% | | | | |
| Cisplatin, ampule, vial, syringe, 50 mg | - | 6.82 | 5.47 | 5.47 | - | 20% | 0% | | | | |
| ampule, vial, synnige, 50 mg | I | | | | | | | | | | |

⁷² Positive values stand for price decrease compared to previous budget year, while negative values stand for price increase accordingly

⁷³ Hereinafter in Annexes 12-19 prices are indicated with two decimals for the ease of presentation, while all calculations in the present assignment were done with four decimals, therefore sums may differ because of the rounding error

| INN, pharmaceutical presentation, strength | 2015 price per UOM, USD | 2016 price, USD | 2017 price per UOM, USD | 2018 price per UOM, USD | 2016/ 2015 price change, % | 2017/ 2016 price change, % | 2018/ 2017 price change, % |
|---|-------------------------------------|-----------------------|-------------------------------------|-------------------------------------|--|--|--|
| Cladribine, solution, 2 mg/ml, 5 ml vial | - | 403.61 | 403.41 | 403.41 | - | 0% | 0% |
| Cyclophosphamide, | | 10.82 | 10.81 | 10.57 | - | 0% | 2% |
| ampule, vial, syringe, 1000 mg Cyclophosphamide, | - | 10.02 | 10.01 | 10.57 | - | 0 /0 | 2 /0 |
| ampule, vial, syringe, 200 mg | - | 3.69 | 3.69 | 3.69 | - | 0% | 0% |
| Cyclophosphamide, ampule, vial, syringe, 500 mg | - | 7.46 | 7.45 | 6.51 | - | 0% | 13% |
| Cytarabine, ampule, vial, syringe, 100 mg | - | 4.77 | 3.82 | 3.82 | - | 20% | 0% |
| Cytarabine, ampule, vial, syringe, 1000 mg | - | 13.17 | 8.27 | 8.27 | - | 37% | 0% |
| Dacarbazine, ampule, vial, syringe, 200 mg | - | 9.44 | 10.44 | 10.28 | - | -11% | 2% |
| Daunorubicin, Vial, 20 mg | - | 39.24 | 39.22 | 34.98 | - | 0% | 11% |
| Docetaxel, ampule, vial, syringe, 20 mg | - | 9.33 | 4.19 | 4.19 | - | 55% | 0% |
| Docetaxel, ampule, vial, syringe, 80 mg | - | 23.33 | 16.75 | 16.75 | - | 28% | 0% |
| Doxorubicin, ampule, vial, syringe, 100 mg | - | 15.91 | 12.76 | 12.76 | - | 20% | 0% |
| Doxorubicin, ampule, vial, syringe, 50 mg | - | 8.10 | 6.51 | 5.30 | - | 20% | 19% |
| Epirubicin, ampule, vial, syringe, 10 mg | - | 4.72 | 4.24 | 4.24 | - | 10% | 0% |
| Epirubicin, ampule, vial, syringe, 50 mg | - | 13.83 | 9.54 | 9.54 | - | 31% | 0% |
| Etoposide, ampule, vial, syringe, 100 mg | - | 3.90 | 3.12 | 3.12 | - | 20% | 0% |
| Etoposide, ampule, vial, syringe, 200 mg | - | 3.82 | 4.57 | 4.57 | - | -20% | 0% |
| Exemestane, tablet, capsule, pill, 25 mg | - | 0.21 | 0.19 | 0.19 | - | 9% | 0% |
| Filgrastim, ampule, vial, syringe, 48 mln. IU | - | 15.38 | 10.38 | 10.38 | - | 33% | 0% |
| Fludarabine, ampule, vial, syringe, 50 mg | - | 13.65 | 22.90 | 31.80 | - | -68% | -39% |
| Fluorouracil, ampule, vial, syringe, 500 mg | - | 2.23 | 1.60 | 1.60 | - | 28% | 0% |
| Gemcitabine, ampule, vial, syringe, 1000 mg | - | 19.09 | 13.71 | 13.71 | - | 28% | 0% |
| Gemcitabine, ampule, vial, syringe, 200 mg | - | 5.83 | 4.19 | 4.19 | - | 28% | 0% |
| Goserelin, ampule, vial, syringe, 10,8 mg | - | 115.71 | 72.27 | 72.27 | - | 38% | 0% |
| Hydroxycarbamide, tablet, capsule, pill, 500 mg | - | 0.51 | 0.55 | 0.54 | - | -9% | 2% |
| Idarubicin, ampule, vial, syringe, 5 mg | - | 64.75 | 43.99 | 43.99 | - | 32% | 0% |
| Ifosfamide, ampule, vial, syringe, 1000 mg | - | 23.54 | 23.53 | 23.53 | - | 0% | 0% |
| Imatinib, tablet, capsule, pill, 100 mg | - | 0.42 | 0.34 | 0.25 | - | 19% | 27% |
| Imatinib, tablet, capsule, pill, 400 mg | - | 1.43 | 1.34 | 1.35 | - | 6% | 0% |
| Irinotecan, ampule, vial, syringe, 100 mg | - | 11.27 | 9.54 | 9.54 | - | 15% | 0% |
| Irinotecan, ampule, vial, syringe, 300 mg | - | 33.94 | 29.68 | 29.68 | - | 13% | 0% |
| Lenalidomide, tablet, capsule, pill, 10 mg | - | - | 13.25 | 13.25 | - | - | 0% |

| raye ivu | Page | 160 |
|----------|------|-----|
|----------|------|-----|

| INN, pharmaceutical presentation, strength | 2015 price per UOM, USD | 2016 price, USD | 2017 price per UOM, USD | 2018 price per UOM, USD | 2016/ 2015 price change, % | 2017/ 2016 price change, % | 2018/ 2017 price change, % |
|--|-------------------------------------|-----------------------|-------------------------------------|-------------------------------------|--|--|--|
| Lenalidomide, tablet, capsule, pill, 25 mg | - | - | 18.92 | 18.92 | - | - | 0% |
| Lenograstim, ampule, vial, syringe, 33.6 mln. IU | - | 55.45 | 55.43 | 55.43 | - | 0% | 0% |
| Letrozole, | - | 0.18 | 0.11 | 0.11 | - | 41% | 0% |
| tablet, capsule, pill, 2,5 mg Leuprorelin, | _ | 391.31 | 391.13 | 361.14 | | 0% | 8% |
| ampule, vial, syringe, 45 mg Lomustine, | - | 8.30 | 8.92 | 8.87 | - | -7% | 1% |
| tablet, capsule, pill, 40 mg Melphalan, | _ | | | | | | |
| tablet, capsule, pill, 2 mg Mesna, | - | 2.73 | 3.49 | 3.28 | - | -28% | 6% |
| ampule, vial, syringe, 400 mg Methotrexate, | - | 2.34 | 2.34 | 2.32 | - | 0% | 1% |
| ampule, vial, syringe, 1000 mg | - | 17.55 | 13.99 | 13.99 | - | 20% | 0% |
| Methotrexate, ampule, vial, syringe, 50 mg | - | 1.85 | 1.84 | 1.84 | - | 0% | 0% |
| Mitoxantrone, ampule, vial, syringe, 20 mg | - | 32.19 | 17.00 | 17.00 | - | 47% | 0% |
| Nilotinib, tablet, capsule, pill, 200 mg | - | 20.57 | 22.07 | 18.92 | - | -7% | 14% |
| Oxaliplatin, ampule, vial, syringe, 100 mg | - | 15.38 | 11.03 | 11.03 | - | 28% | 0% |
| Oxaliplatin, ampule, vial, syringe, 50 mg | - | 9.23 | 6.63 | 6.63 | - | 28% | 0% |
| Paclitaxel, | - | 13.52 | 9.71 | 9.71 | - | 28% | 0% |
| ampule, vial, syringe, 100 mg Paclitaxel, | _ | 7.64 | 5.48 | 5.48 | _ | 28% | 0% |
| ampule, vial, syringe, 30 mg Peginterferon a-2b, | _ | 2.02 | 1.80 | 2.08 | | 11% | -15% |
| ampule, vial, syringe, 3 million IU Piperacillin/Tazobactam, | - | 5.41 | 5.25 | 3.39 | - | 3% | 35% |
| ampule, vial, syringe, 4000 mg/500 mg Radiopharmaceuticals Sodium iodide Na131I for | | | | | | | |
| injection, solution, 4000 MBq Radiopharmaceuticals Sodium iodide Na131I | - | 278.02 | 303.36 | 329.31 | - | -9% | -9% |
| POLATOM, tablet, capsule, pill, 4000 MBq Radiopharmaceuticals Technetium (99mTc) | - | 203.22 | 217.87 | 241.31 | - | -7% | -11% |
| pertechnetate, solution, 15000 MBq | - | 1584.09 | 1773.65 | 1783.04 | - | -12% | -1% |
| Rituximab, ampule, vial, syringe, 100 mg | - | 218.84 | 111.06 | 38.29 | - | 49% | 66% |
| Rituximab, ampule, vial, syringe, 500 mg | - | 1091.25 | 569.95 | 401.98 | - | 48% | 29% |
| Tamoxifen, tablet, capsule, pill, 20 mg | - | - | - | 0.09 | - | - | - |
| Tegafur, tablet, capsule, pill, 400 mg | - | 1.21 | - | - | - | - | - |
| Thalidomide, | - | 6.50 | 6.47 | 6.50 | - | 1% | 0% |
| tablet, capsule, pill, 100 mg Topotecan, | - | 25.73 | 77.61 | 77.99 | - | -202% | 0% |
| ampule, vial, syringe, 4 mg Toremifene, | _ | 0.88 | 1.08 | 1.08 | - | -23% | 0% |
| tablet, capsule, pill, 60 mg Trastuzumab, | | 536.27 | 519.40 | 164.30 | | 3% | 68% |
| ampule, vial, syringe, 150 mg Triptorelin, | | | | | | | |
| ampule, vial, syringe, 11,25 mg Vancomycin, | - | 185.06 | 178.91 | 178.91 | - | 3% | 0% |
| ampule, vial, syringe, 500 mg Vincristine, | - | 3.51 | 6.13 | 3.59 | - | -75% | 41% |
| ampule, vial, syringe, 1 mg | - | 2.57 | 2.57 | 2.57 | - | 0% | 0% |

| | 0045 | 1 | 0047 | 0040 | 0040/ | 0047/ | 0040/ |
|--|-----------|-------------------|-----------------|-----------------|---------|----------|----------|
| | 2015 | 0010 | 2017 | 2018 | 2016/ | 2017/ | 2018/ |
| | price | 2016 | price | price | 2015 | 2016 | 2017 |
| INN, pharmaceutical presentation, strength | per | price, | per | per | price | price | price |
| | UOM, | USD | UOM, | UOM, | change, | change, | change, |
| | USD | | USD | USD | % | % | % |
| Vinorelbine, | - | 25.45 | 22.83 | 22.83 | - | 10% | 0% |
| ampule, vial, syringe, 50 mg | | 20.40 | 22.00 | 22.00 | | 1070 | 070 |
| Voriconazole, | - | 10.10 | 3.50 | 3.50 | _ | 65% | 0% |
| tablet, capsule, pill, 200 mg | - | 10.10 | 3.50 | 5.50 | - | 0576 | 0 /8 |
| Voriconazole, | - | 444.05 | 44.00 | 14.10 | | c.20/ | 000/ |
| Vial, 200 mg | - | 111.35 | 41.02 | 14.10 | - | 63% | 66% |
| Zoledronic acid, | - | 7.00 | 6.40 | 5.04 | | 4.40/ | 40/ |
| ampule, vial, syringe, 4 mg | - | 7.20 | 6.19 | 5.94 | - | 14% | 4% |
| | Adult Her | oatitis B a | nd C | | • | • | • |
| Daclatasvir, | | | | | | | |
| tablet, capsule, pill, 60 mg | - | - | 0.44 | 0.44 | - | - | 0% |
| | | | | | | | |
| Dasabuvir, | - | - | 1.39 | 1.39 | - | - | |
| tablet, capsule, pill, 250 mg | | | | | | | |
| Lamivudin, | 1.45 | - | 1.54 | 1.54 | - | - | 0% |
| tablet, capsule, pill, 100 mg | | | | | | | |
| Ombitasvir/ Paritaprevir/ Ritonavir, | _ | - | 15.96 | 15.96 | _ | - | 0% |
| tablet, capsule, pill, 12.5 mg/ 75 mg/50 mg | | | 10.00 | 10.00 | | | 070 |
| Peginterferon a-2a, | 95.78 | - | 95.40 | 95.40 | - | - | 0% |
| ampule, vial, syringe, 180 µg | 95.70 | - | 95.40 | 95.40 | - | - | 0 /8 |
| Peginterferon a-2b, | 47.00 | - | _ | - | _ | _ | |
| ampule, vial, syringe, 100 mg | 47.36 | - | - | - | - | - | - |
| Peginterferon a-2b, | 47.00 | | | | | | |
| ampule, vial, syringe, 120 mg | 47.36 | - | - | - | - | - | - |
| Peginterferon a-2b, | | | | | | | |
| ampule, vial, syringe, 150 mg | 47.36 | - | - | - | - | - | - |
| Peginterferon a-2b, | | | | | | | |
| ampule, vial, syringe, 80 mg | 47.36 | - | - | - | - | - | - |
| Ribavirin, | | - | | | | | |
| | 0.08 | - | 0.31 | 0.31 | - | - | 0% |
| tablet, capsule, pill, 200 mg | | | | | | | |
| Sofosbuvir, | 17.38 | - | 0.69 | 0.69 | - | - | 0% |
| tablet, capsule, pill, 400 mg | | | | | | | |
| Sofosbuvir/Ledipasvir, | - | - | 1.13 | 1.13 | _ | _ | 0% |
| tablet, capsule, pill, 400 mg/90 mg | | | | | | | 0,0 |
| Sofosbuvir/Velpatasvir, | - | _ | 3.40 | 3.40 | - | _ | 0% |
| tablet, capsule, pill, 400 mg/100 mg | | | 0.40 | 0.40 | | | 070 |
| Tenofovir, | 0.13 | _ | 0.10 | 0.10 | | _ | 0% |
| tablet, capsule, pill, 300 mg | 0.15 | - | 0.10 | 0.10 | - | - | 0% |
| | Childhood | Cystic Fit | orosis | | | | |
| Colistimethate Sodium, | | | | | | | |
| powder, 2 million IU | - | - | 3.51 | 3.27 | - | - | 7% |
| Dornase alfa, | | | | | | | |
| solution (inhalation), 2,5 mg/2,5 mL | - | 20.49 | 20.48 | 20.48 | - | 0% | 0% |
| | | | | | | | |
| Multienzymes (lipase, protease etc.), | - | 0.13 | - | - | - | - | - |
| tablet, capsule, pill, 10 000 Units | + | - | | | | | |
| Multienzymes (lipase, protease etc.), | - | 0.53 | - | - | - | - | - |
| tablet, capsule, pill, 25 000 Units | | | | | | | |
| Pancreatin, | - | - | 0.19 | 0.19 | - | - | -1% |
| tablet, capsule, pill, 10 000 Units in one capsule | | _ | 0.10 | 0.10 | | _ | 170 |
| Pancreatin, | - | - | 0.44 | 0.44 | _ | - | -1% |
| tablet, capsule, pill, 25 000 Units in one capsule | - | - | 0.44 | 0.44 | - | - | -1/0 |
| | Childhoo | d Haemop | hilia | | | | |
| | 5 | | a | - | 1 | r | 1 |
| Anti-inhibitor coagulant complex, | 1316.20 | 1240.80 | 1240.20 | 1303.80 | 6% | 0% | -5% |
| Vial, 1000 IU | .5.0.20 | 12-10.00 | 1240.20 | | 070 | 070 | 070 |
| Anti-inhibitor coagulant complex, | 658.10 | 620.40 | 620.10 | 651.00 | 69/ | 09/ | E0/ |
| Vial, 500 IU | 056.10 | 620.40 | 620.10 | 651.90 | 6% | 0% | -5% |
| Coagulation factor VIII (recombinant), | | | | 000.40 | | | |
| Vial, 1,500 IU | - | - | - | 302.10 | - | - | - |
| Coagulation factor VIII (recombinant), | | 1 | | | 1 | | 1 |
| COADUIATION TACIOL VIII (TECOMOINAND | | | | | | | |
| | - | - | 212.00 | 212.00 | - | - | 0% |
| Vial, 1000 IU | - | - | 212.00 | 212.00 | - | - | 0% |
| | - 66.78 | - 66.28 | 212.00 53.00 | 212.00 53.00 | - 1% | - 20% | 0% 0% |

| INN, pharmaceutical presentation, strength | 2015 price per UOM, USD | 2016 price, USD | 2017 price per UOM, USD | 2018 price per UOM, USD | 2016/ 2015 price change, % | 2017/ 2016 price change, % | 2018/ 2017 price change, % |
|--|-------------------------------------|-----------------------|-------------------------------------|-------------------------------------|--|--|--|
| Coagulation factor VIII (recombinant), Vial, 500 IU | 133.55 | 132.55 | 106.00 | 106.00 | 1% | 20% | 0% |
| Desmopressin, | 21.28 | 19.86 | 22.46 | 22.46 | 7% | -13% | 0% |
| ampule, vial, syringe, 15 mg/1 mL Eptacog alfa (recombinant coagulation factor VIIa), Vial, 2 mg (100 KIU) | 1809.10 | 1700.00 | 1696.00 | 1700.00 | 6% | 0% | 0% |
| Eptacog alfa (recombinant coagulation factor VIIa), Vial, 5 mg (250 KIU) | 4522.74 | 4250.00 | 4240.00 | 4250.00 | 6% | 0% | 0% |
| Human blood coagulation factor IX (plasma), Vial, 500 IU and/or 600 IU | - | - | 127.20 | 79.50 | - | - | 38% |
| Human blood coagulation factor IX (recombinant), Vial, 500 IU | - | - | - | 143.10 | - | - | - |
| Human blood coagulation factor VIII (plasma), Vial, 1000 IU | 279.23 | 243.90 | 233.20 | 147.30 | 13% | 4% | 37% |
| Human blood coagulation factor VIII (plasma), Vial, 250 IU | 71.14 | 60.98 | 58.30 | 34.45 | 14% | 4% | 41% |
| Human blood coagulation factor VIII (plasma), Vial, 500 IU | 117.06 | 116.65 | 92.22 | 92.20 | 0% | 21% | 0% |
| Human coagulation factor IX, Vial, 500 and/or 600 IU | - | 0.20 | - | - | - | - | - |
| Human coagulation factor IX, Vial, 500 IU | 139.41 | - | - | - | - | - | - |
| Human coagulation factor IX (recombinant), Vial, 500 IU | - | - | 100.70 | - | - | - | - |
| Human coagulation factor VIII and human Willebrand factor, vial, 1000 IU | 332.46 | 306.01 | 285.79 | 272.30 | 8% | 7% | 5% |
| Human coagulation factor VIII and human Willebrand factor, vial, 500 IU | 164.45 | 141.92 | 148.82 | 143.15 | 14% | -5% | 4% |
| | TB n | nedicines | | | | | |
| Amoxicillin/Clavulanic acid, powder, 1000 mg/200 mg | - | - | 0.78 | 0.78 | - | - | 0% |
| Amoxicillin/Clavulanic acid, tablet, capsule, pill, 500 mg/125 mg | - | - | 0.11 | - | - | - | - |
| Capreomycin, ampule, vial, syringe, 1 000 mg | 2.48 | 2.26 | 1.94 | - | 9% | 14% | - |
| Clofazimine, tablet, capsule, pill, 100 mg | - | 0.58 | 0.63 | 0.53 | - | -9% | 15% |
| Cycloserine, tablet, capsule, pill, 125 mg | - | - | - | 1.06 | - | - | - |
| Cycloserine, tablet, capsule, pill, 250 mg | 0.27 | 0.24 | 0.21 | 0.21 | 10% | 12% | 0% |
| Delamanid, tablet, capsule, pill, 50 mg | - | - | - | 2.67 | - | - | - |
| Ethambutol, ampule, vial, syringe, 100 mg/mL | - | 2.64 | 2.69 | 2.69 | - | -2% | 0% |
| Ethambutol, ampule, vial, syringe, 2 000 mg | 2.62 | - | - | - | - | - | - |
| Ethambutol, tablet, capsule, pill, 100 mg | - | - | - | 0.23 | - | - | - |
| Ethambutol, tablet, capsule, pill, 400 mg | 0.03 | 0.02 | 0.03 | 0.03 | 21% | -30% | 2% |
| Ethionamide, tablet, capsule, pill, 125 mg | - | - | - | 0.22 | - | - | - |
| Imipenem/Cilastatin, powder, 500 mg/500 mg | - | - | 3.60 | - | - | - | - |
| Isoniazid, ampule, vial, syringe, 100 mg/mL | - | 0.08 | 0.08 | 0.08 | - | 4% | 0% |
| Isoniazid, ampule, vial, syringe, 500 mg | 0.09 | - | - | - | - | - | - |
| Isoniazid, bottles, vials, (syrup), 100 mg/5 mL | - | 3.26 | 3.48 | 3.48 | - | -7% | 0% |

| INN, pharmaceutical presentation, strength | 2015 price per UOM, USD | 2016 price, USD | 2017 price per UOM, USD | 2018 price per UOM, USD | 2016/ 2015 price change, % | 2017/ 2016 price change, % | 2018/ 2017 price change, % |
|--|-------------------------------------|-----------------------|-------------------------------------|-------------------------------------|--|--|--|
| Isoniazid, | 3.17 | - | - | - | - | - | - |
| bottles, vials, (syrup), 4 000 mg Isoniazid, | | | | | | | |
| tablet, capsule, pill, 100 mg | 0.01 | 0.01 | 0.01 | 0.02 | 9% | -17% | -55% |
| Isoniazid, tablet, capsule, pill, 300 mg | 0.02 | 0.01 | 0.01 | 0.02 | 11% | -1% | -8% |
| Kanamycin, | 0.39 | 0.35 | 0.31 | - | 11% | 12% | _ |
| ampule, vial, syringe, 1 000 mg Levofloxacin, | - | | | | | | 00/ |
| ampule, vial, syringe, 5 mg/mL Levofloxacin, | - | - | 0.37 | 0.37 | - | - | 0% |
| ampule, vial, syringe, 5 mg/mL (200 mL) | - | 1.27 | - | - | - | - | - |
| Levofloxacin, tablet, capsule, pill, 250 mg | 0.03 | 0.03 | 0.03 | 0.02 | 8% | 3% | 11% |
| Levofloxacin, | 0.05 | 0.05 | 0.05 | 0.04 | 2% | 3% | 22% |
| tablet, capsule, pill, 500 mg Linezolid, | _ | 4.77 | 4.13 | 4.13 | _ | 13% | 0% |
| ampule, vial, syringe, 2 mg/mL Linezolid, | 0.33 | 0.26 | 0.27 | 0.21 | 22% | -4% | 23% |
| tablet, capsule, pill, 600 mg Meropenem, | 0.33 | 0.26 | 0.27 | 0.21 | 22% | -4% | 23% |
| Vial, 1000 mg | - | - | 2.54 | - | - | - | - |
| Moxifloxacin, ampule, vial, syringe, 100 mg | - | - | - | 1.06 | - | - | - |
| Moxifloxacin, | - | 21.78 | 11.66 | 11.66 | - | 46% | 0% |
| ampule, vial, syringe, 400 mg Moxifloxacin, | 0.54 | 0.99 | 0.27 | 0.27 | -84% | 73% | 0% |
| tablet, capsule, pill, 400 mg Protionamid, | | | | | | | |
| tablet, capsule, pill, 250 mg Protionamide. | 0.08 | 0.07 | 0.07 | - | 14% | -2% | - |
| tablet, capsule, pill, 250 mg | - | - | - | 0.12 | - | - | - |
| Pyrazinamide, tablet, capsule, pill, 150 mg | - | - | - | 0.20 | - | - | - |
| Pyrazinamide, tablet, capsule, pill, 500 mg | 0.02 | 0.02 | 0.02 | 0.02 | 5% | 3% | 2% |
| Rifabutin, | 0.93 | 1.05 | 1.06 | 1.01 | -13% | -1% | 5% |
| tablet, capsule, pill, 150 mg Rifampicin, | - | | 11.54 | 9.54 | | - | 17% |
| ampule, vial, syringe, 600 mg Rifampicin, | | | 11.04 | 0.04 | | | |
| tablet, capsule, pill, 150 mg | 0.03 | 0.02 | 0.03 | 0.03 | 25% | -28% | -12% |
| Rifampicin/Isoniazid, tablet, capsule, pill, 150 mg/75 mg | - | 0.03 | 0.03 | 0.04 | - | -15% | -10% |
| Rifampicin/Isoniazid, tablet, capsule, pill, 75 mg/50 mg | - | 0.04 | 0.06 | 0.05 | - | -69% | 16% |
| Rifampicin/Isoniazid/Pyrazinamide, | _ | 0.04 | 0.07 | 0.06 | _ | -66% | 13% |
| tablet, capsule, pill, 75 mg/50 mg/150 mg Rifampicin/Isoniazid/Pyrazinamide/Ethambutol, | - | 0.06 | 0.07 | 0.09 | - | -9% | -33% |
| tablet, capsule, pill, 150 mg/75 mg/400 mg Sodium aminosalicylate, | | 4.77 | 4.85 | 4.85 | | -2% | 0% |
| ampule, vial, syringe, 30 mg/mL Sodium aminosalicylate, | | | | | - | | 0% |
| powder, 1 000 mg | 0.12 | 0.08 | 0.09 | - | 33% | -13% | - |
| Terizidon, tablet, capsule, pill, 250 mg | 1.11 | 0.95 | 0.85 | 0.85 | 14% | 11% | 0% |

Proposed set of indicators for a new wave of funding

| Indicator Type | Indicator description | Base | line ⁷⁴ | Target | | Explanations |
|----------------------|--|-------|--------------------|--------|--------|--|
| | | Value | Year | Year 1 | Year 2 | |
| participate in decis | 1: By 2022, women and men, girls and boys ion-making and enjoy human rights, gender ansparent and non-discriminatory public services | | | | | |
| | ed availability of medicines and effectiveness of nent products through a stronger national health stem | | | | | |
| | Share of agreed health products procured and delivered to MoH warehouse in the same year as budget year (in monetary value)⁷⁵ | 75% | 2018 | 80% | 90% | Target values should be subject to review depending on when CSA is signed, lists of health products to be procured are finalised and handed over to UNDP, and money is transferred. Suggested target values could be applied on the condition that the above prerequisites are fulfilled no later than Q1 of the relevant budget year. Given that the PSS Project is expected |
| | Share of agreed total number of health products delivered | 75% | 2018 | 80% | 90% | to gradually transform substantially, to focus largely on development activities, the evaluation team recommends tracking the delivery of medicines to end users/patients once this transformation takes effect, as an indicator of timely supplies. UNDP could be involved in developing effective mechanisms aimed at following up, both national and regional procurement of health products at different stages. |

⁷⁴ For indicators which were not tracked earlier, baselines are not available.

⁷⁵ 2018 budget year is suggested as a baseline year being the largest in terms of budget and number of health products procured, of the budget years assessed within this assignment. However, taking into account that the major part of health products procured in terms of the 2018 budget year were actually delivered in the 2019 calendar year, actual performance in terms of output indicators 1.1.1 and 1.1.2 in the 2019 calendar year is taken as baseline values.

| 3. Share of health products delivered within standard time guidelines, i.e. contracted lead times | 70% | 2018 | 95% | 95% | |
|---|-----|------|-----|------|---|
| Number of quality non-conformities, i.e. cases when delivered health products are not compliant with the Quality Assurance Policy | 0 | 2018 | 0 | 0 | |
| Share of health products delivered under long term agreements (in monetary value) | 40% | 2018 | 60% | 60% | |
| Share of health products procured from manufacturers (in monetary value) | 80% | 2018 | 80% | 80% | |
| v are recommended for implementation provided a sus of UNDP's role moves away from procuremen | | | | , | There are no proper mechanisms at the MoH to ensure involvement of health professionals (disease |
| Share of health products procured that meet the CPGs and recommendations of healthcare professionals (defined disease experts and/or professional medical associations) | n/a | 2020 | 80% | 95% | experts/professional medical associations) in decision-making. Involvement of healthcare professionals (disease experts) by the MoH in the public procurement process is currently based on regulations which are of consultative and non-binding nature. Regulations are to be developed to provide clear criteria for appointment of health professionals as disease experts and clear instructions on their role (rights and obligations) and the obligation of the MoH to meet their recommendations. This where developing agencies' involvement is seen of relevant value. |
| 8. Percentage of local CPGs available and updated for all disease programmes included in national procurement | n/a | 2020 | 80% | 100% | A regulatory procedure to ensure CPGs receive proper, systemic and speedy updates and to facilitate the process of approval of updated CPGs by the State Expert Centre is missing. |

| | Share of health products procured in consultation with CSOs/ patients' organisations | n/a | 2020 | 80% | 95% | A transparent process for the selection of the CSOs/patient organisations for the MoH's working groups is not in place. Developed and approved eligibility criteria for patient organisations engaging in the MoH's working groups are not available. Patients' rights and obligations in MoH working groups, as well as the scope of their voting right (currently defined as "a consultative voting right") are not clearly defined. |
|----------------------|--|-----|------|------|------|---|
| | 10.Level of satisfaction of patients with quality and timeliness of health products procured and delivered | n/a | 2020 | 70% | 90% | May be measured through surveys conducted by patients' organisations among those patients that receive treatment procured under centralised/regional procurement for the specific disease programmes. |
| | 11.Dashboard with full and up-to-date data on the progress on national and regional procurement of health products is available on the Ministry of Health website | n/a | 2020 | 100% | 100% | 100% implies all disease programmes and health products are included. Currently there is no single source to provide data on national and regional procurement, basic statistics on the number of patients, needs assessments and needs coverage at national and regional level. There is a lack of coordination and control by the MoH of regional/local treatment of patients. |
| through providing to | system of public procurement is strengthened echnical assistance and capacity development Anistry of Health of Ukraine and national | | | | | |
| | 1. Annual turnover rate of Ministry of Health of Ukraine's and/or SoE MPU employees and officials who have strengthened their skills and capacities to implement public procurement in a transparent, accountable and effective manner (m/f). (Not cumulative) | n/a | 2020 | <60% | <40% | Although this indicator is beyond the direct influence of UNDP annual turnover of MOH and SoE MPU employees will show the efficiency of TA and capacity building investments. In order to ensure proper sustainability, it is advisable to develop a staff retention policy and introduce among other things annual certification and motivation programmes for employees who benefit from TA and capacity development. |

| | 2. The extent to which the SoE MPU have the capacity to procure medicines and medical products in a transparent, accountable and effective manner (scale from 0 to 4) | 2 | 2020 | 3 | 4 | |
|----------------------|---|-----|------|-----|-----|--|
| | Percentage of MoH's and SoE MPU's employees surveyed that believe that TA/Capacity building assistance was relevant and useful for their job | n/a | 2020 | 80% | 90% | Regular (at least annual) monitoring of the feedback of recipients of the TA/capacity building assistance is necessary. |
| | The extent to which the policy, legal and regulatory framework is reformed to ensure participation of CSOs/ patients' organisations in the public procurement process at national and regional/local levels (1 – Low, 2 – Slightly, 3 – Partially, 4 - Fully) | n/a | 2020 | 1 | 2 | |
| knowledge and skills | al and local authorities have scaled-up to engage communities in planning, and monitoring of public services provision | | | | | |
| | Number of regional and local health managers and health professionals who have strengthened skills and capacities to implement public and regional procurement in a transparent, accountable and effective manner (m/f) (Not cumulative) | n/a | 2020 | 450 | 600 | |
| | Number of regional and local CSOs/ patient organisations' representatives involved in planning, coordination, delivery and monitoring of national and regional/local procurement (m/f) (Not cumulative) | n/a | 2020 | 450 | 600 | |
| | Number of regional and local CSOs/ patient organizations' representatives who have strengthened skills and capacities to engage in planning, coordination, delivery and monitoring of | n/a | 2020 | 250 | 450 | No regulations to ensure patient participation in decision making on regional/local level are in place. |

| | national and regional/local procurement (m/f) (Not cumulative) | | | | | |
|---|--|-----|------|-----|-----|--|
| 4 | Percentage of CSOs/ patients organisations' representatives surveyed that believe that the needs of patients are properly assessed and covered at national and regional/local level | n/a | 2020 | 70% | 90% | |
| 5 | The extent to which regional and local health authorities have established proper institutional mechanisms to ensure that patients' needs that are not met at a national level are met at a regional / local level (1 – Low, 2 – Slightly, 3 – Partially, 4 - Fully) | n/a | 2020 | 1 | 3 | Local decentralization led to lack of control and lack of responsibility at all levels (national/regional) for coverage of patients' needs. |

Sample scoring table of non-price criteria for bidders that have a proven record of deliveries to UNDP

| Criteria | Explanation | Scoring | | Bidder 1 | | Bidder 2 | |
|--------------------------|---|---------|-----|----------|-------------|----------|----------------|
| | | scale | | Score | Final score | Score | Final score |
| 1. On-time deliveries | Possible scoring rates could be as follows: 90-100% on-time deliveries – score 5 80-89% on-time deliveries – score 4 70-79% on-time deliveries – score 3 60-69% on-time deliveries – score 2 50-59% on-time deliveries – score 1 <50% on-time deliveries – score 0 | 0 – 5 | 50% | 4 | 2 | 3 | 1.5 |
| 2. Mitigating actions | This criterion considers mitigation actions taken by a supplier to decrease the length of a delay. Possible scoring rates could be as follows: actively seeking an alternative, e.g. sourcing from a different plant if the product from the alternative source is registered in Ukraine, reallocation of products booked for other customer(s) with a later delivery date, split of total delivery quantity into several smaller deliveries meeting the requirement for remaining shelf life etc. – score 3 product delivery with shorter shelf life – score 2 on-time delivery impossible due to global shortage of API or similar reason beyond supplier's control – score 1 no actions taken by the supplier – score 0 | 0 – 3 | 10% | 1 | 0.1 | 3 | 0.3 |

| TOTAL SCORE | | | 3.5 | | 2.7 | | |
|--|--|-------|-----|---|-----|---|-----|
| 4. Speed of reaction/ response time | This criterion implies response time to UNDP requests, for example on amending shipping documents, non-compliance with cold chain requirements, replacement of damaged/non-compliant goods, shelf life issues etc. Possible scoring rates could be as follows: 24h response time in urgent/high importance cases and 48h response time in other cases – score 3 48h response time in urgent/high importance cases and 48h+ response time in other cases – score 2 48h+ response time in urgent/high importance cases and 48h+ response time in other cases – score 2 | 1 – 3 | 10% | 2 | 0.2 | 3 | 0.3 |
| 3. Quality compliance | Delivered products meet quality requirements. Possible scoring rates could be as follows: 0 quality non-conformities, including on meeting remaining shelf life – score 4 ≥97% of delivered products are quality compliant & meet the remaining shelf life requirement – score 3 90-96% of delivered products are quality compliant and meet the remaining shelf life requirement – score 2 80-89% of delivered products are quality compliant and meet the remaining shelf life requirement – score 1 <80% of delivered products are quality compliant and meet the remaining shelf life requirement – score 1 | 0 – 4 | 30% | 4 | 1.2 | 2 | 0.6 |
