Access to Medicines and Health Products programme
Annual report 2022
Abstract:
Affordable access to quality-assured essential medicines, vaccines and health products at the national level requires that Member States have in place comprehensive pharmaceutical sector policies. These policies should cover medicines regulation, pharmacovigilance, procurement, supply, and distribution of medicines, selection and responsible use of medicines, as well as medicine pricing and reimbursement policies to address affordability for patients and health care systems. The 2022 annual report of the Access to Medicines and Health Products (AMP) programme in the WHO Regional Office for Europe describes the work undertaken in collaboration with agencies and partners to support pharmaceutical sector strengthening in the region.

Key words
ACCESS TO MEDICINES; PHARMACEUTICALS; HEALTH PRODUCTS; WHO EUROPEAN REGION

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# Contents

ACKNOWLEDGEMENTS .......................................................................................................................... iv

ABBREVIATIONS ................................................................................................................................... v

FOREWORD .............................................................................................................................................. vi

INTRODUCTION ...................................................................................................................................... 1

FROM THE OMI TO THE ACCESS TO NOVEL MEDICINES PLATFORM: BETTER ACCESS TO EFFECTIVE, NOVEL, HIGH-PRICED MEDICINES ................................................................................... 3
  Webinar series ........................................................................................................................................ 5
  Technical reports ................................................................................................................................. 5

POLICIES AND REGULATION TO ENSURE THE QUALITY, SAFETY AND EFFICACY OF HEALTH PRODUCTS ............................................................................................................................ 7
  RSS .......................................................................................................................................................... 8
  Coalition of Interested Parties ................................................................................................................ 8
  WHO Global Benchmarking Tool ......................................................................................................... 8
  Collaborative procedure for accelerated registration ......................................................................... 9
  Blood and other products of human origin .......................................................................................... 9
  Other regulatory activities conducted in the European Region in 2022 ............................................. 10

PSM .......................................................................................................................................................... 11
  Assessing PSM systems in the European Region .............................................................................. 12
  Improving access to anti-TB medicines in the WHO European Region ........................................... 14
  Ensuring the quality of health products procured locally ................................................................. 14

MEDICINES SELECTION, PRICING AND REIMBURSEMENT FOR EQUITABLE AND AFFORDABLE ACCESS .............................................................................................................................. 15
  Antibiotics on national essential medicines lists and medicine reimbursement lists .................... 16
  Financing and pricing policies ............................................................................................................ 17

DATA AND INFORMATION TO UNDERSTAND AND IMPROVE THE RESPONSIBLE USE OF MEDICINES AND HEALTH TECHNOLOGIES ............................................................................. 19
  AMC Network ...................................................................................................................................... 20

REFERENCES .......................................................................................................................................... 27
Acknowledgements

The WHO Access to Medicines and Health Products (AMP) thanks its network of collaborating centres, other nongovernmental organizations in official relations with WHO, and WHO headquarters, Geneva, for their collaboration, technical expertise and financial support in improving pharmaceutical policies and systems in the WHO European Region.

AMP acknowledges the contribution of national ministries of health, and national regulatory and public procurement agencies for their collaboration and willingness to share their experiences in the pharmaceutical sector.

The AMP programme collaborates with a wide range of partners at national and international level, including the following:

- Amgros, Denmark
- Department of Pharmacy, University of Copenhagen, Denmark
- European Centre for Disease Prevention and Control
- European Commission (including Medical Products: Quality, Safety, Innovation of DG SANTE and Health Emergency Preparedness and Response Authority)
- Gesundheit Österreich GmbH (Austrian Public Health Institute)
- Health Technology Assessment International
- International Network of Agencies for Health Technology Assessment
- International Pharmaceutical Federation
- LSE Health, London School of Economics and Political Science, United Kingdom
- Norwegian Institute of Public Health, Norway
- The Global Fund to Fight AIDS, Tuberculosis and Malaria
- Organisation for Economic Co-operation and Development
- United Nations Children's Fund
- United Nations Development Programme
- Uppsala Monitoring Centre, Sweden
- Utrecht Institute for Pharmaceutical Sciences, the Kingdom of the Netherlands

AMP would like to express its great appreciation for the generous financial assistance provided by the Ministry of Health, Welfare and Sport of the Kingdom of the Netherlands, the German Collaboration Programme and the Ministry of Health and Care Services of Norway.
## Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>AEFI</td>
<td>adverse events following immunization</td>
</tr>
<tr>
<td>AMC</td>
<td>Antimicrobial Medicines Consumption [Network]</td>
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<tr>
<td>AMP</td>
<td>Access to Medicines and Health Products [programme]</td>
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<tr>
<td>AMR</td>
<td>antimicrobial resistance</td>
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<tr>
<td>AWaRe</td>
<td>Access, Watch and Reserve [classification]</td>
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<td>CCPH</td>
<td>Center for Centralized Procurement of Health Products</td>
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<td>CRP</td>
<td>collaborative procedure for accelerated registration</td>
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<td>EML</td>
<td>WHO Model List of Essential Medicines</td>
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<td>EPW</td>
<td>the European Programme of Work</td>
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<td>EU</td>
<td>European Union</td>
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<td>GBT</td>
<td>Global Benchmarking Tool</td>
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<td>GLASS</td>
<td>Global Antimicrobial Resistance and Use Surveillance System</td>
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<td>HTA</td>
<td>health technology assessment</td>
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<td>NEML</td>
<td>national essential medicines list</td>
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<td>NRA</td>
<td>national regulatory authority</td>
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<td>OMI</td>
<td>Oslo Medicines Initiative</td>
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<td>PPRI</td>
<td>Pharmaceutical Pricing and Reimbursement Information [Network]</td>
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<tr>
<td>PPRI EECA</td>
<td>Pharmaceutical Pricing and Reimbursement Information network for eastern Europe and central Asia</td>
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<tr>
<td>PSM</td>
<td>procurement and supply chain management</td>
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<tr>
<td>QMS</td>
<td>quality management system</td>
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<td>RSS</td>
<td>regulatory system strengthening</td>
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<td>SCMM</td>
<td>Supply Chain Maturity Model (Maturity Scorecard)</td>
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<td>SDG</td>
<td>Sustainable Development Goal</td>
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<tr>
<td>TB</td>
<td>tuberculosis</td>
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<tr>
<td>UHC</td>
<td>universal health coverage</td>
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<td>UNICEF</td>
<td>United Nations Children's Fund</td>
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Foreword

The COVID-19 pandemic remained a major influence on the work of the WHO Regional Office for Europe in 2022. The Regional Office continues to support Member States in key actions to prevent and respond to the public health challenges of the pandemic, while at the same time implementing the European Programme of Work (EPW) 2020–2025: “United actions for better health” (1). Effective collaboration between the Regional Office and Member States will increase the impact of the EPW, utilizing WHO's high-quality technical advice and involving the expertise of collaborating centres to develop sustainable and affordable models of service delivery at the country level.

The EPW focuses on three core priorities – moving towards universal health coverage (UHC), protecting against health emergencies, and promoting health and well-being. Strengthening health systems is central to the achieving these priorities. System weaknesses that have been exposed in the pandemic must be tackled. Well-functioning and resilient pharmaceutical systems are needed to ensure a reliable supply of affordable and accessible health-care commodities and pharmaceuticals to the citizens of Member States.

Within the broad scope WHO’s work on access to essential medicines and medical products, the Access to Medicines and Health Products (AMP) team supported Member States in the Region to strengthen their pharmaceutical systems to deal with shortages and stock-outs of critical products and address the challenges of substandard and falsified medicines that are in circulation in some settings. The AMP team works with Member States in applying tools to assess the strengths and weaknesses of regulatory processes, procurement and supply chains, and assists in the development of implementation plans to address problems identified. Effective pricing and reimbursement systems are integral to achieving UHC so that citizens can have universal access to quality care without financial hardship. The AMP team continues to promote the collection and analysis of data to encourage the responsible use of antibiotics and other medicines.

Specific attention was given to Ukraine, where the population has greatly suffered from the war, and the supply of medicines has been severely affected. Along with WHO headquarters and the WHO Country Office in Ukraine, the AMP team has supported the supply of emergency health kits to Ukraine. A preliminary assessment was made of the damage inflicted on the medicines manufacturing and distribution systems, which can help serve as a basis for reconstruction programmes.

A major stream of work for the AMP team in 2022 was the Oslo Medicines Initiative (now Novel Medicines Platform) promoting access to novel, high-cost medicines in the Region (2). The core principles of the initiative are solidarity between stakeholders, transparency to build trust between partners, sustainability of the pharmaceutical industry and affordable health-care systems. Along with technical briefings and webinars, the Regional Office released a series of eight technical reports offering evidence and policy considerations for governments and private industry to improve access to effective and expensive treatments.

I welcome this report on the work of the AMP team in 2022. The availability, accessibility, acceptability and affordability of health products of assured quality are key issues to be addressed to achieve the objectives of the EPW and the health related Sustainable Development Goals in the Region.

Dr Natasha Azzopardi-Muscat
Director of the Division of Country Health Policies and Systems
WHO Regional Office for Europe
Introduction
The activities of the Access to Medicines and Health Products programme (AMP) are underpinned by several global and regional initiatives – the Sustainable Development Goals (SDGs), in particular, target 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” (3); the core priorities of the European Programme of Work (EPW), 2020–2025: “United actions for better health” (1); and the WHO Essential Medicines and Health Products Strategic Framework 2016–2030 (4).

The essential medicines strategic framework (4) identifies three core areas of work relevant to promoting access to medicines and health products:

- policies and regulation to ensure the quality, safety and efficacy of health products;
- medicines and health products selection that will improve equitable and affordable access;
- data and information to promote understanding and improve the responsible use of medicines and health technologies.

These core areas of work can be mapped across the product life cycle – pre-launch, peri-launch and post-launch.

Pre-launch activities focus on the regulation of medicines and medical devices through registration of products, their manufacture in accordance with good manufacturing practices (5), quality assurance through inspection of facilities and testing of products, and safety through pharmacovigilance activities both pre- and post-marketing authorization.

Regulation of access and price depends on efficient procurement through judicious purchasing of products at cost-effective prices – supported by effective supply chain management using the principles of good storage and distribution practices (6). Medicine prices are managed through legislated wholesale and retail margins and effective pricing and reimbursement programmes that meet the needs of all citizens, address affordability and minimize high out-of-pocket costs for patients.

Monitoring and evaluation are essential tools to promote the appropriate use of medicines. Routine and ad-hoc data collection are useful for monitoring expenditures on medicines, assessing prescribing and dispensing choices against treatment preferences recommended in national standard treatment guidelines, and for informing the development of interventions to improve prescribing and dispensing practices. Regulation of access and prices and the monitoring and evaluation of medicines consumption are peri- and post-launch activities.

The high costs of novel medicines are an issue of concern in the WHO European Region and globally. AMP actively contributed to the Oslo Medicines Initiative (OMI), a collaboration established by the WHO Regional Office for Europe with the Norwegian Ministry of Health and Care Services and the Norwegian Medicines Agency (2). The collaboration provided a platform for the public and private sectors to jointly outline a vision for equitable and sustainable access to effective, innovative and affordable medicines.

This report provides an overview of the work undertaken by AMP in 2022 in support of the three core areas of work relevant to promoting access to medicines and health products. Work is conducted in collaboration with international partners across the European Region, using a mix of country-specific technical assistance, and subregional and regional initiatives. The focus is on supporting countries to improve access to quality, affordable essential medicines and health products and their responsible use.
From the OMI to the Access to Novel Medicines Platform: better access to effective, novel, high-priced medicines
Novel types of medicines that are used for rare and complex clinical conditions come at high prices, making patient access difficult. Governments worldwide are concerned about the affordability and availability of such products, while the private sector has highlighted the costs of innovation and clinical research, coupled with the small number of eligible patients as factors driving these high costs. Actions have been undertaken by the European Commission, the Organisation for Economic Co-operation and Development (OECD) and individual governments, pharmaceutical companies and other partners to try to address these access issues.

The OMI was designed to offer a complementary approach, providing a forum where the public and private sectors can discuss the issues and collaborate to identify solutions to improve the affordability of novel high-cost medicines. The OMI supports the implementation of World Health Assembly resolutions, in particular, WHA72.8 on improving the transparency of markets for medicines, vaccines and other health products (7).

Supported by funding from the Norwegian Ministry of Health and Care Services, the OMI is underpinned by the principles of solidarity between stakeholders, transparency to build trust between partners, and ensuring a sustainable industry and affordable health-care systems.

Key outputs of the OMI in 2022 were a series of five public-facing webinars held in January and February 2022 (8), eight technical reports commissioned to summarize relevant evidence and provide policy considerations to inform discussions of OMI stakeholders (9–16), and ongoing consultations with key stakeholder groups. In addition, the work of the OMI is described in a peer-reviewed publication (17), a policy brief (18) and a final report (19).

An overview of the OMI process is shown in Fig. 1.

**Fig. 1. Overview of the OMI process**

Following presentation and discussion of the issues around access to novel high-priced medicines at the 72nd session of the WHO Regional Committee for Europe, in September 2022, Member States provided a mandate to continue the OMI agenda, identifying six technical areas for potential further collaboration. These are:

- continuing the implementation of WHA 72.8 (Improving the transparency of markets for medicines, vaccines, and other health products) (7);
- horizon-scanning and early sharing of information on new products;
- generating reliable evidence on safety and clinical effectiveness across the product life cycle;
- exploring affordable pricing, reimbursement, and funding approaches;
- voluntary and collaborative cross-country mechanisms including pooled procurement;
- governance issues that may affect access for patients, sustainability of health systems and the private sector.

The ongoing work will move to a joint, neutral stakeholder platform (Access to Novel Medicines
Platform) managed by the WHO Regional Office for Europe, allowing Member States and non-state actors, including representatives of private sector companies, to consider joint solutions to the challenges of access to these novel medicines. The platform will allow the work undertaken through the OMI to continue and will move towards implementation through identifying concrete actions, including pilot proposals, to improve affordable and equitable patient access to effective, novel, high-cost medicines in the Region.

Webinar series

Webinars were conducted to create debate and raise awareness around improving people’s access to effective, novel medicines. Globally, 1373 experts and interested parties from the public and private sector participated, with session summaries posted on the WHO Regional Office for Europe website (8). The topics of the webinars are:

- current markets for innovative medicines in the WHO European Region;
- models for financing novel medicines to support innovation as a global public good;
- pricing, reimbursement and coverage policies for sustainable access to affordable innovative medicines;
- non-financial incentives for stimulating affordable innovation;
- the role of corporate social responsibility in the context of the United Nations SDGs.

Technical reports

Technical reports were commissioned, authored by independent experts and externally peer-reviewed, analysing the relevant evidence and offering policy considerations for both governments and private industry to address the challenges of affordable access to novel medicines. The focus of the reports is as follows:

- access to high-priced medicines in lower-income countries (9);
- new business models for pharmaceutical research and development as a global public good (10);
- policy approaches building on the principles of solidarity, transparency and sustainability (11);
- overview of the market for novel medicines in the WHO European Region (12);
- payer policies to support innovation and access to medicines (13);
- the social contract and human rights bases for promoting access to effective, novel, high-priced medicines (14);
- access to information in markets for medicines (15);
- policies for medical innovation (16).
Box 1. Access to high-priced medicines in lower-income countries in the WHO European Region

Health systems need sufficient budgets to pay for necessary products and services. Lower-income countries in the WHO European Region generally have poorer health status and more limited resources for health care than higher-income countries. LICs tend to control pharmaceutical expenditure on high-priced medicines by limiting the number of patients who can access the products. However, Németh et al. (9) suggest there are several policy tools available that might be used to improve patient access to single-source, on-patent medicines by moving towards a higher-volume, lower-price model. These policy tools include price-control mechanisms; increasing the negotiation power of health-care payers; and facilitating appropriate prescribing. The aim is to contain pharmaceutical spending to allow continuous purchasing of medicines and to maximize public health within budget constraints by making informed choices.

Price-control mechanisms

There are several regulatory components through which individual LICs might control prices of high-cost reimbursed medicines: price setting and negotiations; conditions for pricing and reimbursement; and negotiation of delayed-payment mechanisms for technologies with high upfront costs. Price setting needs to be reviewed throughout the different phases of the product life cycle, and transparent rules established for the regulation of wholesale and retail mark-ups. It is recommended that medicines are exempt from indirect taxes such as value-added taxes.

Increasing the negotiation power of health-care payers

Smaller market size and lower public resources mean that LICs generally have less negotiation power in procuring high-cost medicines. Options to improve access through enhanced negotiation power include pooled procurement efforts at a regional level and strengthening national health technology assessment (HTA) procedures, including sharing of relevant information from HTAs conducted by other agencies. Investment in data platforms will improve the validity of local cost, epidemiological and outcomes data to strengthen negotiation power.

Facilitating appropriate prescribing

Treatment guidelines should be based on the best available evidence, considering local health-care priorities and economic constraints. These guidelines should be adopted into clinical practice and their use monitored. High-quality and affordable generics and biosimilars should be the preferred first-line treatment options. Ethical codes should be developed for sales and marketing activities of pharmaceutical manufacturers.
Policies and regulation to ensure the quality, safety and efficacy of health products
Regulatory system strengthening (RSS) and procurement and supply chain management (PSM) are focal activities for AMP in supporting this strategic area. A strong regulatory system for medicines and health products supports the quality of products in circulation and reduces risks associated with substandard and falsified products. Efficient PSM facilitates the purchase of quality products at best prices, ensures adequate and timely supply, and minimizes stock-outs and shortages of medicines.

RSS

National regulatory authorities (NRAs) protect the public’s health by ensuring the quality, safety and efficacy of medicines available, controlling how medicines are manufactured, stored and distributed, reducing the risks of exposure to substandard and falsified products, and approving the information provided to health professionals and patients for the most appropriate uses of the medicines. A robust and well-functioning quality management system (QMS) is a key enabler of good regulatory practices.

WHO has published guidelines on the implementation of QMSs for national regulatory authorities (20). In 2022, AMP conducted a workshop in Istanbul, Türkiye to increase awareness and promote uptake of the QMS guidance. Participants were drawn from regulatory authorities in Albania, Armenia, Azerbaijan Georgia, Kazakhstan, Kyrgyzstan, Moldova, Montenegro, North Macedonia, Serbia, Tajikistan, Türkiye and Uzbekistan. Country needs for support in implementing QMSs were discussed.

WHO Global Benchmarking Tool

The Global Benchmarking Tool (GBT) facilitates objective evaluation of NRAs, identifying system strengths and areas for improvement, leading to the formulation of an institutional development plan to address identified gaps (22). In 2022, AMP provided enhanced support to countries using the GBT. In Kazakhstan, there was an NRA follow-up mission (to the 2021 in-country visit) with expansion of the benchmarking work to include oversight of domestic manufacture of vaccines. Self-benchmarking workshops were conducted in the Republic of Moldova and Ukraine. An NRA follow-up mission was also conducted in Kyrgyzstan. AMP provided technical support to the NRA in Türkiye for strengthening its quality control laboratory capacity. In addition, formal benchmarking of the NRA in Türkiye was conducted in September 2022.

Coalition of Interested Parties

In conjunction with WHO headquarters, the WHO Regional Office for Europe has established a new voluntary collaborative network called the Coalition of Interested Parties (CIP) (21). Its purpose is to promote a unified, strategic and coordinated approach to national and regional RSS efforts and thereby to enhance access to safe, effective and quality medical products.¹ CIP activities span the range of RSS efforts, including benchmarking of regulatory systems; assisting in the formulation and implementation of strategic plans and regional and institutional development plans; providing technical support; and monitoring the progress of system strengthening. Entities apply to join the CIP network. Eligible entities include intergovernmental organizations, including the United Nations and its specialized agencies; government bodies such as ministries of health and NRAs; nongovernmental organizations; academic institutions; and philanthropic foundations. Kazakhstan has already enrolled in the CIP and work has commenced supporting RSS efforts in that country.

¹ Medical products refers to medicines, vaccines, blood and blood products, and medical devices, including diagnostics.
Collaborative procedure for accelerated registration

The collaborative procedure for accelerated registration (CRP) facilitates assessment and national registration of health-care products that have already received regulatory approval from a stringent regulatory authority (23). Countries participating in the CRP receive the same product dossier that was submitted to the stringent regulatory authority along with the full assessment and inspection reports for the product. The CRP approach reduces the regulatory burden on NRAs and aims to reduce the time and costs of registration and help improve patient access to important medicines.

AMP conducted a virtual information session on the CRP in April 2022 and an advocacy and sensitization workshop in June 2022. The sessions aimed to raise awareness and increase knowledge of regulatory authorities on the CRP mechanisms, processes, requirements and available tools. Regulators and WHO prequalification experts shared experiences on the use and benefits of the procedure.

The 10th annual meeting on the CRP was held in December 2022. The meeting aimed to promote facilitated regulatory pathways such as the CRP, and to encourage the exchange of experiences among designated CRP focal points. Best practices for regulators in implementing the CRP were discussed.

Blood and other products of human origin

Member States in the European Region have recognized the need to improve blood donation services and strengthen blood product regulation. AMP has continued to support activities for the implementation of WHA Resolution 63.12 on the availability, safety and quality of blood products (24), and WHA Resolution 63.22 on human organ and tissue transplantation (25), and to promote uptake of the action framework for blood products 2020–2023 (26). Strategic objectives of the action framework include: well-coordinated and sustainably resourced national blood systems; ensuring the quality and safety of blood; well-functioning blood services; optimizing transfusion practices; and effective surveillance supported by comprehensive and accurate data collection systems. The WHO working group on implementing the action framework conducted monthly meetings during 2022 with countries that are working to improve their blood supply framework and systems. A virtual meeting was held with the WHO Collaborating Centre for Quality Assurance of Blood Products and in vitro Diagnostic Devices and a webinar was conducted on World Blood Donor Day (14 June 2022).
Other regulatory activities conducted in the European Region in 2022

In March 2022, the WHO Regional Office for Europe held a virtual meeting to brief countries in the Region on outcomes of the 4th general meeting of the WHO-National Control Laboratory Network for Biologicals that was held in 2021. A virtual consultative meeting on the WHO Global Model Regulatory Framework for Medical Devices (including in-vitro diagnostic medical devices) was held in June 2022, and an introductory WHO–Medical Dictionary for Regulatory Activities (MedDRA)–Uppsala Monitoring Centre (UMC) workshop on safety monitoring of medicines and vaccines was held in September.

Four countries from the WHO European Region – Armenia, Hungary, Poland and Türkiye – participated in the November 2022 virtual meeting of the WHO–International Regulatory Cooperation for Herbal Medicines network. Poland and Türkiye also participated in the second WHO interregional training workshop on ensuring the quality of traditional, complementary and integrative medicine products held in November 2022.

WHO established the mRNA vaccine technology transfer hub in 2021 with the objective of building capacity in low- and middle-income countries to produce mRNA vaccines (27). This centre of excellence and training is located at Afrigen Biologics and Vaccines, Cape Town, South Africa. Two Member States from the European Region – Serbia and Ukraine – are technology recipients (spokes). Practical training is provided by the biomanufacturing hub in Seoul, South Korea.
Annual report 2022

PSM
Public procurement of medicines is a strategic policy option to foster competition and improve access to medicines, ensure security of supply of essential products and improve crisis preparedness. In addition, through judicious procurement of products such as antimicrobials and hormones, it can help to protect the environment.

Ukraine

The war in Ukraine has severely affected the supply of medicines in Ukraine, and people are suffering from the lack of access. AMP supported the medicines donation programme coordinated by WHO headquarters and the WHO Country Office in Ukraine, using the Emergency health kits.

The Regional Office also supported the preparation of a report on the damage suffered by the health system and related infrastructure, including pharmaceutical manufacturing, and wholesale and distribution capacity; this will form the basis for funding and initiating the reconstruction programme.

Assessing PSM systems in the European Region

Since 2020, AMP has worked with the United Nations Children’s Fund (UNICEF) to assess PSM systems in nine Member States – Albania, Armenia, Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Republic of Moldova, Tajikistan and Uzbekistan – using the UNICEF Supply Chain Maturity Model (SCMM) Maturity Scorecard (28). Follow-up activities were undertaken in four of these countries in 2022 – Azerbaijan, Republic of Moldova, Tajikistan and Uzbekistan.

Azerbaijan

PSM assessment using the SCMM was undertaken in 2020. In 2022, at the request of the Ministry of Health, WHO conducted a review of the supply chain system for essential medicines to help understand the current landscape and roles of the various actors, to review warehouse requirements and provide recommendations to improve overall supply chain performance. The review noted the strengths and challenges associated with using a centralized pharmaceutical storage and distribution model, as opposed to a decentralized, outsourced contractor operation used in other countries in the Region.

The review recommended management of the supply chain by generic names rather than brand names, in line with the WHO Model List of Essential Medicines (EML) (29). Currently, most procurement occurs by brand name. Product master data should link brands by generic name to assist in forecasting demand, procurement planning and substitution of products. Hospital product procurement should focus on priority products. The “must have” list should be under constant review and should not be performed at branded goods level. The review noted the importance of regular, systematic collection and analysis of consumption (demand) data to assist in quantification and supply planning at all levels of the health system.

Republic of Moldova

The Center for Centralized Procurement of Health Products (CCPH) in the Republic of Moldova does not procure medicines directly, but instead negotiates the prices at which health facilities can buy these products from nominated suppliers. This generates three-party agreements between the CCPH, suppliers and health facilities for individual pharmaceutical products. The large number of these contracts annually and complex payment systems in place create a large administrative burden for all parties. This model of operation means that the Republic of Moldova does not have a public central medical store or similar central storage point, instead relying on a private model of distribution managed by the contracted suppliers, with the costs of storage and distribution embedded in the negotiated prices for medicines.

The review conducted by WHO in 2022 concluded that, in general, the current operational processes would be more efficient than considering a centralized warehouse and distribution company owned or managed by the government. Currently,
quantification of medicine needs is predominantly clinician-led and based upon treatment profiles rather than historical consumption of commodities. The review suggested that there were opportunities for improved quantification and forecasting by applying consumption-based forecasting tools. Better use of timely information on consumption and enhanced expiry date controls would reduce the risks of wastage of health products.

**Tajikistan**

The 2021 assessment using the SCMM identified challenges to the PSM system in Tajikistan in the areas of forecasting and quantification of need, warehousing and staffing. In addition, there were issues identified with the procurement legislation governing purchase of medicines and health products. In 2022, WHO conducted a follow-up country visit to identify priority activities for strengthening the national PSM system for essential medicines.

The available budget for health programmes is not sufficient to meet all of the medicine needs for the country; therefore, a transparent mechanism for prioritizing medicines for procurement is needed. Only quality-assured medicines should be procured. The review recognized the importance of strengthening central warehousing and distribution capacity in Tajikistan with adequate storage facilities and effective distribution networks. Systems should be managed using a comprehensive set of standard operating procedures supported by inventory control software.

**Uzbekistan**

The 2020 rapid assessment of the PSM system in Uzbekistan identified challenges in several areas including finance and domestic resource mobilization, storage and distribution of products, and the need for better use of data for system management, monitoring and evaluation of the PSM system. In addition, the assessment highlighted the need for a new legislative framework to expand options for medicines procurement.

The 2022 WHO review noted several improvements to the PSM system with increased national funding for medicines, modifications to legislation to address PSM challenges and a well-resourced and functioning regulatory authority. There was increased collaboration with United Nations agencies for procurement of some essential medicines and vaccines. Improvements in managing medicines at the health facility level were also noted, with good availability of medicines at the facilities visited. However, weaknesses remain in the management of medicines for the special disease programmes and for primary health care, where better quantification and forecasting of needs is required. Improvements in warehousing, storage and distribution practices are also necessary to align with good distribution practice guidelines (6).
Improving access to anti-TB medicines in the WHO European Region

Access to tuberculosis (TB) medicines varies considerably across the WHO European Region. Substantial donor support provides access to the latest generation treatments in low- and middle-income countries that have a high burden of TB disease. Many of these medicines are WHO prequalified products. Conversely, these newer treatments may not be registered in high-income, low TB burden countries. This results in a complex mix of markets for older generation products and newer patent-protected products. A fragmented, low-volume, low-price market is not attractive for manufacturers, threatening long-term supply of these medicines. Supply and access issues will become even more acute as countries with high disease burden transition from donor support to national responsibility for procurement and distribution of TB medicines. Without intervention, poor medicines supply will compromise treatment programmes and treatment successes across the Region.

In response to these concerns, WHO initiated a project to explore options to improve access and ensure ongoing supply of anti-TB medicines in the Region. A workshop convened by WHO in June 2022 concluded that political commitment and support was critical and that coordinated multistakeholder, multidisciplinary responses were needed.

Aggregation of demand through joint or coordinated contracting and procurement was proposed to address the problems of small demand volumes and to encourage manufacturer participation in the market. Knowing the likely size of the demand, manufacturers would be better placed to assess the financial viability of participating in the market. In addition, removing legislative barriers that limit access by some countries to the Global Drug Facility may improve access to newer treatments. Also, recognizing WHO prequalification may remove barriers and costs associated with registering newer anti-TB medicines in high-income countries.

It is unlikely that commercial entities will invest in research and development of newer anti-TB medicines, therefore public subsidy is likely to be needed for new product development and market entry for products that fill existing treatment gaps.

Ensuring the quality of health products procured locally

The COVID-19 pandemic and the war in Ukraine have disrupted regular supply chains for essential medicines and health products. To support Member States, the WHO Health Emergencies Programme developed an emergency global supplies catalogue and portal to facilitate purchase of critical health products (30). However, lead times are increasing for global procurement.

Many countries in the WHO European Region have received additional funding to conduct procurement of health products, however some lack the capacity to conduct local procurement. Countries have requested assistance in developing technical specifications for specific medical products, reviewing the certificates received during the tender process, and WHO participation in the assessment of technical offers. To support local procurement of good quality health products AMP worked jointly with WHO procurement teams and WHO headquarters to ensure that country colleagues have a good understanding of the procurement processes in place and are aware of the practical guidance and instructions that have been developed to support procurement during COVID-19 and other health emergencies. Several webinars were conducted, jointly by AMP and the Regional Office procurement team, on the topic of health procurement during an emergency, with participants from Ukraine and five neighbouring countries, to ensure correct planning for local procurement. AMP has taken on a coordination role to ensure good communication among all the technical teams involved in procurement.
Medicines selection, pricing and reimbursement for equitable and affordable access
Careful selection and efficient introduction of medical products into country health-care systems are key for controlling public pharmaceutical expenditure. Fair pricing and effective financing schemes are needed if there is to be access to quality-assured and affordable essential medicines for all citizens. Despite significant efforts to progressively include more medicines in insurance schemes, pharmaceuticals are still the most important component of out-of-pocket payments for health in several countries in the WHO European Region (31). The combination of a limited number of medicines that are reimbursed, the low percentage of the price reimbursed for those that are, and unregulated medicine prices can result in catastrophic health expenditures for patients.

**Antibiotics on national essential medicines lists and medicine reimbursement lists**

WHO suggests that there should be alignment between the WHO model lists, national essential medicines lists (NEMLs) and clinical guidelines that are used at the country level. In 2017, WHO proposed a new classification of antibiotics, the AWaRe (Access, Watch, Reserve) classification to assist in monitoring antibiotic consumption, to optimize antibiotic use and provide an additional tool to support antibiotic stewardship (32,33). The AWaRe classification was further updated in 2019 and 2021.

“Access” antibiotics have a narrow spectrum of activity, lower cost, a good safety profile and generally low resistance potential, and are recommended as empiric first- or second-choice treatment options for common infections. “Watch” antibiotics are broader-spectrum antibiotics, generally with higher costs. These are only first-choice options for patients with more severe clinical presentations or for infections where the causative pathogens are more likely to be resistant to “Access” antibiotics. “Reserve” antibiotics are last-choice antibiotics used to treat multidrug-resistant infections. To promote responsible use of antibiotics and slow the spread of antibiotic resistance, WHO has proposed a monitoring indicator with the target that at least “60% of total antibiotic consumption at the country level should be Access antibiotics by 2023” (34).

AMP undertook a review comparing the latest NEMLs or reimbursement lists of 17 countries in central Asia and eastern Europe with antibiotics on the EML (35). The proportion of the EML-recommended antibiotics included in the national lists ranged between 26% and 85%, with most over 50%. The Access agents, amoxicillin and amoxicillin with clavulanic acid, and the Watch agent ciprofloxacin were included in all 17 national lists. Less often included were Access agents cloxacillin (alternatives dicloxacillin and flucloxacillin), procaine benzylpenicillin and spectinomycin, and Watch group agent oral vancomycin. Except for the Ukraine list, none of the remaining 16 applied the AWaRe classification in listing antibiotics. In some cases, partial concordance with the EML might be explained by the fact the NEMLs and reimbursement
lists had been published before 2020 and therefore did not reflect more recent additions and deletions from the EML. The review recommended that countries regularly review national lists to ensure they align with approved clinical guidelines. Adopting the AWaRe classification of antibiotics can help to guide national stewardship and address antimicrobial resistance (AMR).

Financing and pricing policies

Equitable access to quality-assured and affordable essential medicines and other medical technologies depends on affordable and fair pricing and effective financing schemes. AMP continues to support medicines financing work in the European Region through the WHO Pharmaceutical Pricing and Reimbursement Information network (PPRI) and the PPRI network for eastern Europe and central Asia (PPRI EECA) as forums for sharing information on medicines prices and experiences in negotiation of prices.

Four country study visit to Türkiye

Delegations from Azerbaijan, Kyrgyzstan, Tajikistan and Uzbekistan took part in a visit to the Turkish Medicines and Medical Devices Agency and the Social Security Institution of Türkiye. Through a mix of formal and informal discussions, participants gained in-depth knowledge and understanding of the Turkish regulatory and pharmaceutical pricing and reimbursement systems. Topics included the structure of the pharmaceutical sector in Türkiye and the role of HTA and pricing in managing the costs of medicines and medical devices. Experts described the reference pricing system and the role of technology in managing the health-care system. Experiences in procurement of medicines and medical devices were shared with the delegations.

PPRI EECA network

In January 2022, members of the PPRI EECA network participated in a technical training session on raising queries within the PPRI pricing database. A PPRI EECA network meeting was held online on 23 February 2022 with representatives from six Member States. In addition to updates from the WHO Regional Office for Europe and the network secretariat, there were capacity-building and training sessions on the latest developments in medicines pricing policies, with a special focus on external reference pricing. External reference pricing is the practice of comparing the price of pharmaceutical products in different countries to set a local benchmark price. Effective use of the approach requires careful selection of reference countries, verifiable sources of reference prices that take account of all forms of discounts, rebates and taxes, and established procedures for regular review of the reference price. The training session addressed best practice implementation of external reference pricing and considered the benefits and limitations of the procedure.
The secretariat introduced a video-based training module for public authorities on medicines pricing work: *What you need to know about pharmaceutical pricing and reimbursement policies.*

A PPRI EECA network meeting was held online on 31 May 2022 with representatives from Azerbaijan, Georgia, Kyrgyzstan, the Republic of Moldova and Ukraine, along with representatives of the secretariat (Gesundheit Österreich GmbH), the Kingdom of the Netherlands Ministry of Health, Welfare and Sport; the WHO Barcelona Office for Health Systems Financing; and the WHO Regional Office for Europe. Participants were updated on activities within the PPRI EECA network and work undertaken by the Regional Office. The impact of the geopolitical situation in Ukraine and the Russian Federation on the production, import and export of medicines, and access to them, in PPRI EECA countries was discussed. Other topics discussed in the meeting included procedures and methods for negotiating medicine prices and prioritizing medicines for public funding and subsidy. As well as considering theoretical approaches, participants shared practical experiences in pricing and reimbursement of medicines.

The fifth anniversary meeting of the PPRI EEAC network was held in Istanbul, Türkiye, on 14–15 December 2022. Azerbaijan, Georgia, Kazakhstan, Kyrgyzstan, Republic of Moldova, Tajikistan, Türkiye, Turkmenistan, Ukraine and Uzbekistan were represented at the meeting along with colleagues from Gesundheit Österreich GmbH and the WHO Regional Office for Europe. Participants were drawn from ministries of health, procurement agencies, state insurance funds and pricing authorities. Country profiles on pricing and reimbursement policies were updated, achievements over the past five years were reviewed and priority future directions for the network were established.

**Pricing and Reimbursement Assessment Tool**

In 2021 and 2022 the Regional Office developed a set of indicators to be used in assessing country pricing and reimbursement systems; further consultation will be needed also considering the PPRI indicators, plus possibly field testing. The aim is to support the assessment of national pricing and reimbursement frameworks that would contribute to systems strengthening and to gaining efficiencies in the public pharmaceutical sector.

**Generating evidence on medicines prices and consumption**

Price dynamics and consumption patterns were analysed in Azerbaijan, Georgia and Uzbekistan to inform policy options for improved access to medicines. Uzbekistan used their analysis to improve the price regulation framework and rationalize the basket of reference countries used in external reference pricing. This analysis also provided additional data for reimbursement strengthening ongoing in Georgia since 2021.

**HTA in western Balkan countries**

The subregional plan for countries in the western Balkan region, Roadmap for health and well-being in the western Balkans (2021–2025), published in 2021 (36) identified ongoing weaknesses in health financing that have hindered progress towards UHC. HTA has been identified as a useful tool to support UHC and to thereby improve access to and affordability of medicines and other health technologies. AMP has continued to support efforts to introduce HTA in the western Balkan region. An HTA learning network has been established and HTA champions identified to help promote and develop HTA systems.

An online meeting of the western Balkans HTA champions was held in February 2022. The purpose of the meeting was to promote alignment with the western Balkans roadmap and to discuss mechanisms for HTA strengthening in the region. A special session was organized at the Health Technology Assessment International meeting on 27 June to present the key developments in HTA strengthening in western Balkan countries.
Data and information to understand and improve the responsible use of medicines and health technologies
AMP supports the use of data and information to inform pharmaceutical policy and to understand and improve the responsible use of medicines and health technologies. To this end, AMP promotes the use of:

- drug utilization methods to quantify use and expenditure on medicines and health technologies;
- data collection on the availability of medicines;
- assessment of affordability through monitoring of medicines prices and out-of-pocket expenses incurred by patients;
- data collection and analysis on antimicrobial consumption.

AMP also contributes to the development and implementation of specific ad hoc studies to better understand how medicines are used in practice in the European Region.

**AMC Network**

AMP continues to support the WHO Regional Office for Europe's Antimicrobial Medicines Consumption (AMC) network in data collection and analysis. As well as disseminating the findings of quantitative analyses, member countries are undertaking studies to better understand how antibiotics are used in practice.

**AMC Network meeting**

A two-day virtual meeting of members of the AMC Network was conducted on 1–2 June 2022. Participants included members from Armenia, Belarus, Bosnia and Herzegovina, Montenegro, North Macedonia, Republic of Moldova, Serbia and Tajikistan, as well as international experts and WHO staff. The meeting covered a range of topics reflecting ongoing monitoring work, ad-hoc studies conducted and country experiences in data collection. Specifically, the meeting discussed:

- analyses of AMC data from 2019;
- results of studies on antimicrobials supplied in community pharmacies in the early phases of the COVID-19 pandemic;
- modifications to the EML 2021, including changes in AWaRe classification, and introduction of the WHO Essential Medicines List Antibiotic Book;
- results of an analysis of the antibiotics in national medicines selection lists in the WHO European Region.

Preliminary analyses of AMC 2020 data for Azerbaijan and Türkiye were presented to explore possible differences in country responses to the supply of antibacterial agents during the COVID-19 pandemic.
Day two of the meeting focused on the Global Antimicrobial Resistance and Use Surveillance System (GLASS) protocol for monitoring antimicrobial consumption in hospitals (37) and training for national AMC focal points on uploading data to the GLASS platform.

Subsequently, in August 2022, representatives of eight countries – Armenia, Belarus, Georgia, Montenegro, Republic of Moldova, Russian Federation, Tajikistan and Switzerland – enrolled in further training on the use of the GLASS platform, and have now started reporting AMC data directly to the platform.

Fourth report of the AMC Network: AMC data 2019

The fourth report of the AMC Network was published in 2022 (38). AMC data for 14 of the participating countries are presented using cross-national analyses, with trends over time (2014–2019), and analyses for the WHO target of at least 60% of total consumption being “Access” agents. In 2019, five AMC Network countries met this target. Bosnia and Herzegovina was the only AMC Network country to achieve this target in each of the years analysed (2014–2019).

Antimicrobials supplied in community pharmacies in the early phases of the COVID-19 pandemic

Nine countries (Armenia, Georgia, Kazakhstan, Kyrgyzstan, North Macedonia, Russian Federation, Serbia, Tajikistan and Uzbekistan) assessed patterns of supply of antiviral and antibacterial agents in community pharmacies in the early phases of the COVID-19 pandemic. In all but Serbia, data collection relied on manual methods to record information on encounters in community pharmacies where antimicrobials were supplied. In Serbia, data were extracted from the health information system that holds data on dispensed medicines in all public and 90% of private community pharmacies. Country reports were prepared, and a cross-national analysis published in 2022 (39).

Across the eight country studies using manual data-collection methods, data were available from 25,843 community pharmacy encounters in which one or more antimicrobials were obtained. Supply related to presentation of a prescription ranged from 22.7% of encounters in Tajikistan to 97.1% in North Macedonia. A “reason for use” was recorded for almost all encounters. There were 30,575 encounters extracted from the health information system during the one-week study period in Serbia in 2020.

Overall, the trends were towards increased use of medicines that had been proposed for the treatment of COVID-19 infection, specifically azithromycin and, to a lesser extent, hydroxychloroquine. Azithromycin, however, was the most supplied agent across a range of clinical indications, not just presumed or confirmed COVID-19 infection. The studies illustrate the value of reviewing prescribing and dispensing practices. Beyond findings related to COVID-19, the results can be used to review issues around access to, and appropriate choices of, antibacterial agents for common conditions presenting in community care.

Survey on the knowledge, attitudes and behaviours around antimicrobial resistance

In conjunction with the WHO Regional Office for Europe AMR team, a survey was conducted to investigate the level of usage and knowledge about antibiotics among the general public in 14 central Asian and eastern European countries. Data collection was undertaken from mid-October to mid-November 2022 and involved 500 interviews conducted in each capital city with citizens aged over 18 years. The survey utilized the same questionnaire used by the European Commission in a study of European Union (EU) member states (40).

Preliminary findings indicate that around 50% of those surveyed had used antibiotics in the last year (41). Of these, around two thirds reported that their last course of antibiotics was obtained with a medical prescription. One in three participants stated that they had either used leftover antibiotics
from a previous prescription or obtained them over-the-counter without a prescription from a pharmacy or elsewhere. Around 61% of those surveyed were also unaware that antibiotics do not work against viruses, while over half believed, incorrectly, that they were effective against colds. However, two-thirds of respondents correctly believed that the unnecessary use of antibiotics made them ineffective.

The results of the survey contribute to understanding of the current level of public knowledge, attitudes and behaviour related to antimicrobial use and AMR at the country and regional level, and will facilitate the development and evaluation of interventions to improve antimicrobial use and combat AMR.

**AMC/AMR country missions**

**Armenia mission (virtual) 30 May–3 June 2022**

This mission was undertaken in conjunction with the Regional Office AMR team to support the development of the next national action plan for AMR (2023–2027). An informal situation analysis was conducted to examine the successes of the National AMR Strategic Programme and Action Plan of 2015–2020 in Armenia, together with the challenges and obstacles to achieving or advancing its seven strategic directions. Discussions aimed to identify areas requiring greater attention and investment, a renewed focus or re-evaluation of current approaches. Antimicrobial medicines consumption surveillance and opportunities to advance antimicrobial stewardship were also discussed.

**Georgia mission (virtual) 12–16 September 2022**

This joint AMR/AMC mission was conducted to support the development of the national AMR strategy in Georgia. Discussions focussed on the five strategic objectives of the global action plan on AMR. Most relevant to the AMP team were the discussions relating to the status of national antibiotic consumption surveillance, steps needed to contribute to the AMC Network and GLASS platform, and antimicrobial stewardship including an update of the national medicines list and implementation of AWaRe classification of antibiotics.

**Tajikistan mission 3–7 October 2022**

Tajikistan has recently revised its NEML and is planning adoption of AWaRe classification of antibiotics. Antimicrobial medicines consumption surveillance is in place, with Tajikistan an active member of the AMC Network and participant in ad-hoc studies to understand antibiotic use in the country. These activities generate evidence to support the development of targeted actions to improve antibiotic use in the country. Meetings were held with key stakeholder groups including the national AMR working group, the team responsible for revision of the NEML and groups responsible for revising clinical protocols for the treatment of common infections. Evidence from the recent studies on antimicrobial supply in community pharmacies and the MedMon study on availability of antibiotics and AMC data were shared in the meetings.

**Kazakhstan mission 21–25 November 2022**

AMC surveillance in hospitals plays a central role in guiding antimicrobial stewardship activities, therefore, its introduction is an important step towards improving antimicrobial management. As agreed during a virtual mission in 2021, training on the use of the GLASS protocol for hospital AMC surveillance (37) was provided to around 40 participants, including clinical pharmacologists and hospital pharmacists across the country. Pilot data collection was planned for early 2023 in selected hospitals. The aim is to develop a programme of hospital surveillance that is relevant to the local context and sustainable in relation to available resources.
Country focus – Kyrgyzstan

Vaccine safety monitoring

While modern vaccines are safe and effective, they may be associated with adverse reactions. Mostly, reactions are minor and self-limiting, however, vaccines may sometimes cause more serious adverse reactions. The rapid development and deployment of COVID-19 vaccines highlighted the need for a well-functioning vaccine pharmacovigilance programme to monitor adverse events following immunization (AEFI). WHO, with financial support from the United States Agency for International Development (USAID), facilitated work in Kyrgyzstan to adapt and implement regulatory pathways and procedures for vaccines to help prepare for public health emergencies. The project strengthened monitoring and surveillance of AEFI and the investigation of severe AEFI reported after COVID-19 vaccination.

Training on surveillance and reporting of AEFI was provided to more than 800 health-care workers nationally. Experts from the Department of Medicine and Medical Devices and National Immunization Programme were trained in vaccines and medicines regulation. Achievements include establishing client follow-up and self-reporting systems on AEFI; surveillance, reporting and analysis of AEFI; and enhanced institutional capacity in vaccine regulation, management and deployment.

Medicines pricing reforms

The cost of medicines is an important contributor to high out-of-pocket costs for health care in some countries of the European Region. Regulating prices is an important element of controlling these costs for patients. In 2019, the government of Kyrgyzstan approved a decree regulating the prices of medicines reimbursed under the compulsory health insurance programme and the government outpatient guarantee programme, as well as some medicines used for the management of COVID-19. Revised draft legislation was approved in July 2021 and a temporary price control mechanism was piloted across the country. The selected medicines are typically prescribed at the primary health care level for the treatment of noncommunicable diseases and are included in the NEML. A preliminary analysis suggests price decreases of 3–5% occurred from January 2022 to January 2023. While these changes are modest, the government is working on further measures including permanent regulation to improve access to medicines and decrease financial costs to patients.

Modernizing the legal framework for regulation of medicines

WHO has been working with the Kyrgyzstan Ministry of Health to modernize the legal framework governing the regulation of medicines and medical devices. The list of essential medicines subject to price regulation has been expanded, and good regulatory practices for medicines and medical devices introduced. A legal basis for a medicines tracking system has been established and this will allow the creation of an electronic database of medicines to manage stocks, improve pharmacological control and prevent the smuggling of counterfeit drugs.

Together, these legislative and policy changes will enhance access to reasonably priced, high-quality essential medicines. The changes will encourage responsible selection and utilization of medical products and medicines, and increase the affordability of medicines that are needed to address the burden of noncommunicable diseases in Kyrgyzstan.
### Calendar of activities, 2022

#### January

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<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>13 Jan</td>
<td>OMI webinar #1 (virtual)</td>
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<td>20 Jan</td>
<td>OMI webinar #2 (virtual)</td>
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<tr>
<td>22 Jan</td>
<td>OMI Scientific Programme Committee meeting (virtual)</td>
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<tr>
<td>27 Jan</td>
<td>OMI webinar #3 (virtual)</td>
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<tr>
<td>27–28 Jan</td>
<td>WHO pre-benchmarking mapping of regulatory system – Moscow, Russian Federation</td>
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<tr>
<td>30 Jan–4 Feb</td>
<td>PSM assessment: quantification and warehouse – Chisinau, Republic of Moldova</td>
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#### February

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<tr>
<td>3 Feb</td>
<td>OMI webinar #4 (virtual)</td>
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<tr>
<td>8 Feb</td>
<td>OMI Scientific Programme Committee meeting (virtual)</td>
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<tr>
<td>9 Feb</td>
<td>OMI Steering Committee meeting (virtual)</td>
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<tr>
<td>10 Feb</td>
<td>OMI webinar #5 (virtual)</td>
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<tr>
<td>15 Feb</td>
<td>Balkans HTA roadmap meeting (virtual)</td>
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<tr>
<td>23 Feb</td>
<td>PPRI EECA Network meeting (virtual)</td>
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<tr>
<td>26 Feb–5 Mar</td>
<td>PSM of essential medicines warehousing capacity – Baku, Azerbaijan</td>
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#### March

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<th>Date</th>
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<tr>
<td>8–10 Mar</td>
<td>Estonia study visit to Amgros, (Danish public procurement agency), &quot;Strategic procurement for essential medicines” – Copenhagen, Denmark</td>
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<tr>
<td>9 Mar</td>
<td>OMI Steering Committee meeting (virtual)</td>
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<tr>
<td>13–20 Mar</td>
<td>NRA follow up mission – Bishkek, Kyrgyzstan</td>
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<tr>
<td>23–30 Mar</td>
<td>High-level meeting on NRA benchmarking – Ankara, Türkiye</td>
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#### April

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<tr>
<td>1 Apr</td>
<td>OMI Scientific Programme Committee meeting (virtual)</td>
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<tr>
<td>6 Apr</td>
<td>Journey to collaborative procurement: Asian Development Bank series (webinar, virtual)</td>
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<tr>
<td>6 Apr</td>
<td>OMI Steering Committee meeting (virtual)</td>
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<tr>
<td>19–22 Apr</td>
<td>Kazakhstan NRA follow-up visit (virtual)</td>
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<tr>
<td>29 Apr</td>
<td>Member State informal consultation regarding medical devices nomenclature (virtual)</td>
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#### May

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<tr>
<td>3–4 May</td>
<td>PPRI Network meeting (virtual)</td>
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<td>4 May</td>
<td>OMI Steering Committee meeting (virtual)</td>
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<tr>
<td>4–5 May</td>
<td>Preparing an institutional development plan to strengthen supply of vaccines, medicines and blood products – Belgrade, Serbia</td>
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<tr>
<td>10 May</td>
<td>Study tour in preparation for high-level OMI meeting, June 2022 – Oslo, Norway</td>
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<tr>
<td>18–19 May</td>
<td>Collaborating centre on blood transfusion safety and blood products meeting (virtual)</td>
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<tr>
<td>22 May</td>
<td>OMI Scientific Programme Committee meeting (virtual)</td>
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<tr>
<td>23–27 May</td>
<td>WHO QMS implementation workshop – Istanbul, Türkiye</td>
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<tr>
<td>23–28</td>
<td>Pricing system in Uzbekistan and policy options for strengthening pricing and reimbursement system – Tashkent, Uzbekistan</td>
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<tr>
<td>30–31</td>
<td>PPRI EECA network meeting (virtual)</td>
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<tr>
<td>30 May–3 June</td>
<td>Development of national action plan for Armenia on AMR (virtual)</td>
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**June**

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<th>Date</th>
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<tr>
<td>1</td>
<td>Access to TB medicines in EU countries – Sociedad Española de Neumología y Cirugía Torácica (SEPAR), Pamplona, Spain (virtual)</td>
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<tr>
<td>1–2</td>
<td>AMC Network meeting, GLASS-AMC training (virtual)</td>
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<tr>
<td>14</td>
<td>World Blood Donor Day – Copenhagen, Denmark</td>
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<tr>
<td>14–16</td>
<td>First Joint Meeting WHO Global Advisory Committee on Vaccine Safety (GACVS) and WHO Advisory Committee on Safety of Medicinal Products (ACSoMP) – WHO headquarters (virtual)</td>
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<tr>
<td>15</td>
<td>AMP retreat – Copenhagen, Denmark</td>
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<tr>
<td>15–16</td>
<td>First International Pharmaceutical Forum of Uzbekistan (hybrid meeting) – Tashkent, Uzbekistan</td>
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<tr>
<td>22–23</td>
<td>Workshop on improving access to TB medicines in the WHO European Region with focus on EU Member States (hybrid meeting) – Copenhagen, Denmark</td>
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<tr>
<td>24–26</td>
<td>Bulgarian Pharmaceutical Days, role of pharmacist in safe use of medicines – Plovdiv, Bulgaria</td>
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**July**

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<th>Date</th>
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<tbody>
<tr>
<td>18–22</td>
<td>PPRI summer school (virtual)</td>
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<tr>
<td>31</td>
<td>NRA self-benchmarking mission – Chisinau, Republic of Moldova</td>
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**August**

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<th>Date</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>26</td>
<td>Webinar on data management for blood (virtual)</td>
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**September**

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<th>Date</th>
<th>Event Description</th>
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<tbody>
<tr>
<td>1</td>
<td>Launch of OMI technical report series (webinar)</td>
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<tr>
<td>12</td>
<td>Regional Committee RC72 ministerial lunch: access to effective, novel, high-priced medicines and the OMI – Tel Aviv, Israel</td>
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<tr>
<td>12–16</td>
<td>Development of national action plan for Georgia on AMR</td>
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<tr>
<td>14</td>
<td>RC72 – Personalized genomic medicine approach for improving health – Tel Aviv, Israel</td>
</tr>
<tr>
<td>15–16</td>
<td>Vancouver Group meeting: presentation of OMI, policy dialogue on recent challenges in regulation, assessment and reimbursement – Vienna, Austria</td>
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<tr>
<td>19–30</td>
<td>Barcelona health financing course and AMP–WHO Barcelona Office for Health Systems Financing discussions on enhancing access to medicines and financial protection – Barcelona, Spain</td>
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<tr>
<td>20–21</td>
<td>European Health Public Procurement Alliance summit – Brussels, Belgium</td>
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<tr>
<td>26–30</td>
<td>Benchmarking of the Turkish Medicines and Medical Devices Agency – Ankara, Türkiye</td>
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<tr>
<td>26–28</td>
<td>European Health Forum Gastein: post-OMI and the WHO Europe Novel Medicines Platform – Gastein, Austria</td>
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<tr>
<td>27–29</td>
<td>Meeting with Technical Assistance and Information Exchange expert mission, discussion on support to the National Medicines Regulatory Authorities with the EU delegation and United States of America embassy – Sarajevo, Bosnia and Herzegovina</td>
</tr>
</tbody>
</table>
### October

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Location</th>
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</thead>
<tbody>
<tr>
<td>3–8</td>
<td>Stakeholder meetings on AMC surveillance and responsible use of antibiotics – Dushanbe, Tajikistan</td>
<td>Dushanbe, Tajikistan</td>
</tr>
<tr>
<td>6–7</td>
<td>Biosimilar Medicines Conference, &quot;Translating the pharmaceutical legislation into access and affordability&quot; – Brussels, Belgium</td>
<td>Brussels, Belgium</td>
</tr>
<tr>
<td>11–13</td>
<td>Central Asia Regional Economic Cooperation Countries and the Caucasus working group for health – Tbilisi, Georgia</td>
<td>Tbilisi, Georgia</td>
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<tr>
<td>25–27</td>
<td>Expert conference on rare diseases – Prague, Czechia</td>
<td>Prague, Czechia</td>
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<tr>
<td>30 Oct–4 Nov</td>
<td>Pre-benchmarking visit: benchmarking to reconfirm Maturity Level 3 – Belgrade, Serbia</td>
<td>Belgrade, Serbia</td>
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### November

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<tr>
<th>Date</th>
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<tbody>
<tr>
<td>3–4</td>
<td>CIP Network Global Steering Group meeting (virtual) – Geneva, Switzerland</td>
<td>Geneva, Switzerland</td>
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<tr>
<td>5–7</td>
<td>Professional Society for Health Economics and Outcomes Research HTA roundtable, HTA and WHO Novel Medicines Platform (post-OMI) – Vienna, Austria</td>
<td>Vienna, Austria</td>
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<tr>
<td>7–11</td>
<td>Workshop on vaccine pharmacovigilance (virtual) – Ljubljana, Slovenia</td>
<td>Ljubljana, Slovenia</td>
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<td>13–15</td>
<td>Baltic policy dialogue – Vilnius, Lithuania</td>
<td>Vilnius, Lithuania</td>
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<tr>
<td>17</td>
<td>Assistant Director General AMR visit to UN City – Copenhagen, Denmark</td>
<td>Copenhagen, Denmark</td>
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<tr>
<td>21–25</td>
<td>Follow-up on 2021 PSM assessment – Bishkek, Kyrgyzstan</td>
<td>Bishkek, Kyrgyzstan</td>
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<tr>
<td>21–25</td>
<td>Trainers training for hospital AMC surveillance – Astana, Kazakhstan</td>
<td>Astana, Kazakhstan</td>
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<tr>
<td>22–24</td>
<td>Consultation on Good Practices for Health Products Manufacture and Inspection Annual Meeting (virtual) – Geneva, Switzerland</td>
<td>Geneva, Switzerland</td>
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<tr>
<td>23</td>
<td>PPRI network meeting (virtual)</td>
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<tr>
<td>28–30</td>
<td>Informal consultation on WHO guideline for nonclinical/clinical evaluation of monoclonal antibodies to treat infectious diseases (hybrid meeting) – London, United Kingdom</td>
<td>London, United Kingdom</td>
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<tr>
<td>29 Nov–2 Dec</td>
<td>Simulation exercise, preparations for public health emergency regional workshop (virtual)</td>
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<tr>
<td>28 Nov–1 Dec</td>
<td>Joint UNICEF–United Nations Population Fund –WHO meeting with manufacturers and suppliers – Copenhagen, Denmark</td>
<td>Copenhagen, Denmark</td>
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<tr>
<td>28 Nov–2 Dec</td>
<td>PPRI EECA network meeting</td>
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<tr>
<td>26 Nov–10 Dec</td>
<td>PSM assessment – Tajikistan and Uzbekistan</td>
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### December

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<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Location</th>
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<tbody>
<tr>
<td>5</td>
<td>European Public Health Alliance Access to Medicines Forum, Novel Medicines Platform – Brussels, Belgium</td>
<td>Brussels, Belgium</td>
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<tr>
<td>6–7</td>
<td>AMR retreat for development of AMR roadmap – Elsingore, Denmark</td>
<td>Elsingore, Denmark</td>
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<tr>
<td>9</td>
<td>AMR reference group for the Swedish EU Presidency – Stockholm, Sweden</td>
<td>Stockholm, Sweden</td>
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<tr>
<td>12–15</td>
<td>CRP annual meeting – Istanbul, Türkiye</td>
<td>Istanbul, Türkiye</td>
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<tr>
<td>13</td>
<td>European Commission biosimilar multistakeholder event – Brussels, Belgium</td>
<td>Brussels, Belgium</td>
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<tr>
<td>14–15</td>
<td>PPRI EECA network meeting – Istanbul, Türkiye</td>
<td>Istanbul, Türkiye</td>
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<tr>
<td>14–16</td>
<td>Second joint WHO GACVS and ACSoMP meeting (hybrid) – Geneva, Switzerland</td>
<td>Geneva, Switzerland</td>
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</table>
References


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

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World Health Organization
Regional Office for Europe

UN City, Marmorvej 51,
DK-2100 Copenhagen Ø, Denmark
Tel.: +45 45 33 70 00 Fax: +45 45 33 70 01
Email: eurocontact@who.int
Website: www.who.int/europe