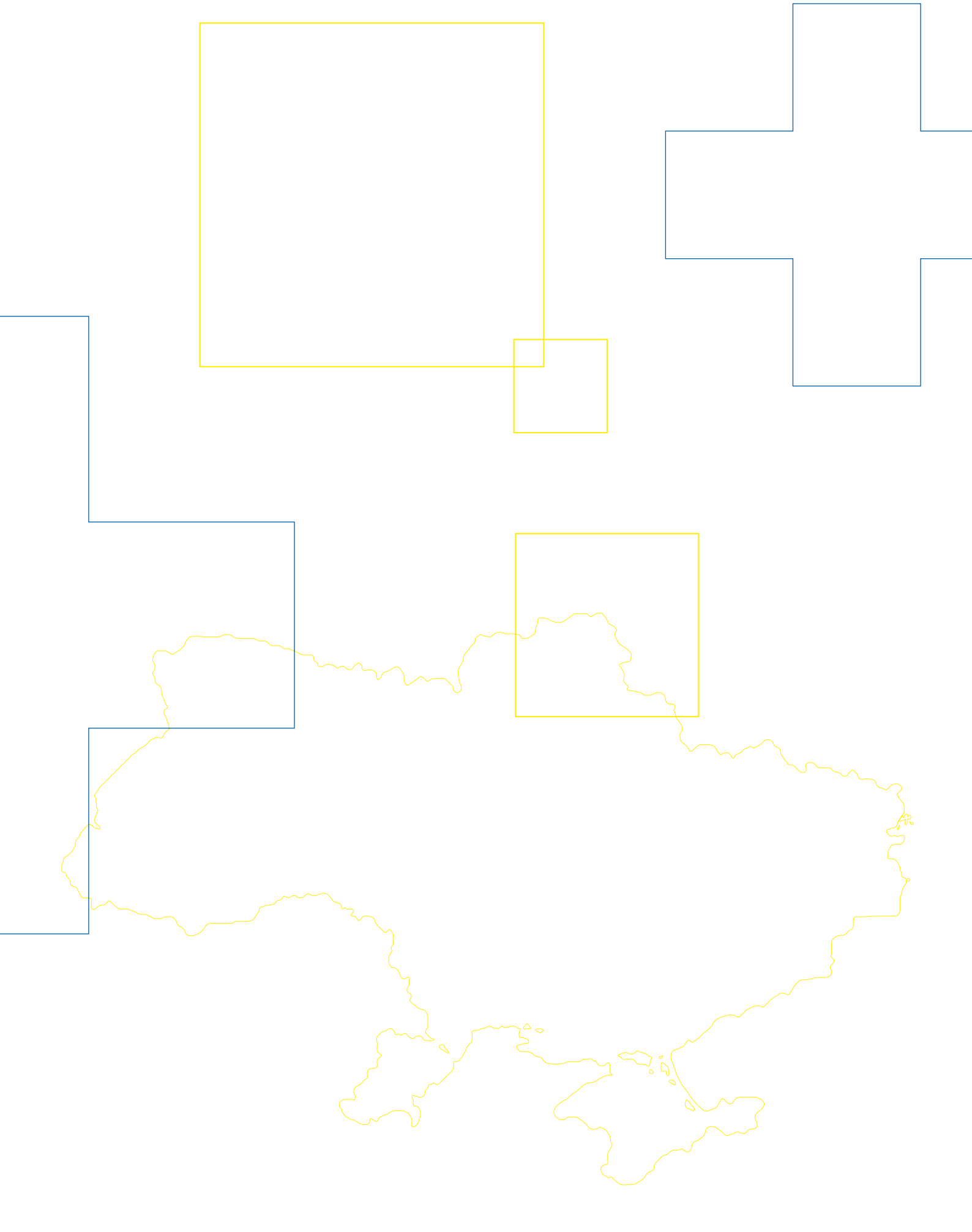
World Health Organization

European Region

# PRINCIPLES TO GUIDE HEALTH SYSTEM RECOVERY AND TRANSFORMATION IN UKRAINE



# Principles to guide health system recovery and transformation in Ukraine

WHO/EURO:2022-5750-45515-65155



**Suggested citation.** Principles to guide health system recovery and transformation in Ukraine. Copenhagen: WHO Regional Office for Europe; 2022. Licence: CC BY-NC-SA 3.0 IGO.

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



Designed by: Djordje Devic

# Contents

# Foreword

WHO has been supporting the process of health reform in Ukraine. Since 2016, reforms accelerated with the creation of new institutions and new mechanisms in the health system to improve efficiency and equity. Good progress was being made in health financing, establishing primary care provision, e-health, ensuring access to medicines and refocusing on public health. In 2020 the COVID-19 pandemic required focused efforts on the pandemic response, as it did in countries around the world, but at the same time the health reform path continued. Together with many partners WHO supported the pandemic response and reforms and, by the time of the invasion in February 2022, Ukraine had again made good progress. To advance towards the health and wellbeing goals set for 2030, WHO was supporting the Ukrainian Ministry of Health to develop its Health Strategy 2030 for further development of the sector. A draft was to be discussed by Government in late February. Before that could happen, of course, the war began and again disrupted the situation.

In the context of the war, WHO has been supporting Ukraine's health authorities to respond to the most urgent needs of the population and of the health professionals, who have inspired us with their courage and dedication. Much has been learned in this period about the connection between health and security for Ukraine's population. The unprecedented number of attacks on health since 24 February 2022 have also motivated the Government to initiate planning for post-war recovery, and WHO fully endorses the decision to plan now for recovery. Health is integral to the overall recovery of Ukraine. While health is not everything, without health, there is nothing.

This policy note is aligned with the Ukrainian Government's position that recovery is not about rebuilding everything that has been destroyed. Instead, the critical question to drive this process is how to best get services to the Ukrainian

population – public health, health protection and disease prevention, health promotion, treatment, and palliative care – as well as linking with needed social and other services. The implications of this and the principles outlined in this policy note are to build forward smarter: more digital, greener and increasingly aligned with the European Union's integration requirements.

In addition to national resources, many countries and international agencies are expected to provide funding to support Ukraine's recovery. An important lesson learned from past experiences is that such investments must be coordinated to ensure they are put to the common purpose of transforming the health system. There must be a common vision with common standards, and through the application of the principles described in this policy note, WHO can support the Government in the process of orienting recovery investments with the vision of a modernized Ukrainian health system in the future.

Hans Kluge

WHO Regional
Director for Europe

Jarno Habicht

WHO Representative and
Head of the WHO Country
Office in Ukraine

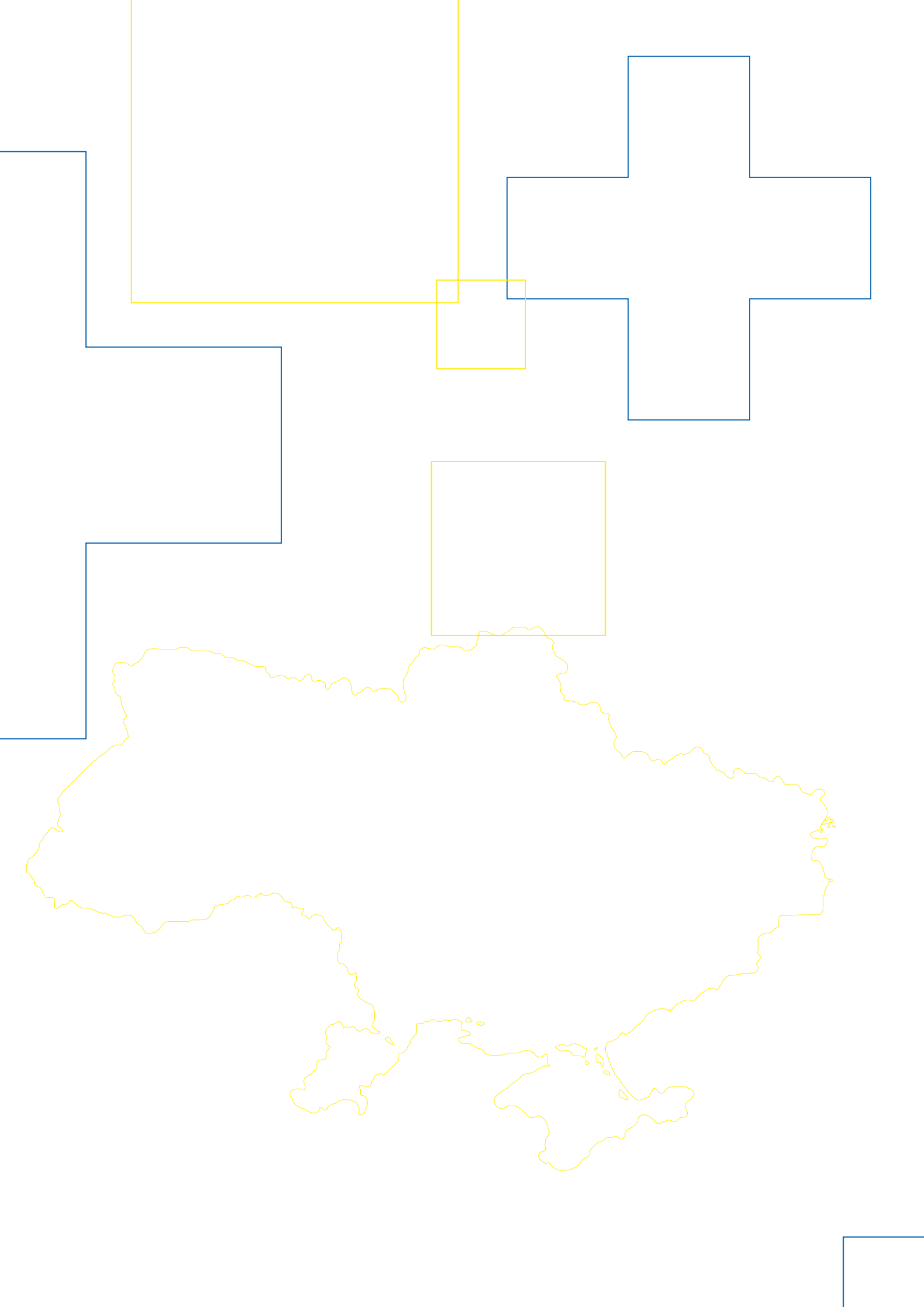
# Acknowledgements

This policy note was prepared at the request of the WHO Regional Director for Europe, Hans Kluge, and under the guidance of the Head of the WHO Country Office in Ukraine, Jarno Habicht. Technical coordination was led by Joseph Kutzin, Kateryna Fishchuk and Sheila O'Dougherty.

The team is indebted to the many WHO staff and other experts who contributed technical inputs at short notice. WHO staff contributors include Natasha Azzopardi Muscat, Hélène Barroy, James Campbell, Cornelis De Joncheere, Tamás Evetovits, Andre Griekspoor, Triin Habicht, Melitta Jakab, Dorit Nitzan, Svitlana Pakhnutova, Ihor Perehinets, Nataliia Piven, Teri Reynolds, Gerald Rockenschaub, Tomas Roubal, Guillaume Simonian, Susan Sparkes and Tomas Zapata. Other contributors included Elina Dale, Alona Goroshko, Loraine Hawkins, Mark Hellowell and Maksym Obrizan. Feedback from discussions on an earlier draft with the colleagues from the World Bank, European Union Delegation to Ukraine and United States Agency for International Development was used to shape this policy note.

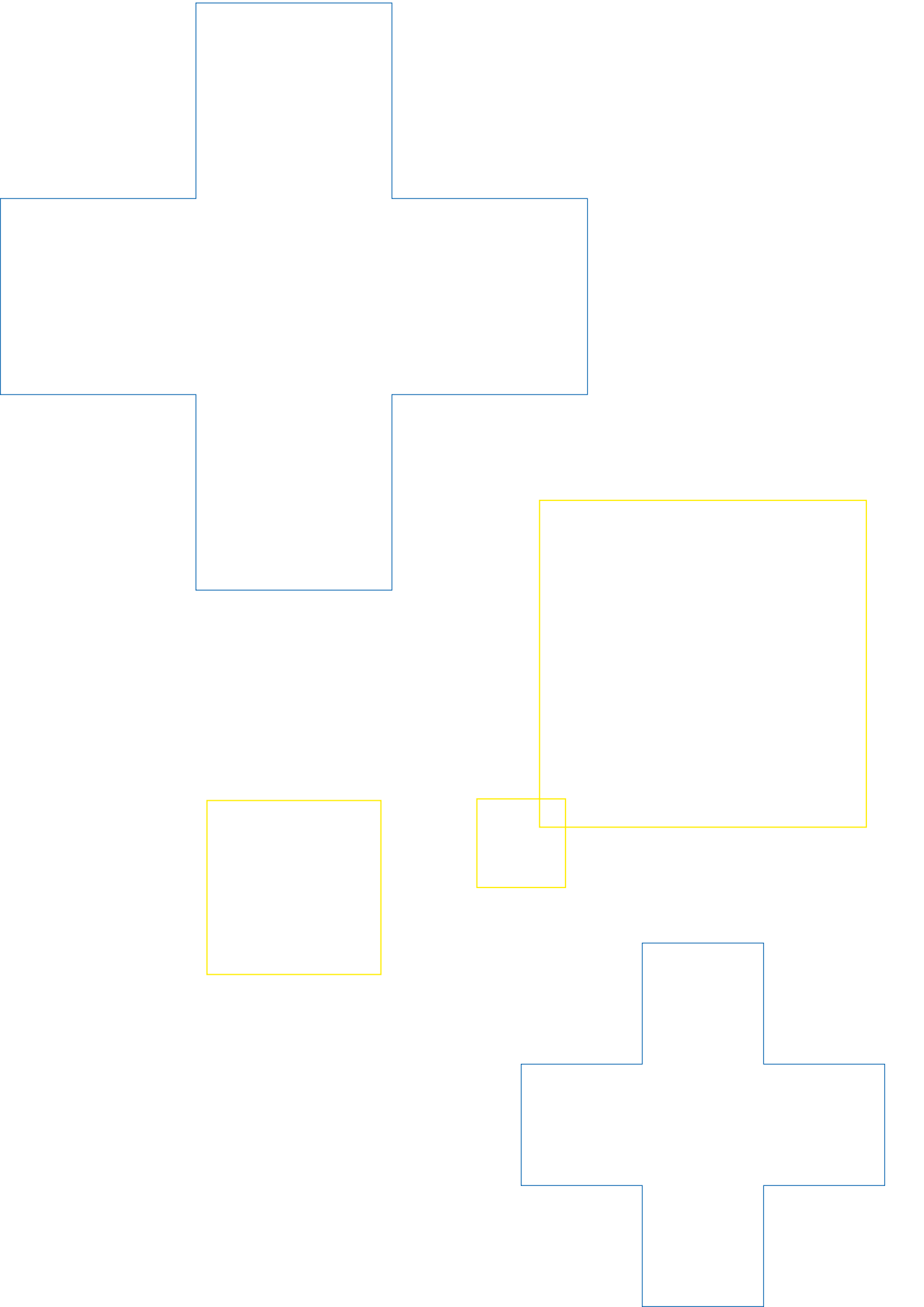
We are also grateful for feedback on the overall recovery process to staff of the Ministry of Health of Ukraine, the Parliament of Ukraine and other government officials.

This policy note is compiled in line with collaboration framework and several strategic priorities of the Biennium Collaborative Agreement (BCA) between WHO Regional Office for Europe and the Government of Ukraine and through financial resources of the European Union contribution agreement "Health System Development in Ukraine".



# Abbreviations

| | |
|---|---|
| AMP | Affordable Medicines Programme |
| CBRNE | chemical, biological, radiological, and nuclear substances and explosives |
| EU | European Union |
| IDP | internally displaced person |
| IHR (2005) | International Health Regulations (2005) |
| JEE | Joint External Evaluation |
| NHSU | National Health Service of Ukraine |
| PHC | primary health care |
| PMG | Programme of Medical Guarantees |
| UPHC | Centre for Public Health of the Ministry of Health of Ukraine |
| VHI | voluntary health insurance |



# Executive summary

Despite the continuing war in Ukraine, the Government is preparing for the country's recovery and reconstruction. Given the magnitude of the attacks on the health infrastructure and consequent disruption to health system functioning, reconstruction of the health system is integral to the country's recovery. The immediate priorities are to restore essential services, respond to new physical and mental health needs, protect public health, and provide a secure and attractive environment for the return of both health professionals and the general population.

This policy note identifies strategic directions for post-war health system recovery in the short and longer terms, while sustaining essential health services during the ongoing invasion. The strategic directions are based on a set of five principles (or tenets) that may be used as criteria to assess potential investments to enable the delivery of quality individual and public health services to the population, rather than merely rebuilding what was destroyed by the war. The aim is to align the expected investments with the priority directions for health system development in Ukraine. The tenets are:

- people-centredness
- equity and financial protection
- resilience
- efficiency and sustainability
- accountability.

The tenets should be applied to the implementation of the draft Health Strategy 2030 to align health system recovery investments with the reform strategy and to integrate these into the ongoing humanitarian response.


BRAND
сертифікат

Fig. 1 illustrates a people-centred health system; this model should be reinforced as part of the recovery activities in Ukraine. People are directly affected by both public health and individual services. Delivering these services requires an effective health workforce and other resources (medicines and supplies, equipment, physical and digital infrastructure), along with financing and governance to establish incentives and rules to ensure the coherent functioning of the health system. Laying out the tenets against which the Government can assess health recovery activities is a critical step to (i) ensure a well-coordinated investment approach that is aligned with the main directions of Ukrainian health reform, including the European Union accession process, and (ii) accelerate transformation of the health system to more fully benefit the population. Table 1 specifies the implications of the tenets for each aspect of the health system, including dos (green lights) and don'ts (red lights).

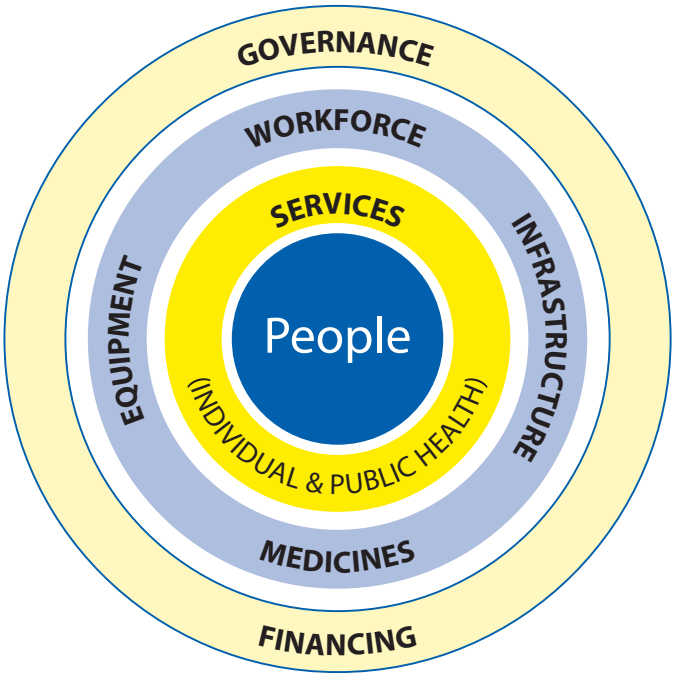



**Fig. 1.** A people-centred health system

The tenets guide the "what" and "how" questions, but this policy note also addresses "when" by providing a concrete illustration of sequenced priorities and the dynamics between initial and follow-on actions. This means that the initial response to the war context can lay the groundwork for the transition from crisis management to normal health system functioning. Central to this transition is (re)building and expanding the health service delivery network with primary health care services at the core, including improved access to pharmaceuticals, and public health surveillance. Follow-on actions should align the rebuilt and restructured multiprofile hospitals and outpatient specialty centres with this foundation, by taking a green approach to infrastructure design to reduce future energy consumption and recurrent costs. Thus, the initial and follow-on actions are closely linked: the sequencing gives a general indication of priorities, aligned with the tenets, for the actions needed to get individual and public health services to the people who need them. Application of the tenets can assist the Government to develop a recovery plan that aligns national policies and various stakeholders with the desired transformation of the health system.

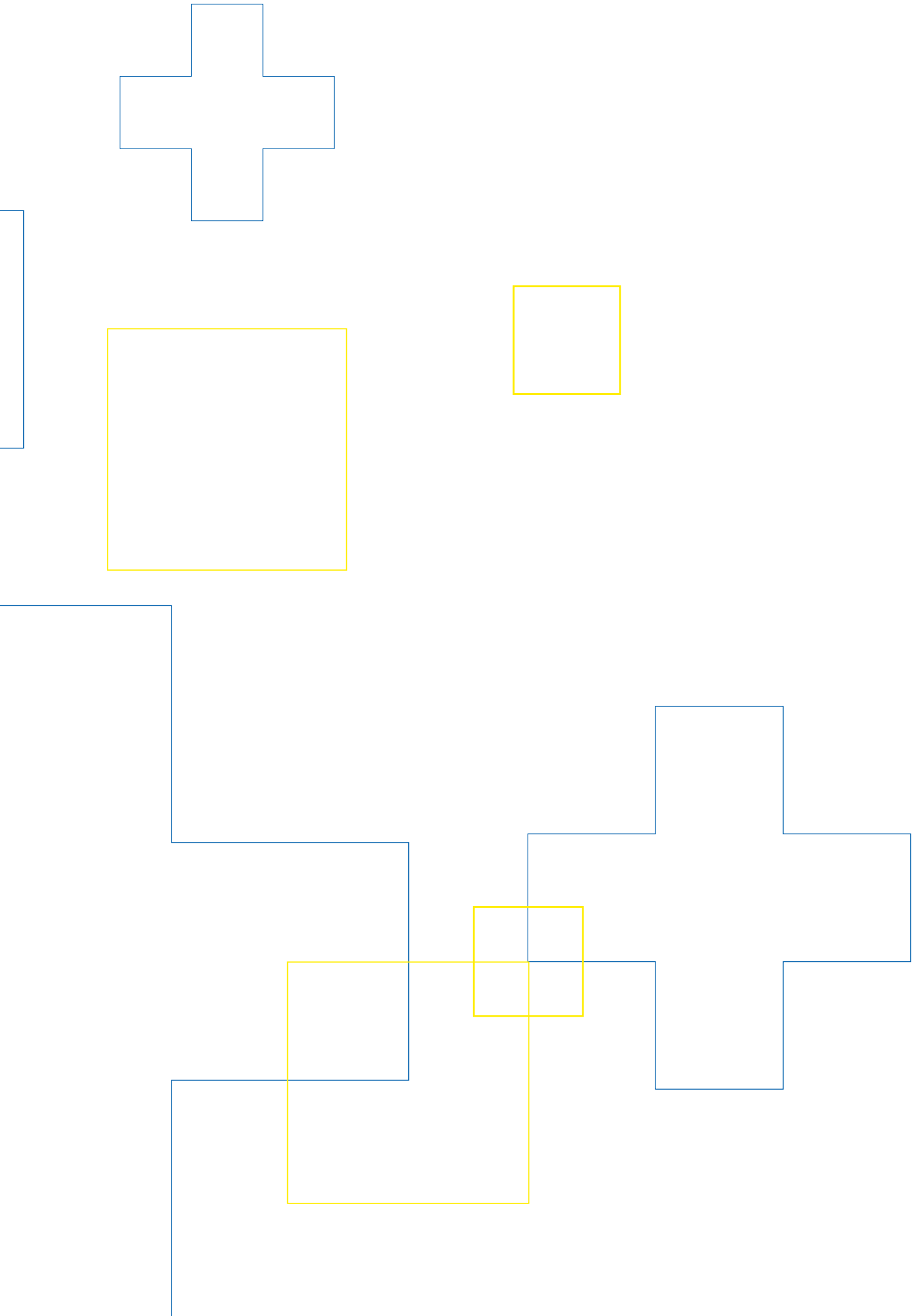
**Table 1.** Implications of the tenets for health system recovery and transformation, with sequencing

| Functions and implications | Green/red light | Initial | Follow-on |
|---|---|---|---|
| **Public health, emergency preparedness and response** | | | |
| Clarify the roles, responsibilities and accountability, and build capacities of the UPHC, Centre for Disaster Medicine, oblast centres for disease control and prevention, and local authorities for public health functions and services | 🟢 | X | |
| Implement JEE recommendations for emergency preparedness and align with the EU accession process | 🟢 | X | X |
| Ensure the integration and coordination of public health services with individual-based services, specifically within PHC | 🟢 | X | X |
| Do not organize public health investments by disease or health programme | 🔴 | | |
| **Delivery of health services for individuals** | | | |
| Coordinate and integrate humanitarian assistance with the management and delivery of services in Ukrainian health facilities | 🟢 | X | |
| Strengthen, expand and extend primary care services (see **Infrastructure**) | 🟢 | X | X |
| Develop plans for multiprofile hospitals organized on territorial basis (see **Infrastructure**) | 🟢 | X | |
| Improve clinical guidelines and use data from interoperable e-health and financial information systems | 🟢 | X | X |
| Do not prioritize specialty hospitals over primary care and multiprofile facilities | 🔴 | | |
| Do not organize the health network separately by each level of government | 🔴 | | |
| **Health workforce** | | | |
| Attract and prepare for the return of health workers and develop a digital workforce registry | 🟢 | X | |
| Provide modular training for war-related needs, including those related to mental health, sexual and gender-based violence, physical rehabilitation and CBRNE health threats | 🟢 | X | |
| Quantify health workforce needs consistent with the vision for service delivery | 🟢 | X | |
| Improve medical education and health professional regulation (licensing, self-regulation) | 🟢 | X | X |
| Do not create separate tracks for public health and medical education | 🔴 | | |
| **Infrastructure (physical, digital), equipment and medicines** (also see **Delivery of health services for individuals**) | | | |
| Renovate or construct PHC facilities based on an expanded and extended delivery model with greater energy efficiency, ensuring climate resilience, environmental sustainability and resilience to infectious diseases | 🟢 | X | X |
| Perform critical short- term hospital renovations incorporating greater energy efficiency while minimizing negative impacts on the environment and maintaining health and well-being | 🟢 | X | |
| Develop health care facility renovation and construction plans, prioritizing multiprofile hospitals, geographical network development and equity across regions | 🟢 | X | |
| Renovate or construct secondary and tertiary health care facilities in accordance with plans that ensure climate resilience, environmental sustainability, greater energy efficiency and resilience to infectious diseases | 🟢 | | X |

**Table 1.** contd

| Functions and implications | Green/red light | Initial | Follow-on |
|---|---|---|---|
| Rebuild and strengthen the IT infrastructure, including devices and connectivity | 🟢 | X | X |
| Plan, procure and manage an inventory of costly high-tech medical equipment | 🟢 | X | X |
| Maintain and strengthen both central medicine procurement and NHSU purchasing of PMG services, together with AMP reimbursement via private pharmacies | 🟢 | X | X |
| Rebuild or strengthen the domestic production capacity for vaccines, pharmaceuticals and medical products | 🟢 | X | X |
| Upgrade the regulatory system for medicines and medical products | 🟢 | X | X |
| Develop a national biomedical R&D agenda with investment in science and technology to help in upgrading the medicines and medical products industry | 🟢 | | X |
| Do not simply rebuild what has been destroyed, but with planning based on the service delivery network and health needs (see **Individual services**) | 🔴 | | |
| Do not build/rebuild fragmented e-health and financial information systems | 🔴 | | |
| **Health financing** | | | |
| Strengthen NHSU institutional and staff capacity, with sufficient funding for administrative costs | 🟢 | X | X |
| Shift funds for facility utility costs from local government to NHSU, thereby fully transforming NHSU to be the single purchaser of individual health services | 🟢 | | X |
| Improve NHSU information systems to enable flexible strategic purchasing through implementation of a formula-based payment system for the PMGs (e.g. to cope with population mobility) and incentivize hospital restructuring | 🟢 | X | X |
| Expand the use of health taxes to promote health and raise revenues | 🟢 | X | X |
| Refine capital and inventory accounting procedures (see **Infrastructure**) | 🟢 | X | |
| Strengthen the autonomy and accountability of facility-level financial management systems | 🟢 | X | X |
| Do not return to 2016–2019 trend of steadily deprioritizing health in public spending | 🔴 | | |
| Do not move away from universal, non-contributory-based entitlement to health services, funded from general revenues | 🔴 | | |
| **Health system governance** | | | |
| Functional specification, realign roles and relationships across all government levels, and build capacity | 🟢 | X | |
| Increase the voice and engagement of citizens in decisions that affect them | 🟢 | X | X |
| Strengthen transparency and independent oversight of capital investments | 🟢 | X | X |
| Integrate or make interoperable information systems while ensuring cybersecurity | 🟢 | X | X |
| Do not undermine facility autonomy (facility management is essential for recovery) | 🔴 | | |

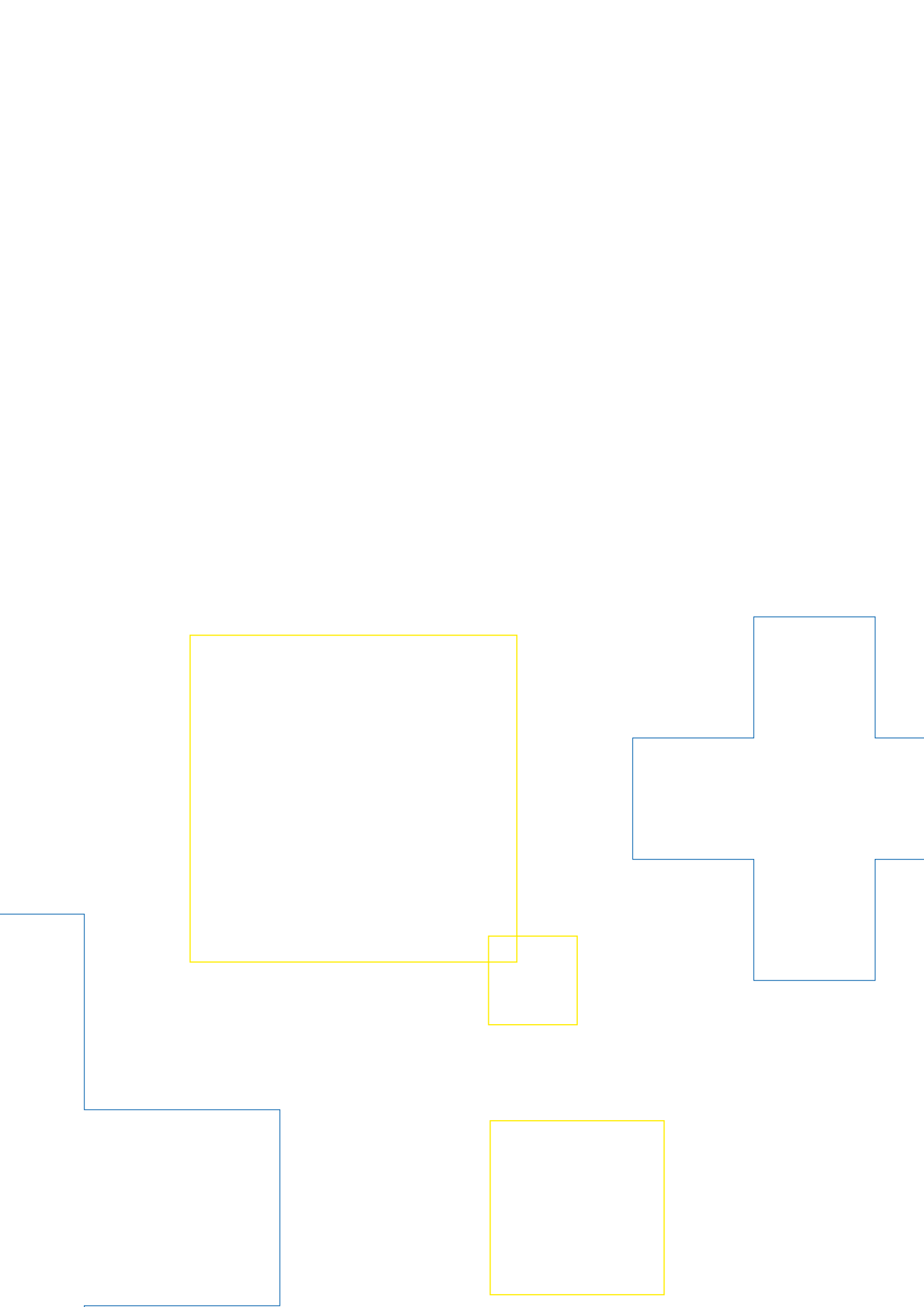
AMP: Affordable Medicines Programme; CBRNE: chemical, biological, radiological, nuclear and explosive; EU: European Union; IT: information technology; JEE: Joint External Evaluation; NHSU: National Health Service of Ukraine; PHC: primary health care; PMG: Programme of Medical Guarantees; UPHC: Centre for Public Health of the Ministry of Health of Ukraine.



# 1. Introduction

Despite the continuing war in Ukraine, the Government has expressed a desire to prepare for recovery and reconstruction for all sectors of the economy, including the health sector. The war has had the severe effect of increasing the population's need for health care while reducing the system's ability to provide services, with substantial variation across the country. Some facilities have been destroyed, while others have been overwhelmed by people seeking care for trauma and injuries resulting directly from the war. The challenges of displacement and meeting the changing health needs of the population are compounded by the effects of the war on the delivery of care. For example, people with chronic diseases are experiencing worsening symptoms because of interrupted treatment. Such disruptions, together with the effects of the COVID-19 pandemic, have aggravated conflict-related crises, creating a surge in the need for mental health care and psychosocial support that is only beginning and is likely to be prolonged. The effects of disruptions to health promotion and preventive services will be seen for years to come, including an increased risk of vaccine-preventable diseases. Without targeted efforts to catch up on such essential health interventions, the impact of war disruptions may approach or exceed the direct morbidity and mortality associated with the hostilities.

This policy note briefly reviews the reasons why health and the health system are integral to the national recovery process, and then identifies strategic directions for maintaining essential health services in war-affected areas in the short term and for longer-term post-war health system recovery and transformation, as well as highlighting the capacities and capabilities required to ensure resilience against health emergencies. It proposes a set of principles (or tenets) against which potential investments in strengthening health system functioning can be assessed in order to align expected investments with the priority directions for health system development. It also provides a foundation for the coherent development of a more detailed health sector recovery plan in the coming months.



# 2. Health is essential for peace and recovery

The health system, and health more broadly, is essential for recovery, peace and security in Ukraine for the following reasons.

- **Preserving and rebuilding.** Ukraine has witnessed an alarmingly high number of attacks against health care. The physical destruction of health resources, coupled with the psychological effect of war on health care workers and the wider population, will have lasting consequences. Preserving and rebuilding the health system is critical to convey a sense of security and normality for all.
- **Recovering.** Responding to health care needs is not merely a short-term humanitarian obligation but also an intrinsic part of human welfare and an investment needed for long-term recovery and growth of Ukraine. The availability of quality health services and medicines is essential to give people who have fled conflict the confidence to return to their homes, for community-level reconciliation and to maintain trust in the public authorities. Strengthening the health sector to attract returning health professionals and the general population is vital to national recovery.
- **Protecting.** Beyond the delivery of clinical services, the war has disrupted public health services such as disease surveillance and monitoring, as well as access to safe water and food, garbage collection and rodent control. In addition, the conflict has brought exposure risks associated with deliberate or accidental damage to nuclear and chemical plants or the use of chemical, biological or nuclear weapons. Strengthening the health system is crucial to mitigate these risks by preparing to respond to potential public health and all-hazards emergencies.
- **Prospering.** Investing in health and health systems is a precondition for sustainable development and a strong macroeconomy *(1)*. The health sector makes a key contribution to the stability and resilience of national economies worldwide *(2)*, and is an important employer (and a major employer of women). In addition, experience from the COVID-19 pandemic and other emergencies shows how quickly gains in gender equality in the workforce can be lost and other forms of inequality can be exacerbated.

# 3. Criteria for assessing potential investments in health system recovery and transformation

Ukraine is committed to preserving, protecting and strengthening the health and well-being of its citizens. This is reflected in its national policies *(3)*, as well as by its endorsement of key international declarations, including the Tallinn Charter *(4)* and the Political Declaration of the United Nations High-level Meeting on Universal Health Coverage *(5)*. The President of Ukraine recently announced the United24 initiative *(6)*, which identified health as one of the areas to which national and international donations will be channelled. Many international development partners and governments, as well as nongovernment entities and individuals, are also planning to support the Government of Ukraine's recovery efforts.

To ensure that domestic and international investments in recovery are aligned with the Government's draft Health Strategy 2030 *(7)*, this policy note identifies a set of five tenets with important implications for humanitarian assistance (short-term support for urgent needs) and mid- to longer-term investments in the health sector. The tenets reflect health system goals but are more operational and tailored to the current situation. They apply to recovery decisions made at national level (such as the plan being prepared by the National Recovery Council *(8)*, which was created by President Volodymyr Zelenskyy in April 2022) or as part of multisectoral regional recovery plans. Since the tenets are not unique to a specific funding source or geographical area, they can be applied as criteria to assess and steer domestic government, private, multilateral or bilateral sources

of investment. They are also relevant to ensuring that the ongoing humanitarian assistance lays a foundation for short- to medium-term recovery.

To maximize the benefits of using the tenets as assessment criteria, it is essential to ask the correct question about what to assess. Given Ukraine's commitment to achieving universal health coverage and health security, the question is not "How do we replace a damaged or destroyed health facility?" but "How can we best get individual and public health services to the population in need?" Put another way, transformation to a more resilient, people-centred, equitable, efficient and accountable health system is the main consideration moving forward.

The tenets proposed for use as assessment criteria are as follows.

**People-centred.** Putting people at the centre is more than a slogan: taking this concept seriously has important implications for the organization of both individual and public health services and for the health workforce, health financing and health governance. This implies, for example, that investments should not support a vertical delivery system (organized by disease); instead, health care should centre on the systems needed to support an individual's health in a holistic way by embedding disease- or condition-specific services and different health disciplines within services that are coordinated and focused on the person's needs.

**Equity and financial protection.** This entails a commitment to responding to those most affected by the conflict (both directly and indirectly) and those with the greatest need for health services and least ability to cope with financial costs. Special attention should be paid to the most vulnerable groups, including people exposed to sexual and gender-based violence and those suffering from mental and/or physical trauma from the war. People driven into poverty by the conflict should be protected from financial barriers and catastrophic expenditure, in particular older people with chronic illnesses.

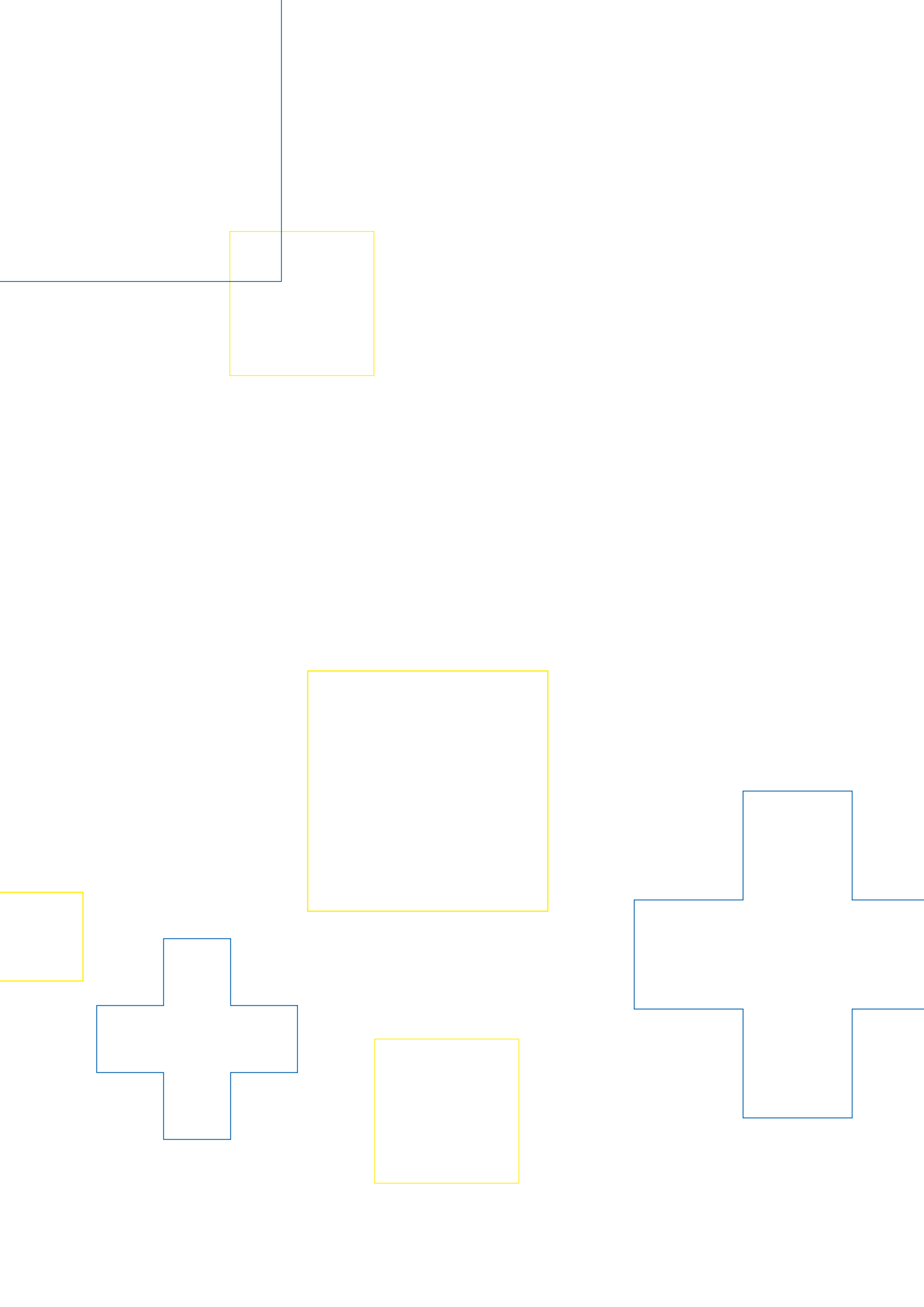
**Resilience.** This tenet implies that a community, a health system or the wider society is prepared for and able to resist, absorb, recover, adapt and respond to hazards or other shocks in a timely and efficient manner, while retaining and restoring its essential basic structures and functions *(9,10)*. Resilient structures and processes can shield societies by making systems more robust, thereby keeping communities more connected, and keeping people healthier. This requires institutions and management processes that enable people to respond, learn and adapt during a crisis so as to mitigate disruption to routine services while also monitoring, assessing and addressing the increased health needs and public health risks. For example, emergencies provide opportunities for deep systemic reviews and regular evaluations, followed by changes to build resilience, based on the lessons learned. It also requires systems that can adapt to widely varying circumstances across the

country and to specific contextual shifts such as service displacement and the remapping of referral pathways; loss of qualified health workers; large numbers of internally displaced persons (IDPs) and refugees; the likely slow or partial return of refugees; and evolving health needs across the population. It also requires what Ukraine has already demonstrated: the capacity to rapidly adjust its health facilities and services and re-deploy its health workforce when faced with a security threat.

**Efficiency and sustainability.** Efficient use of the limited available resources is needed to achieve Ukraine's health objectives, particularly as the country may face severe fiscal constraints in the coming years. Furthermore, and as many countries learned in their COVID-19 response, an efficient approach must consider not only the immediate deployment of inputs but also the need for reserve/surge capacities. As with people-centredness, there are critical implications for how resources are allocated and used across the health system and, thus, for the design of future investments. This includes the conflict context, where the capacity and location of services need to be adapted to changing demographics. Sustainability is a related but different concept that refers to the ability of a country to make progress over time towards its objectives, such as universal health coverage.

**Accountability.** An accountable health system and, by extension, government, has credible health policy commitments and is answerable to the population for its performance and use of resources. To ensure that commitments made by the Government of Ukraine are realized, it is critical to have clearly defined roles and relationships for both the national Government and its agencies (in particular, the Ministry of Health, National Health Service of Ukraine (NHSU), Centre for Public Health of the Ministry of Health of Ukraine (UPHC) and Central Procurement Agency) and across all levels of government, as well as procedures for citizen engagement; participatory planning; standardized budgeting, accounting and financial reporting; transparent expenditure and procurement; corruption risk mitigation; and clear communication. The effectiveness of accountability and financial management systems depends on the mechanisms used to disburse funds, including how to manage the money and in-kind support entering the country. For example, it is desirable that money to support the recurrent costs of health service delivery flows through NHSU purchasing mechanisms for the national benefits package: the Programme of Medical Guarantees (PMG). Although it is recognized that some inflows for such costs will come separately (e.g. directly to providers and people), to the fullest possible extent, the flows should be integrated into (or at least coordinated with) the NHSU's health service purchasing arrangements. Capital investments should be transparent and use accepted national procurement practices and/or those of development partners.

These tenets are not new to Ukraine: they are either implicit or explicit in the National Health Reform Strategy for Ukraine 2015–2020 *(3)*, as well as the draft Health Strategy 2030 *(7)*. The proposal is to use the tenets as criteria for both assessing and steering potential investments to align with Ukraine's main policy directions. This will provide a solid foundation for ensuring a well-coordinated and adaptive investment approach. In effect, the tenets define how to operationalize the slogan "building back better" or, preferably, "building forward smarter". Recovery should be guided by pre-war health sector reform strategies and processes, while responding to changing population health needs and mitigating pre-existing inefficiencies, in order to build a more robust and resilient health system that is capable of absorbing future shocks and crises. This approach reflects WHO's broad and deep support for the direction of health reform as already laid out by the Government of Ukraine in its existing laws, regulations, strategies and plans, while recognizing that critical steps are still needed to fully realize these tenets, given the pre-war implementation challenges.



# 4. A dynamic, sequenced vision for Ukraine's health system recovery

The five tenets outlined in this policy note provide guidance on the key "what" and "how" questions for recovery plans, but it is also important to provide concrete sequenced priorities as the war context requires an immediate response, including restoring the functionality of the health network and securing access to essential services to meet ongoing, increased and new health needs and public health threats. While this response is ongoing, it is possible to lay the groundwork for the transition from crisis management (with Ukrainian national and local governments operating under martial law and supported by humanitarian assistance focused on urgent needs) to peace-time roles for all government levels in implementing longer-term reform and development. This requires a stable but dynamic vision for health system recovery in Ukraine that:

- builds on the strengths of Ukraine's existing system, previous reform agenda, institutions and human capital;
- links humanitarian assistance and medium-term system development from as early as possible, finding opportunities to stabilize, deepen and accelerate the implementation of Ukraine's existing reform strategy;
- incorporates the tenets as criteria to guide how to proceed; and
- plans for realistic implementation sequencing.

Achieving this vision requires a sequenced but dynamic approach that recognizes that actions on multiple fronts are related and that there are priorities, but also that the situation may involve some overlap in terms of the timing of implementation. Initially, humanitarian assistance/short-term support (both cash and in-kind payments) for urgent needs should be immediately (or as soon as practicable, depending on the differing extents and implications of the war in different parts

of the country) integrated into the routine functioning of facilities and services managed by Ukraine's health system. In coordination with this, strengthen the existing, renovated or rebuilt primary care facilities to be more people-centred and oriented to reach those most in need, and have the capacity to deliver expanded services. For practical purposes, expanded primary care services refers to:

- shifting inpatient to outpatient services as part of health system transformation and increasing population coverage for these services;
- changing the scope of services included in clinical practice guidelines;
- expanding services to address the critical needs emerging as a direct result of the conflict, including trauma and rehabilitation care, mental health care, care for survivors of sexual and gender-based violence, and coordination of services for IDPs;
- enhancing linkages and coordination with public health services (e.g. clean water and sanitation, nutrition, and surveillance of COVID-19 and other emerging public health threats);
- extending community-level health prevention and promotion services; and
- extending community-level service delivery by incorporating mobile teams currently delivering essential health services within the humanitarian response to later become part of local health service delivery as outreach services for hard-to-reach areas or patients with mobility problems, and ensuring catch-up on essential services such as immunization and screening *(11)*.

The integration of the services provided through humanitarian assistance (short-term support for urgent needs) into expanded primary health care (PHC) services should be institutionalized by adapting the existing NHSU output-based provider payment systems used for the PMG (including the AMP) to cover both health services and essential medicines for which most out-of-pocket payments are currently made. In anticipation of a reduction in humanitarian supplies and commodities, the priorities should be to expand central drug procurement and reimbursement of private pharmacies by the NHSU under the AMP, thereby driving a shift from inpatient to outpatient services; restore private and public retail pharmacy functioning in liberated areas where conditions permit; strengthen the capacity of the Central Procurement Agency; and reinforce national production and supply chains for some products. Combined with the availability of expanded primary care services and strengthened interoperable health and financial information systems, these actions will enable benefit portability and continuity of care nationwide. Funds from both domestic and international sources can be incorporated, with the adaptability (that is, resilience) needed to deliver in widely varying contexts within the country (e.g. mobile populations, high numbers of IDPs). In parallel, the multiprofile hospitals will be (re)built to meet the anticipated

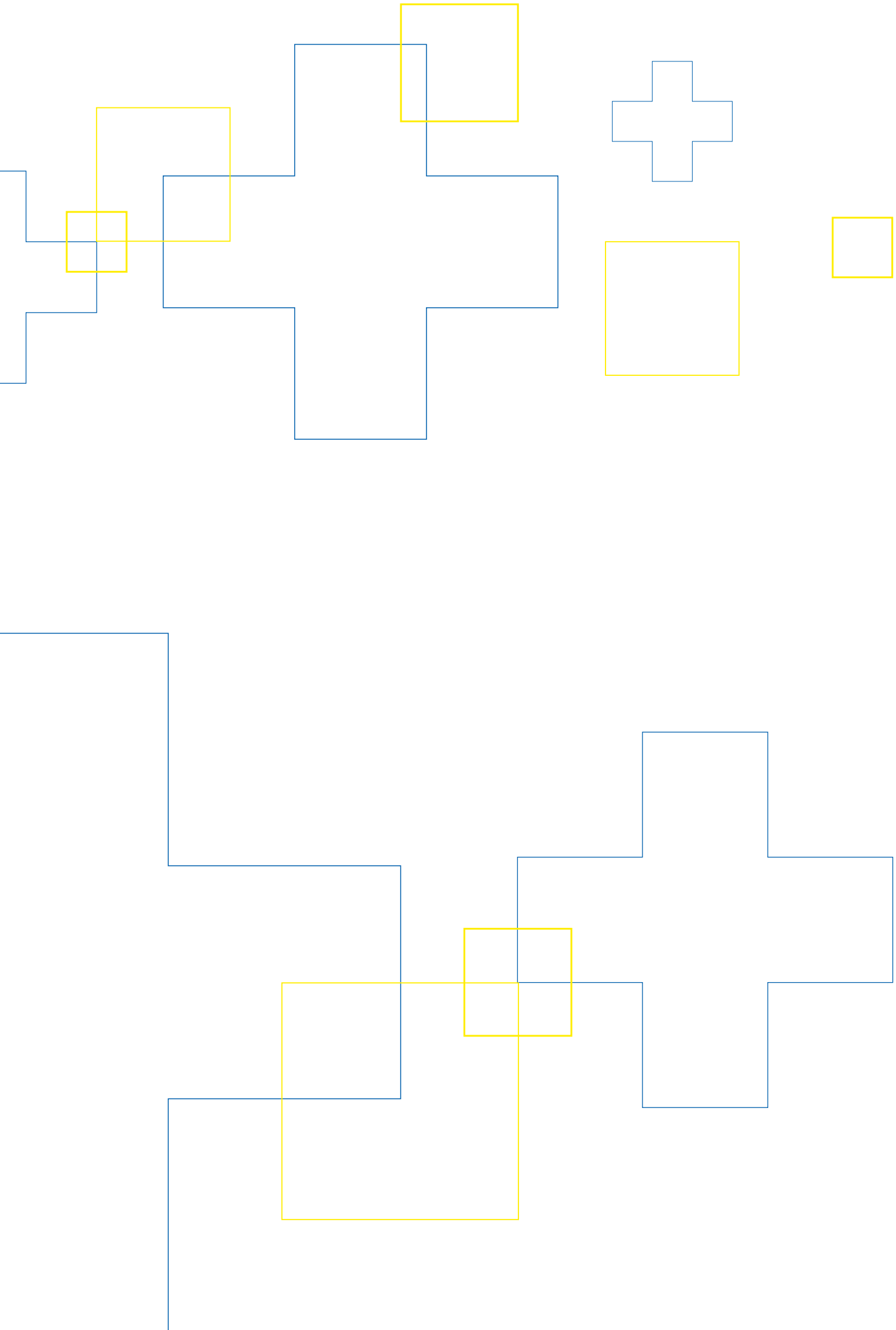
needs for secondary and tertiary services for the expected population in each coverage area, taking into account the need for and availability of the health workforce.

The initial approach is to (re)build and expand PHC services in the transition from humanitarian assistance (where relevant), along with improving access to pharmaceuticals, trauma and emergency care, and public health surveillance. This will form the basis of follow-on actions to align the rebuilt and restructured multiprofile hospitals with outpatient specialty centres. Given the length of time needed to rebuild and strengthen next-generation health facility infrastructure, the initial and follow-on actions may be initiated at the start of recovery but selected interventions will be prioritized for initial funding and/or progress more rapidly. The health system function tables included at the end of each subsection of Chapter 5 summarize investments and related policies that follow from the use of the five tenets as assessment criteria, resulting in green light (do) or red light (don't), as well indicating initial and follow-on measures.

Good sequencing provides the flexibility required to adapt implementation to different situations and conditions in the different geographical areas of Ukraine. Four factors will vary substantially across the country and should be considered for contextualization: (i) conflict status (e.g. government control of territories with varying levels of service disruption, ongoing conflict, or areas temporarily not under government control); (ii) numbers of IDPs and returning refugees; (iii) number of health workers remaining at either health facilities or in the geographical area; and (iv) transition from military to civilian administration and use of health facilities.

The sequencing of recovery activities also highlights practical solutions for a variety of complex problems that are particularly important for coordinating national investments with those of development partners. The solutions include:

- recognizing the different time frames for various types of investment, in particular, physical infrastructure versus human capital development (e.g. training, mentoring);
- synchronizing regional investments by development partners with national standards/guidelines, particularly in the light of the need to plan hospital infrastructure investments across oblast-wide districts based on geographical area rather than level of government, and prioritizing multiprofile hospitals; and
- coordinating investments and capacity-building with the realignment of institutional structure, roles and relationships, including the ability of NHSU PMG purchasing to ensure the sustainability of health facility investments and empower the managers of health facilities to improve facility-level accounting and financial management.



# 5. Implications of the principles for health system functions

Fig. 1 shows a model of a people-centred health system. People are directly affected by public health and individual services; delivery of these services requires health professionals and other resource inputs (medicines, equipment, infrastructure), along with financing and governance to establish the incentives and rules for the system to function in a coherent manner. The following sections describe the relationship between health system functions and the implications of the tenets. The Government of Ukraine can use these tenets as criteria for assessing potential health system recovery investments, flexibly adapting them to different contexts across the country.

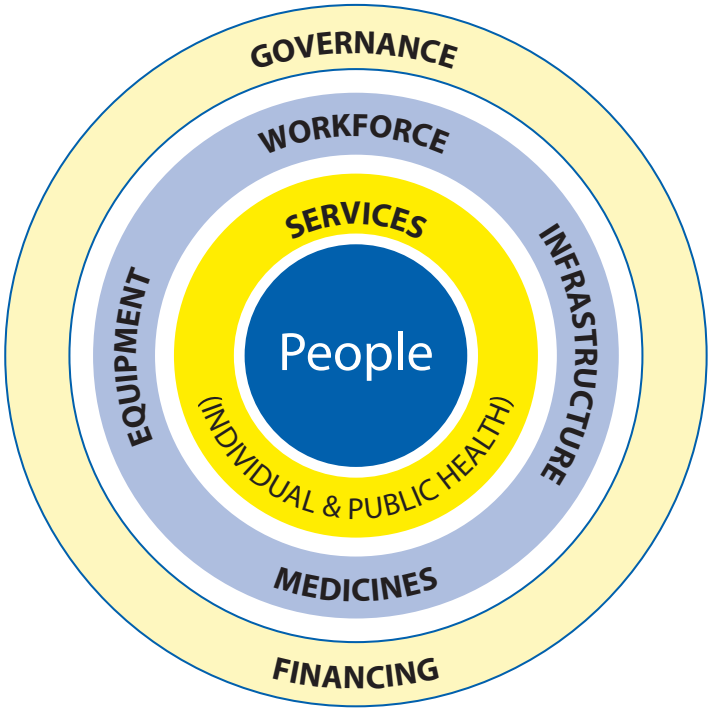



**Fig. 1 .** A people-centred health system

## 5.1 Public health services and health emergency preparedness and response

### *5.1.1 Multisectoral health emergency preparedness and response*

Ukraine will be emerging from (and potentially also remaining in) a war-time scenario while simultaneously addressing the health consequences of the current war and the COVID-19 pandemic and continuing the considerable health system reform efforts it has undertaken since 2016. These combined factors highlight the importance of building public health capacities focused on prevention, preparedness, detection and response, in line with the International Health Regulations (IHR) (2005) and utilizing whole-of-society, all-hazards and One Health approaches (Table 1). The IHR (2005) Joint External Evaluation (JEE) conducted in 2021 provides a baseline of the status of the 19 IHR (2005) core capacities in Ukraine. At the core of future recovery actions is the strengthening (and in some areas, such as recently liberated territories, re-establishing) of public health services, including enhanced surveillance of emerging diseases and risk factors, monitoring of health hazards, integration of health information systems from public health and individual health care services, understanding ongoing and looming threats, early detection and response, and communicating to the population and coordinating relevant authorities to ensure that proper control and protection measures are in place.

Preparedness for emergencies enables a resilient response to health threats. Critical enablers for this include resources (for example, safe buildings, laboratories and warehouses), effective health information and intelligence, staff with the necessary skills and experience, the integration of IHR (2005) capacities within all parts of the health system, adoption of the One Health approach, effective communications across levels of government, and maintaining civil–military communication. All-hazards preparedness has taken on new urgency as a consequence of the war. This refers to preparation for health threats arising from chemical, biological, radiological and nuclear substances and explosives (CBRNE) causes. Therefore, it is important to review the functions of the Centre for Disaster Medicine as a basis for upgrading its capacities, and to ensure interlinkages with operations of the Centre with UPHC and the network of oblast centres for disease control and prevention, the State Emergency Service of Ukraine, and military medical departments so that Ukraine is prepared and ready to use the all-hazards approach.

To enhance efficiency as part of recovery, it is also important to reduce the potential fragmentation of public health services at the national and regional levels, avoid potential conflicts of interest and duplication of functions, and establish a well-aligned intra- and interagency coordination mechanisms (including with

food safety, animal health, environmental protection, civil protection, defence and security). These actions will ensure a comprehensive One Health approach in building Ukraine's capacity to prepare and respond to health threats of any origin. They can be supported by implementation of the JEE recommendations and lessons learned from the COVID-19 pandemic *(12)* which are to:

- adopt a five-year national action plan for health security;
- develop and implement a multisectoral all-hazards emergency response plan based on a national risk-mapping and strategic risk assessment;
- design and implement a multistage programme of regular training courses, simulations and drilling exercises for all sectors;
- adopt and implement the One Health and all-hazards approaches throughout Government, across sectors and between ministries;
- engage communities through listening and strong risk communication;
- establish a ready-to-act command, control and coordination architecture rooted in evidence and tailored to communities' needs;
- drive actions based on timely and high-quality data as the foundation for applied research and use of intelligence;
- ensure a well-resourced supply chain and operational support capabilities that are accessible at all times;
- prepare to provide essential health services to people on the move; and
- plan for surge response (human, financial and material).

The JEE identified stronger and weaker areas in public health core capacities. The recovery period will create opportunities to improve in some of the weak points such as biosafety and biosecurity, surveillance systems, emergency preparedness, activation and coordination of medical countermeasures for public health emergencies, and risk communication for unexpected events for which specific efforts have been made during war time. It also identified strong pre-war capacities such as vaccine access and delivery, analysis of surveillance data, global WHO IHR (2005) and reporting of the WHO–World Organisation for Animal Health–Food and Agriculture Organization of the United Nations tripartite agreement *(13)*, field epidemiology, emergency medicines systems, and radiological and nuclear emergency response mechanisms. Importantly, the Government of Ukraine can capitalize and build on these strong capacities.

### *5.1.2 Public health system and services*

Transformation of the public health system has already been initiated and is built upon key domains: health protection, disease prevention and health promotion. To create a public health system capable of responding to health

emergencies and the health and well-being needs of the population, there is a critical need to clearly delineate the roles, responsibilities and accountability of public health institutions within the health system and beyond. This should be supported by a legal framework. The role of the UPHC as the highest professional, politically independent and technically capable public health institution needs to be strengthened through delegated authority to coordinate and manage oblast centres for disease control and prevention, as well as to allocate technical resources based on risk assessments. The Centre also needs to maintain alignment and coordination of its efforts with the Ministry of Health as a policy-making authority to ensure evidence-informed public health decision making and accountability for the entire continuum of public health system governance, including needs assessment, planning and priority-setting to the most distal outcomes.

The example of public health surveillance (that is, the systematic and ongoing collection, management, analysis, interpretation, and dissemination of information for the purpose of informing the actions of public health decision-makers*(14)*) illustrates how the principles can be applied to steer investment for public health services. A well-functioning surveillance system relies on (i) detection at facility level; (ii) confirmation, which often involves laboratories; and (iii) registration, reporting and analysis, which rely on well-connected and responsive information systems *(15)*. The **people-centredness** and **efficiency** criteria jointly entail organizing public health surveillance at the entire system level because they comprise cross-cutting functions that do not sit exclusively within a single disease- or intervention-specific area (Table 1). Siloed surveillance systems with their related inputs organized around diseases or specific populations are outdated, inefficient and cannot meet demands for real-time data *(16)*. They can also constrain opportunities for multipurpose strategies that consider the complete needs of individuals *(17)*.

This system-wide approach is consistent with the JEE recommendations to improve surveillance in Ukraine by (i) implementing the electronic integrated disease surveillance system for monitoring and routine surveillance of all infectious diseases at all levels, and to enable the coordinated analysis of epidemiological surveillance and laboratory data; (ii) enhancing intersectoral collaboration for unified surveillance at all levels, particularly between the public and veterinary health sectors, through regular exchanges (for example, by establishing weekly meetings); and (iii) improving event-based surveillance activities at all levels, including by training personnel and expanding the existing event-based surveillance approaches to integrate further sources. These recommendations can be implemented during the recovery period to create surveillance systems that are well-functioning, responsive and cross-cutting (beyond vertical disease programmes).

Ukraine has already submitted the first-round questionnaire for potential Member States of the European Union (EU). The EU accession process will also define the scope of necessary interventions for strengthening the public health system in areas such as surveillance of prioritized infectious diseases; integration of early warning notification systems within the EU; implementation of the IHR (2005); quality and safety of substances of human origin, such as blood, tissues and cells; and addressing major health determinants and problems, such as mother and child health, mental health, and risk factors for noncommunicable diseases (tobacco control, alcohol consumption and road safety).

Investments in these population-based public health and preparedness-oriented functions, which are closely linked to extended PHC at community level, sit at the heart of the post-war recovery and serve as the foundation for the future health and well-being of Ukrainians. Stock-taking of changing epidemiological patterns will be needed in the face of new threats. In the light of post-war recovery, ensuring water and sanitation services are restored is a priority and should be embedded into the humanitarian response and expanded PHC approach. Although individuals may not demand or be aware of these public health functions, they are critical for people-centred and efficient health systems. More generally, this orientation requires a cross-system, cross-sectoral and multilevel approach to investing in the public health workforce, laboratories and information systems in Ukraine led by the UPHC (together with oblast centres for disease control and prevention that are currently being established).

**Table 1.** Implications of the tenets for public health, emergency preparedness and response, with sequencing

| Implications | Green/red light | Initial | Follow on |
|---|---|---|---|
| Clarify the roles, responsibilities and accountability, and build the capacities of the UPHC, Centre for Disaster Medicine, oblast centres for disease control and prevention and local authorities for public health functions and services | 🟢 | X | |
| Implement JEE recommendations for emergency preparedness and align with the EU accession process | 🟢 | X | X |
| Ensure the integration and coordination of public health services with individual-based services, specifically within PHC | 🟢 | X | X |
| Do not organize public health investments by disease or health programme | 🔴 | | |

## 5.2 Delivery of health services for individuals

Ukraine will have the opportunity to transform its health services to meet the anticipated needs and demands of its citizens in the coming decades, including the (i) growing noncommunicable disease burden with significant avoidable mortality; (ii) remaining agenda of infectious disease control, including for TB, HIV and vaccine-preventable diseases; (iii) increasing range of long-lasting mental health conditions and physical rehabilitation as direct impacts of the war and its aftermath; and (iv) socioeconomic problems linked to physical and mental health issues. The health system must be able to address the challenge of simultaneously restoring services, responding to new health needs and evolving health threats, addressing old and new barriers to access, and accelerating the implementation of planned reforms. Improving clinical practice will be a priority across all levels of care through evidence-based guidelines/protocols, together with continuing medical education and quality improvement techniques. A priority is to address disruptions or barriers to access for essential maternal and child health and chronic illness services.

**People-centredness** requires taking a PHC approach to service delivery, which places primary care at the core of integrated health services and ensuring that systems are responsive to people's needs, values and preferences. Considerations related to this as well as to **equity and financial protection**, and **efficiency and sustainability** include furthering service delivery reforms to address individual needs in safe, convenient settings with the capacity to address most health concerns (and linking to other social services, where needed), including new and expanded needs for mental health, trauma, disability and rehabilitation care, and the needs of survivors of sexual and gender-based violence. To deliver on this complex agenda, primary care providers must combine biomedical and psychosocial approaches to comprehensively address people's problems, including early recognition of dangerous health conditions, timely resuscitation and targeted referral where needed. The COVID-19 pandemic has shown the impact such an integrated multidisciplinary approach to primary care (including community-level services) can have to make a real difference to people's lives *(18–21)*. From the perspective of health service organization and based on the Ukrainian context, the country's past experiences and the tenets suggest that specific attributes for maintaining, strengthening and expanding primary care services (Table 2) include:

- a multidisciplinary team approach combining general practitioners, nurses, psychologists and social workers;
- expanding services to include psychosocial support;

- institutionalizing practices for multiplatform service delivery that combines in-facility face-to-face consultations, mobile teams delivering outreach face-to-face services and digital remote consultations;
- network-based organization of services to facilitate economies of scale through resource sharing (e.g. diagnostics, psychologists), to support remote areas and creating a cascading approach to change management and learning; and
- investing in the digital health infrastructure to identify and reach the most vulnerable and high-risk people in the community in real time, anticipate their needs and respond proactively.

**Resilience** requires that the health system is able to respond to people's needs for timely and out-of-hours emergency care and ensure access to critical care and surgical services that can only be delivered safely in a hospital setting. Integrated people-centred service delivery requires emergency, critical and surgical care services that are linked to communities through primary care and via communication, transportation, referral and counter-referral mechanisms.

**People-centredness** and **efficiency** also involve optimizing inpatient capacity by making greater use of outpatient and one-day services and moving towards greater use of multispecialty hospitals with intensified infection control (rather than separate infectious disease facilities). Both of these criteria are also served when services are organized on a geographical (territorial) basis rather than by level of government, which is aligned with a pre-war reform strategy of establishing oblast-wide hospital districts. However, these efforts will need to be intensified and include national standards, guidelines and oversight to adapt to population displacement and reduce excess capacity or repurpose facilities for new health-care needs (e.g. rehabilitation). **People-centredness** and **efficiency** also require reducing health system fragmentation across ministries.[1]

**Resilience** also involves having the capacity to adapt to new needs and changing/diverse situations to ensure continuity of care in the face of high population mobility, IDPs and returning refugees. **Equity** entails reducing geographical disparities in the structure of the health delivery system and having in place the mechanisms and resources needed to reach the remote rural, low-income and most vulnerable populations. Demand-side barriers should also be considered, including the need to address or compensate for transport disruption, ongoing

[1] Currently, health facilities are owned and managed by various central executive bodies such as the Ministry of Defence of Ukraine, Ministry of Health of Ukraine, Ministry of Justice of Ukraine, Ministry of Infrastructure of Ukraine, Ministry of Internal Affairs of Ukraine, Ministry of Social Policy of Ukraine, Ministry of Youth and Sports of Ukraine, National Academy of Medical Sciences of Ukraine, National Police of Ukraine, Security Service of Ukraine, State administrations, State Border Guard Service of Ukraine, State Emergency Service of Ukraine and Ukrainian Railways.

insecurity near to the front lines, people's fear of going to health facilities that are being targeted during the war, curfews and other movement restrictions, and income loss resulting in a reduced capacity to pay out of pocket (especially for older people with chronic illness and reduced mobility). A critical enabler that reflects all of these criteria, as well as public **accountability** for performance, is the further development and interoperability of e-health and financial information systems to serve multiple needs. Digitalization of these allows linkage between health and social services, serving multiple health programmes, connecting individual services to the public health surveillance system as needed, and contributing to good financial management and more cost-reflective relative payment rates.

**Table 2.** Implications of the tenets for delivery of health services for individuals, with sequencing

| Implications | Green/red light | Initial | Follow on |
|---|---|---|---|
| Coordinate and integrate humanitarian assistance with the management and delivery of services in Ukrainian health facilities | 🟢 | X | |
| Strengthen, expand and extend primary care services (see Table 4) | 🟢 | X | X |
| Develop plans for multiprofile hospitals organized on a territorial basis (see Table 4) | 🟢 | X | |
| Improve clinical guidelines and use data from interoperable e-health and financial information systems | 🟢 | X | X |
| Do not prioritize specialty hospitals over primary care and multiprofile facilities | 🔴 | | |
| Do not organize the health network separately by each level of government | 🔴 | | |

## 5.3 Health workforce

Health workforce shortages are undoubtedly critical bottlenecks to address in health system recovery and are key to **patient-centredness, equity, efficiency** and **resilience**. There will be a need to attract health workers, prepare for the return of those who have left as refugees, and meet the mental health, physical health and social needs of all health workers. Therefore, it is critical to consider

priority areas for attention (and possible investment) in the health workforce needed in order to realize the service delivery strategies, structure and models described in sections 5.1 and 5.2, in line with the five tenets (Table 3). These are to:

- quantify the type and number of health workforce needed to achieve the vision for service delivery (including strengthening and expanding PHC), and estimate the evolution of shortages over time, with particular emphasis on conflict zones and rural and underserved geographical areas;
- set priorities for health worker training, recruitment and retention and adjust salary scales accordingly; and
- build on the training components within the humanitarian response and the experience since 2014 in eastern Ukraine, and incorporate new post-war recovery needs into medical education and training (such as mental health, sexual and gender-based violence, physical rehabilitation and CBRNE health threats).

**Accountability** involves improving the development and regulation of medical education (with a particular focus on nursing curricula) to produce the right type, level and number of health professionals with more practical training, together with health professional regulation, including licensing procedures and shifting to self-regulation.

**Table 3.** Implications of the tenets for the health workforce, with sequencing

| Implications | Green/red light | Initial | Follow on |
|---|---|---|---|
| Attract and prepare for the return of health workers and develop a digital workforce registry | 🟢 | X | |
| Provide modular training for war-related needs, including those related to mental health, sexual and gender-based violence, physical rehabilitation and CBRNE health threats | 🟢 | X | |
| Quantify health workforce needs consistent with the vision for service delivery | 🟢 | X | |
| Improve medical education and health professional regulation (licensing, self-regulation) | 🟢 | X | X |
| Do not create separate tracks for public health and medical education | 🔴 | | |

## 5.4 Infrastructure, capital equipment and medicines

### *5.4.1 Infrastructure (physical and digital) and capital equipment*

Physical infrastructure will be the most visible candidate for investment. However, recovery should not be perceived as an infrastructure project. An assessment of the population's need for services, in concert with the **efficiency and sustainability, people-centredness,** and **equity criteria**, inform the decisions of whether and how to (re)build a facility as part of decision-making on the design and functionality of the local service delivery network (section 5.2). More specifically, however, the **efficiency, sustainability and resilience** criteria are most central to the design of new or rebuilt infrastructure: the design must account for the future running costs of the facility and, critically, the focus must be on greater energy efficiency, environmental sustainability, climate resilience, and infectious diseases resilience (Table 4).

Climate-resilient and environmentally sustainable health care facilities anticipate, respond to, cope with, recover from and adapt to climate-related shocks and stresses, while minimizing negative impacts on the environment and leveraging opportunities to restore and improve it. Environmental sustainability in infrastructural interventions aims to reduce hazards resulting from health care facility operations (such as health care waste), while simultaneously working towards decreasing exposures and vulnerabilities (both within and outside the health care facility) *(22)*. Resilience to infectious diseases should be incorporated within the design of healthcare facilities to strengthen preparedness and response capability and ensure adaptability to surge needs and management of old and new emerging pathogens.

Here, several aims converge: financial sustainability (less costly to run), environmental sustainability (greener design, lower carbon footprint) and national security (less dependent on foreign energy and able to support its own operations in case of blackouts). Analysis of the implications of different facility design options for future recurrent utility costs (i.e. heating, electricity, waste management, water, sanitation and hygiene) should be part of any investment planning process. **Equity** will be a major factor in determining variations in investment across different geographical areas, with national monitoring of the extent to which investment increases geographical (in)equity in service availability.

**Accountability** requires clear functional specification and roles for the procurement of capital investments for infrastructure and equipment (see section 5.5 on the financing of recurrent costs through provider payment for the PMG). In addition,

procedures for infrastructure procurement via public or donated funds should be strengthened to increase transparency (and efficiency). Medical equipment needs should be well-planned, possibly including a regulatory process (Ministry of Health approval) to ensure that expensive equipment is planned, procured and managed across facility networks to avoid duplication and cost escalation.

Building and strengthening information technology infrastructure (including both hardware and connectivity) is a high priority to improve access and use, as needed to perform against all five tenets and functions of the health system. The focus should be on extending interoperability across all health system levels and developing integrated e-health and financial information systems aligned with government policy on cybersecurity.

### *5.4.2 Medicines*

The criteria of **people-centredness** and **equity and financial protection** require a focus on expanding primary care services, including increasing the scope of the PMG's AMP (section 5.5) and the functionality of the private pharmacy network. The AMP has the potential to support more-effective service delivery and reduce potentially impoverishing out-of-pocket payments for the population. Revitalizing and reinforcing the e-prescription system is a priority.

**Accountability** considerations require that procedures for medicines procurement via public or donated funds should be strengthened to increase transparency (and efficiency). Ukraine has made strong progress on this in recent years. Most of the public procurement for medicines and health products is conducted by the Central Procurement Agency. In recent years, capacity-building of Agency staff members in quality management was conducted through specific theoretical and practical training in order to receive an import licence. The Government of Ukraine should also consider the **resilience** and **efficiency** criteria to make a strategic decision on the public supply chain. Having worked for several years with an outsourced model, the Central Procurement Agency and its stakeholders should study the pros and cons of (i) the current model (largely outsourced) against (ii) a model in which the Agency would use internal capacity to import, store and distribute medicines, or (iii) a mixed model.

Recovery of the national pharmaceutical sector depends on sustaining pre-war gains and using this opportunity to strengthen areas that were historically challenging, such as pricing. Pharmaceutical service delivery has undergone substantial disruption in war-affected areas owing to rapid population movements, destruction of critical infrastructure with consequent difficulties in supply planning, and the initial shutdown of many private pharmacies. To improve **resilience** in medicines supply, there is a need to create on-duty pharmacies that are ready to operate on a continuous basis, are protected from external damage, have

a register of pharmacists who are qualified to work in war time, and whose medicine stocks are designed to be ready for a state of emergency. Different options are possible, with good potential for a partnership in which the State is responsible for the norms and specification of medicine stocks and is financially responsible for ensuring the availability of a minimum stock of essential drugs, and the private pharmacies focus on delivery and management.

Before the war, the pharmaceutical industry in Ukraine supplied about 75% of the national market (as measured in units). Production dropped in March due to the war as several manufacturing sites and warehouses were destroyed or damaged. Supply lines for raw materials and packing materials were disrupted, as were energy supplies to the facilities. The industry, which employs many women, also lost a significant number of skilled staff who became refugees. In addition, companies are, of course, facing enormous financial problems in paying their suppliers (both within and outside Ukraine). Despite these challenges, production began again during April, with some manufacturers running 24-hour shifts and some having regained access to international capital.

As part of the humanitarian response, supplies were provided through WHO and the international community, nongovernmental organizations and the pharmaceutical industry outside Ukraine. The last also aimed to address the increased demand for analgesics, antibiotics and surgical materials. The situation is quite challenging, with congestion problems reported in bringing supplies into Ukraine and in distribution sites within the country.

In the short term, ongoing humanitarian support can also serve to strengthen the foundations for the future. There is an immediate need for rebuilding and to provide both financial and technical support so that companies can repair their production and warehousing facilities and also upgrade them to comply with higher regulatory standards (Table 4). This can provide opportunities to attract new technologies and increase efficiency. Financial support will be needed for raw materials and credit lines need to be provided for the industry to restore its supply lines, with suppliers as well as clients. Finally, there is also a short-term need for an intensive training and employment programme, including for staff in production facilities, research and product development departments, and quality control and regulatory departments. Although the extent of such training will depend on the number and rate of return of technical staff who have left the country, it is important to focus on this now.

Looking further forward, Ukraine will benefit from a comprehensive national strategy on biomedical innovation as an investment in human capital, including in universities and research institutions. Combined with seeking technology transfer and licensing agreements, this strategy will help to create a dynamic

**Table 4.** Implications of the tenets for infrastructure, equipment and medicines, with sequencing

| **Implications** (also see Table 2) | Green/red light | Initial | Follow on |
|---|---|---|---|
| Renovate or construct primary care facilities based on an expanded and extended delivery model with greater energy efficiency, ensuring climate resilience, environmental sustainability and resilience to infectious diseases | 🟢 | X | X |
| Perform critical short-term hospital renovations incorporating greater energy efficiency while minimizing negative impacts on the environment and maintaining health and well-being | 🟢 | X | |
| Develop healthcare facility renovation and construction plans prioritizing multiprofile hospitals, geographical network development and equity across regions | 🟢 | X | |
| Renovate or construct secondary and tertiary health care facilities in accordance with plans that ensure climate resilience, environmental sustainability, greater energy efficiency and resilience to infectious diseases | 🟢 | | X |
| Rebuild and strengthen the IT infrastructure, including devices and connectivity | 🟢 | X | X |
| Plan, procure and manage an inventory of costly high-tech medical equipment | 🟢 | X | X |
| Maintain and strengthen both central medicine procurement and NHSU purchasing of PMG services, together with AMP reimbursement via private pharmacies | 🟢 | X | X |
| Rebuild or strengthen the domestic production capacity for vaccines, pharmaceuticals and medical products | 🟢 | X | X |
| Upgrade the regulatory system for medicines and medical products | 🟢 | X | X |
| Develop a national biomedical R&D agenda with investment in science and technology to help in upgrading the medicines and medical products industry | 🟢 | | X |
| Do not simply rebuild what has been destroyed, but with planning based on the service delivery network and health needs (see Table 2) | 🔴 | | |
| Do not build/rebuild fragmented e-health and financial information systems | 🔴 | | |

AMP: Affordable Medicines Programme; IT: information technology; R&D: research and development.

industrial sector capable of producing high-quality medicines and medical products, supported by an incentive and regulatory/legal climate that can attract investment. A priority should be to ensure that regulations on the production and circulation of medicines are harmonized with EU legislation and take account of the requirements of the EU Association Agreement and the conditions for membership of international organizations. Simplified procedures for conducting clinical trials in the country, if they are well-governed, can provide additional opportunities for the population's access to pharmaceuticals and for additional revenue streams for health facilities.

## 5.5 Health financing

The draft Health Strategy 2030 prioritizes the importance of strengthening key institutions in the health sector, including the NHSU as the national strategic purchasing agency, and of implementing policies intended to ensure that the entire population can obtain state-guaranteed quality health services with financial protection *(7)*. The design is consistent with international best practice *(23,24)*, and WHO fully supports this approach. Together with other development partners, WHO will continue to work with the NHSU, Ministry of Health and other relevant bodies to support Ukraine to take forward its health financing reforms.

The macroeconomic and fiscal consequences of the war suggest that government revenue will be tight, and this will impact the capacity for public spending on health. Although the share of health in total government spending increased substantially in the 2020–2021 period, this was largely due to the COVID-19 response. However, from 2016 to 2019, the health sector was steadily deprioritized in public spending, although real per-capita levels were rising due to steadily improving gross domestic product during this period *(25)*. However, effective health financing depends on more than just the level of spending. The ability of the system to cope with both pre-existing and new needs will be compromised if the trend of deprioritization since 2016 is resumed, as this implies stagnation or decline in real levels of government health spending, given the expected negative impact of the war on growth of Ukraine's gross domestic product and tax revenues.

In this context, the scope for new public resource mobilization is limited. However, as noted in the draft Health Strategy 2030, increased taxes on tobacco, expanded taxes on alcohol and the introduction of a tax on sugar-sweetened beverages should be pursued *(7)*. Such health taxes are important public health measures that are also likely to generate some revenue for government in the short term. While expanded international aid flows to support recovery are expected, design and negotiation of the actual mechanisms for this should incorporate explicit attempts to ensure that these external funds are additional to rather than substitutes for some domestic budget allocations for health. President Zelenskyy's recently

launched United24 initiative includes health as one of its three pillars and offers the potential to channel charitable donations into the government budget *(6)*. Thus, it effectively supports the health sector budget and is fully aligned with the Government of Ukraine's public financial management mechanisms.

Other options to mobilize funds from the population, such as increased use of co-payments and voluntary health insurance (VHI), should be treated with caution. International evidence demonstrates that neither is a panacea for solving the funding problem; moreover, they pose a risk of doing more harm than good. The challenge that few countries have managed to overcome is to design these private sources in a manner that is explicitly complementary to public funding for the guaranteed service package.

In most countries, VHI is not effective in reducing out-of-pocket spending. Instead, it tends to widen inequalities in access to services *(26)*. In only three countries (Croatia, France and Slovenia), VHI is designed to be explicitly complementary to the national health coverage program by covering the co-payments that are part of benefit design. These countries have been able to ensure equity only by limiting VHI to this role in the health system and by providing additional fiscal outlays (public budget funding) to directly subsidize uptake by lower income groups. In other countries, VHI contributes to wider inequalities (27, 28). Moreover, using tax credits and deductions – in effect, public spending – to subsidize VHI uptake has been particularly problematic in contexts where it is not designed to complement the publicly guaranteed benefit package. In such cases, these tax subsidies disproportionately benefit people with a higher income, who already have the capacity to buy VHI *(27)*. Therefore, before considering such subsidies, Ukraine would need to create the enabling conditions for complementarity and **equity**, including a strong regulatory framework.

The initial design of Ukraine's health financing reforms included a set of priority services (the PMG) that are meant to be free of charge to users, with the intention to gradually expand the extent of services covered in this way as fiscal space increased. While the practice of charging patients informally remains, it will not be solved simply by introducing co-payments. Turning the promise of free-of-charge benefits into a reality for the population depends critically on coordinated policy action to increase public funding for the PMG, strengthened purchasing methods of the NHSU in a way that enables providers to make **efficiency** gains (for example, by reducing utility cost), and stronger monitoring and governance to determine whether services that are supposed to have zero co-payment are actually provided free of charge to patients. For services outside the scope of the PMG, any co-payments need to be designed in a manner consistent with policy objectives by setting fees that are defined in fixed currency terms rather than as a percentage of cost or charge; set at low, affordable levels; defined in simple terms that are easy for the population to understand (**transparency**); and include

mechanisms to protect lower-income persons (**equity**). WHO recommendations on this make clear both that co-payments are not a feasible mechanism to increase budgetary space for health, and that co-payment design should follow these good practice principles *(29)*.

Recovery provides Ukraine with the opportunity to resume the health financing reforms initiated in 2016 *(11)*, and to take the next steps needed to realize the benefits of these reforms (Table 5). National pooling contributes to **equity** and **resilience** by maximizing the potential to redistribute to where needs are greatest. This is a critical concern for equity, given the wide variations in the impact of war, as well as the pre-war distribution of income and poverty across geographical regions. Prior to the war, Ukraine had an unfinished agenda of pooling reform. Local governments continued to take responsibility for financing utility costs in government health facilities, and local governments in higher-income regions provided supplemental recurrent financing to providers in addition to the funds received from the NHSU through its purchasing of the PMG benefits. The draft Health Strategy 2030 envisages that NHSU is the single national purchaser of health services for the population and, as such, would pool all public funding for recurrent costs of the PMG, including the funding that local governments currently use for health facility utility costs *(7)*. This further extension of pooling and purchasing reforms should intersect with investment plans for the service delivery infrastructure to align financial incentives and governance arrangements to drive **efficiency** gains arising from changes in the service delivery structure and models *(23,30)*. In this process, local governments would retain the responsibility for capital investment in and development of health facilities.

Transition of provider payment for PMG services to a formula-based approach will enable increased **people-centredness, equity, efficiency** and **resilience** due to the increased flexibility this provides. For example, the NHSU can consider updating (continuous or retrospective) primary care enrolment or catchment areas to reflect population mobility and IDP concentrations in particular geographical areas, adding payment adjustors to the formula to incorporate short- and longer-term policy objectives while maintaining budget neutrality, and addressing any barriers in public financial management. The NHSU's market power can be increased by incentivizing hospital sector restructuring with an emphasis on multiprofile hospitals organized on a territorial basis (hospital district), addressing inequity across regions, reducing fragmentation in service packages and gradually moving towards selective contracting.

Further expanding the scope of the PMG's AMP can drive gains in **people-centredness, efficiency, and equity** and **financial protection**, as this has the potential to improve service delivery, accelerate the transition from inpatient to outpatient services, align private sector pharmacies with public policy objectives and substantially reduce out-of-pocket spending for the population.

Updating NHSU information systems is a priority to enable the agile operation of payment systems, integration of financial and e-health information systems, and use of data to continuously refine and improve PMG purchasing.

**Accountability** requires a clear functional specification of roles and relationships combined with improved financial management at all system levels, but particularly in health facilities. Output-based payment delegates to health facilities the right to determine and procure the best mix of inputs, indicating a need for better management systems, procurement procedures and internal controls. As the owners of regional health facilities, local governments should empower facility managers to respond to financial incentives in accordance with desired policy objectives and, thus, maximize investment results by delivering health services more effectively, performing good financial management and reporting publicly on the use of funds. If local authorities continue to finance service inputs, they could shift from fixed infrastructure costs (such as utilities) to public health

**Table 5.** Implications of the tenets for health financing, with sequencing

| Implications | Green/red light | Initial | Follow on |
|---|---|---|---|
| Strengthen NHSU institutional and staff capacity, with sufficient funding for administrative costs |  | X | X |
| Shift funds for facility utility costs from local government to NHSU, thereby fully transforming NHSU to be the single purchaser of individual health services |  | | X |
| Improve NHSU information systems to enable flexible strategic purchasing through implementation of a formula-based payment system for the PMG (e.g. to cope with population mobility) and incentivize hospital restructuring |  | X | X |
| Expand the use of health taxes to promote health and raise revenues |  | X | X |
| Refine capital and inventory accounting procedures (see Table 4) |  | X | |
| Strengthen the autonomy and accountability of facility-level financial management systems |  | X | X |
| Do not return to 2016–2019 trend of steadily deprioritizing health in public spending |  | | |
| Do not move away from universal, non-contributory-based entitlement to health services, funded from general revenues |  | | |

and multisectoral programmes for health and social assistance appropriate to their local context. This could support the delivery of much-needed services for the population while overcoming the existing distortion of the incentives for realigning the structure of the health delivery system. National and local accountability measures are also required to determine whether the promised PMG benefits are realized for the population. Capital procurement (section 5.4.1) also has consequences for health financing, in particular related to strengthening procurement procedures and internal controls.

## 5.6 Health system governance

Effective governance of the health system and the investment process will be key to the success of recovery efforts (Table 6). **Accountability** and **efficiency** require clear and transparent functional specification, institutional structure, and roles and relationships, including:

- specifying roles and functions among national health institutions/agencies, including the Central Procurement Agency, Ministry of Health, NHSU and UPHC;
- specifying roles and functions across national Government and ministries, including working with the Ministry of Finance and Ministry of Economy on multiyear planning of recurrent and capital budgets, and with other ministries to enable a multisectoral approach to health;
- specifying roles and functions across government levels, including in the governance of autonomous health facilities and structures for governing and managing the emerging networks of health facilities, distinguishing facility-level from local government roles and, as part of this, developing the roles and functionality of governance bodies, notably supervisory boards for health facilities and health facility networks;
- strengthening mechanisms for coordination and cooperation among neighbouring local governments in relation to planning and operating health facilities within the network, patient referrals and transfers (for example, by establishing cooperation within and between the oblast-wide hospital districts), and in public health functions;
- strengthening engagement and regulatory mechanisms to align private entities in the health system with public policy aims; and
- increasing the voice and engagement of citizens in decisions that affect them, such as PMG development, health facilities network planning, citizen/patient monitoring and feedback on the quality and availability of health services and on informal payments, and social accountability, including civil society engagement to help alert authorities to potential cases of corruption and fraud.

Ensuring **accountability** through transparent procurement processes for major capital investments requires strengthening oversight capacity at all government levels and establishing databases, systems and processes for monitoring progress and the use of investment funds. The use of independent expert commissions will help to ensure that the allocation and selection of investments aligns with the five tenets and that the decision-making process is manageable and transparent, given the very large number of stakeholders with different interests who will seek to influence decisions. **People-centredness** and **equity** considerations reflect the need for national and local governments to apply transparent criteria and data analysis to prioritize the allocation of resources for investment across the different regions of the country based on population need.

The nature of public and private sector relationships will be a key element in rebuilding the health delivery system in Ukraine. Experiences during the war in Ukraine indicate that **equity, efficiency** and **resilience** are best served in the short to medium term by maintaining public ownership of most health facilities.

As with other types of emergencies, conflicts are often associated with rapid reductions in private sector capacity, resources and activity. For example, many retail pharmacies in Ukraine closed their operations at the beginning of the war and have been reluctant to reopen in conflict-affected areas. With Ministry of Health and NHSU leadership, a sustainable solution may be found to promote system resilience by keeping private pharmacies in business, for example, by incorporating supply-side financing into contracts to include availability payments if the demand is substantially reduced owing to population displacement. Looking towards recovery, if public–private partnerships are to be considered a major procurement strategy for reconstruction or capital investments in inpatient and outpatient specialty care, national investors and development partners should ensure that they use the tenets as criteria to assess both general procurement strategies and specific investment proposals. This will help to reduce the likelihood of committing to fixed and sizeable allocations of future resources to service areas that would not otherwise be prioritized.

The collective capacity of health facilities should be sufficient (including for surges, as needed) but not excessive to cover the population's health care needs. Health facilities should be able to easily and rapidly adapt to unexpected health needs (e.g. epidemics, natural disasters) or transitions from civilian to military administration. At the same time, a balance is needed to avoid over-regulation and ensure sufficient autonomy for health facilities (with corresponding management accountability) to enable efficiency gains to be realized and reinvested to benefit patients. Policy for and regulation of the private sector are key, particularly in the context of NHSU purchasing from private providers and pharmacies within scope of the PMG, including the AMP. More generally, clear policies and regulations

are essential to align private providers with public policy objectives, for example for the planning and organization of the health facilities network, emergency planning, and access and better use of information across the entire health sector. Potential policies on the use of public–private partnerships for some of the planned investments need to be carefully designed to ensure sufficient government capacity to manage such arrangements.

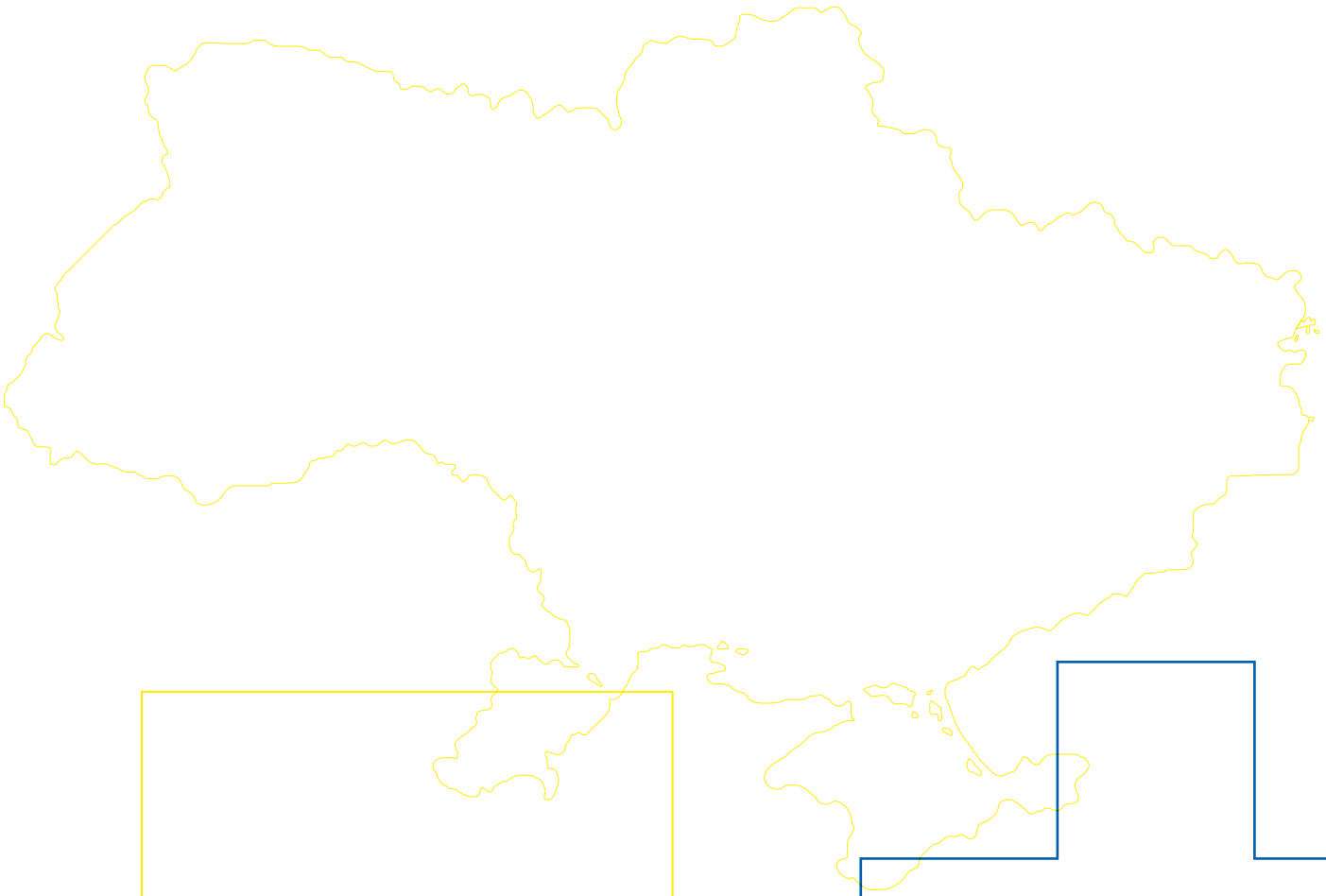
Lastly, and as reflected in sections 5.1–5.5, a key enabler for all of the tenets is data to inform policy and management decisions. Effective governance is needed for a health system that supports effective service delivery while complying with the Government's cybersecurity measures. More specifically, there is a need to move towards seamless, integrated or interoperable e-health and financial information systems across all health system functions, levels of government, and public and private sectors.

Application of the criteria to separate health system functions can appear to result in a long "to-do" list, when in fact many of the actions are closely linked and interdependent. At the core are services for public and individual health (Fig. 1), which are made possible through the efforts of the health workforce in using equipment, medicines and supplies, as well as through the physical and digital infrastructure of the health system. In turn, the use of all inputs is influenced by financial incentives and by the rules and regulations of the health system. Governance, together with improved management across the entire system, helps pull all the pieces together to align with priority health objectives.

**Table 6.** Implications of the tenets for health system governance, with sequencing

| Implications | Green/red light | Initial | Follow on |
|---|---|---|---|
| Functional specification, realign roles and relationships across all government levels, and build capacity | 🟢 | X | |
| Increase the voice and engagement of citizens in decisions that affect them | 🟢 | X | X |
| Strengthen transparency and independent oversight of capital investments | 🟢 | X | X |
| Integrate or make interoperable information systems while ensuring cybersecurity | 🟢 | X | X |
| Do not undermine facility autonomy (facility management is essential for recovery) | 🔴 | | |


ГРАФІК ПРИЙОМУ
П.І.Б ПН. ВТ. СР. ЧТ. ПТ. СБ.
сультативно-діагностичний центр», філія № 1
Конєв Едуард Якович
Тимчасово відсутній
Моргун Сергій Васильович
9:00 - 14:00
Білоус тяна Володимирівна
9.30 – 14.30
Околіта Микола Іванович
Гізатуліна Олена Олександрівна
14.30 -18.00
9.00 -12.30
Подройко Світлана Володимирівна
8:00 - 13:00
Романенко лег Володимирович
Крохмаль Тетяна Вікторівна
8:00 - 11:00
Логінова Тетяна Олексіївна
14:00 - 19:00
Винниченко Микола Миколайович
Новак Ірина Леонідівна
Онікієнко Євгеній Петрович
Корчинський ндрій Анатолійович
учкова Юлія Ігорівна
Шпагін ергій Олександрович
№ каб.
Спеціальність
П.І.Б
ПН. ВТ. СР. ЧТ.
Амбулаторія загальної практики – сімейної медицини, вул. Воло
337
Сімейний лікар
Валничний Володимир Володимирович
9:00 - 11:00
215
Рагуліна Ольга Володимирівна
125
Кудрявцев Володимир Владиславович
15:40-20:00
8:00 - 12:20
8:00 - 12:20
12:00 - 16:20
128
Кифлюк Тетяна Миколаївна
ВІДПУСТКА
330
Шелія Етері Севастіївна
317
Шпагіна Олена Василівна
12:00 - 16:20
10:00 - 14:20
9:00 - 13:20
15:40-20:00
327
Денисенко Валентина Антонівна
9:00-13:20
8:00 - 12:20
12:00 - 16:20
Лисенко Катерина Едуардівна
10:00 - 14:20
12:00 - 16:20
15:40-20:00
8:00-12:20
117
Огороднійчук Ольга Олександрівна
8:00 - 12:20
15:40-20:00
12:00 - 16:20
9:00-13:20
Амбула загальної практики – сімейної медицини, вул. Туров
224
Терентьєва дмила Володимирівна
Кривонос еоніла Василівна
Рибалкіна аталя Генріхівна
9:00 - 13:20
13:00 - 17:20
9:00 - 13:20



# 6. Summary, conclusions and future directions

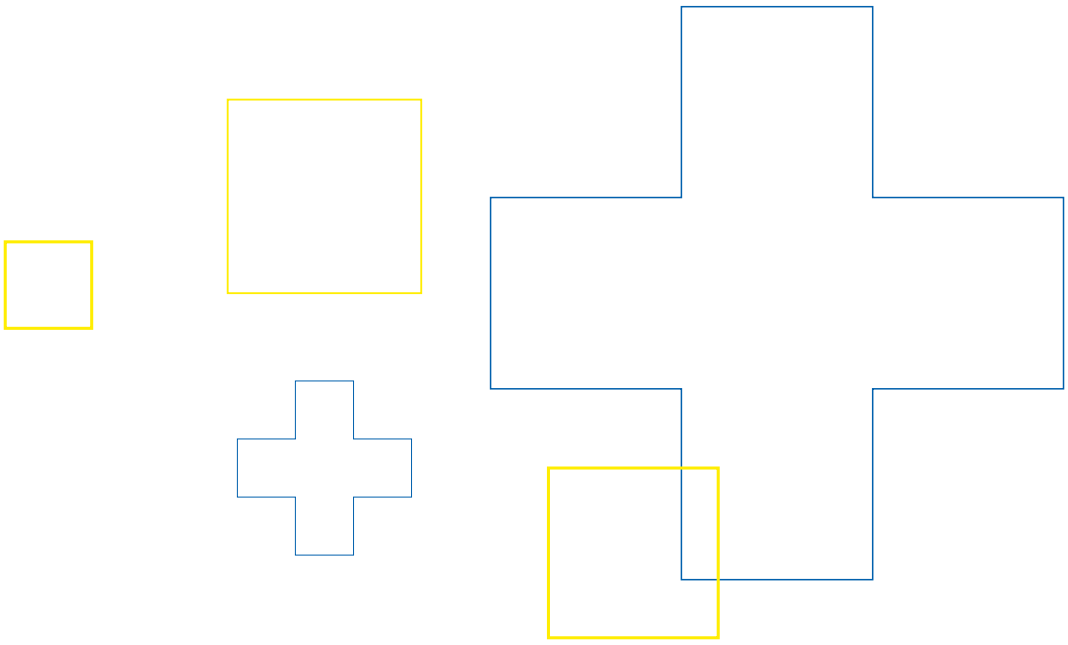
Even while the war in Ukraine continues, the Government is preparing for the country's recovery and reconstruction. Given the magnitude of the attacks on Ukraine's health facilities that have disrupted health system functioning, population health and the health sector are integral to the country's recovery. Immediate priorities are to restore essential services, respond to new needs related to physical and mental trauma, protect public health, and provide a secure and attractive environment for the return of health professionals and the general population.

This policy note identifies strategic directions for post-war health system recovery in the short and longer terms, while sustaining essential health services in the context of ongoing hostilities. The strategic directions are based on a set of proposed tenets for use as assessment criteria to guide policy and investment to better enable the health system to get individual and public health services to the population, rather than merely rebuilding what was destroyed by the war. The five tenets are **people-centredness, equity and financial protection, resilience, efficiency and sustainability, and accountability.** The application of these tenets to the recovery strategy offers the opportunity to align investments and policy priorities with the main directions of Ukrainian health reform, including the EU accession process, and to accelerate the transformation of Ukraine's health system.

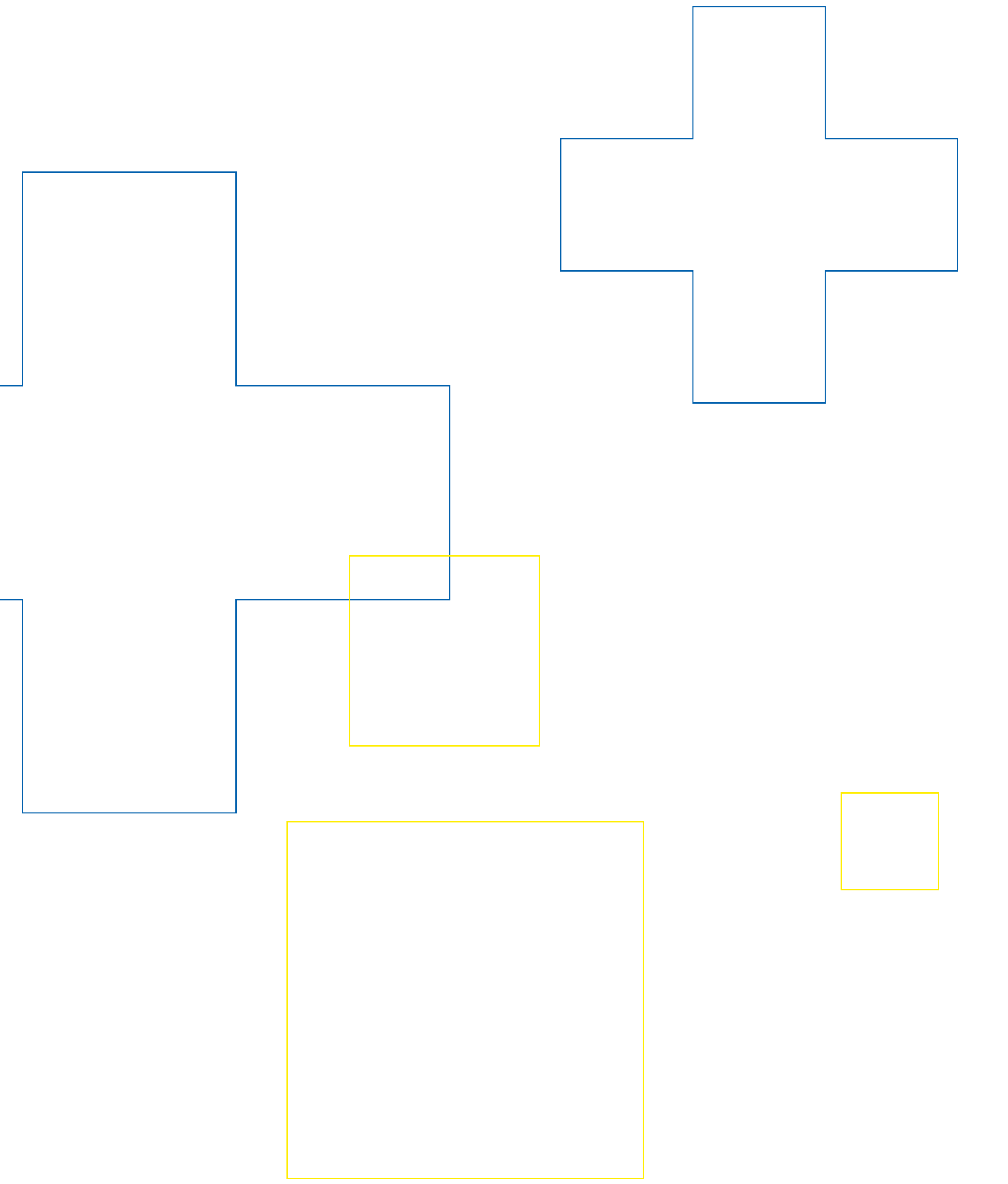
The policy note also provides concrete recommendations for sequenced priorities, while noting that contexts vary widely across the country owing to the effects of the war. There is a strong base from which to begin: the strengths of Ukraine's pre-war health system, the direction of reforms already taken, and the experience and capacity of the leadership and staff. The proposed approach is to immediately integrate humanitarian assistance (short-term support for urgent needs) into the facilities and services managed by Ukraine's health system. This approach will lay the groundwork to strengthen the existing, renovated or rebuilt PHC facilities to become more people-centred and oriented to reach those most in

need and with the capacity to deliver expanded PHC services to meet the new needs arising as a direct result of the war; enhance linkages with community-level public health services and surveillance; and improve access to medicines, first aid, trauma and emergency care. It provides the foundation upon which to align the rebuilt/restructured/new and energy-efficient multiprofile hospitals and outpatient specialty centres.

The principles and approach of this paper are consistent with the Government's declared commitment to develop a recovery plan for Ukraine *(8)*. Each sector, including the health sector, should develop a recovery plan that specifies objectives, assesses how to attain them in the context of current challenges and reform implementation, and defines further implementation plans. Sector recovery plans should be ready for adoption by the time of the Ukrainian Recovery Conference in July 2022 – this ambitious time frame has specific milestones for drafts in May and June. This policy note may be seen as *step zero* of this process, with its five tenets aligned with the draft Health Strategy 2030 to orient development of the health sector recovery plan *(7)*. Throughout May and June 2022, it will be essential for WHO and other partners to collaborate and work closely with the Government of Ukraine to ensure the timely delivery of a forward-looking plan that responds to the country's immediate needs and supports the desired transformation of the health system. This will ensure that Ukraine's population is secure in the knowledge that it is served by an efficient and equitable health system that is prepared to respond to threats, promotes population health and offers good-quality health services with protection against financial hardship.




AMBULANCE
103
AA 5904 PH



# References[2]


1. Health and economy [website]. Brussels: European Observatory on Health Systems and Policies; 2021 (https://eurohealthobservatory.who.int/themes/observatory-programmes/health-and-economy#:~:text=Health%20and%20the%20economy%20are,development%20and%20a%20strong%20macroeconomy).

2. The WHO Council on the Economics of Health for All – Manifesto: 24 September 2021. Geneva: World Health Organization; 2021 (https://cdn.who.int/media/docs/default-source/council-on-the-economics-of-health-for-all/who-council-eh4a_manifesto_09112021.pdf?sfvrsn=788671_5).

3. Health Strategic Advisory Group. National health reform strategy for Ukraine 2015–2020. Kyiv: Ministry of Health of Ukraine; 2014 (https://en.moz.gov.ua/uploads/0/16-strategy_eng.pdf).

4. The Tallinn Charter: health systems for health and wealth. Copenhagen: WHO Regional Office for Europe; 2008 (https://apps.who.int/iris/handle/10665/349648).

5. Political Declaration of the High-level Meeting on Universal Health Coverage "Universal health coverage: moving together to build a healthier world". New York: United Nations; 2019 (73rd session of the General Assembly of the United Nations; https://www.un.org/pga/73/wp-content/uploads/sites/53/2019/07/FINAL-draft-UHC-Political-Declaration.pdf).

6. United24: the initiative of the President of Ukraine. Kyiv: Government of Ukraine; 2022 (https://u24.gov.ua/).

7. Міністерство охорони здоров'я. Про утворення міжсекторальної робочої групи з питань розробки стратегії розвитку системи охорони здоров'я до 2030 року. [On the establishment of a cross-sectoral working group to develop the national health strategy 2030 [website]. Kyiv: Ministry of Health; 2022] (https://moz.gov.ua/strategija) (in Ukrainian).

8. About the National Council for the Recovery of Ukraine from the War [website]. Kyiv: Government of Ukraine; 2022 (https://www.kmu.gov.ua/en/national-council-recovery-ukraine-war/about-national-council-recovery-ukraine-war)

9. Strengthening health systems resilience: key concepts and strategies. Brussels: European Observatory on Health Systems and Policies; 2020 (Policy Brief 36; https://eurohealthobservatory.who.int/publications/i/strengthening-health-system-resilience-key-concepts-and-strategies).


[2] All references were accessed on 20 May 2022.

10. World Meteorological Organization, United Nations International Strategy for Disaster Reduction. UN system task team on the post-2015 UN development agenda: disaster risk resilience. Geneva: United Nations International Strategy for Disaster Reduction; 2012 (https://library.wmo.int/index.php?lvl=notice_display&id=12490#.YoeUMqjMKSk).

11. [Relief, recovery and resilient reconstruction: supporting Ukraine's immediate and medium-term economic needs.] Washington (DC): World Bank; 2022 (in Ukrainian; https://documents1.worldbank.org/curated/en/099547405052230400/pdf/IDU063b2f81900861047a70b5540e3e950f93a8c.pdf).

12. Response to the COVID-19 pandemic: lessons learned to date from the WHO European Region. Copenhagen: WHO Regional Office for Europe; 2021 (Regional Committee for Europe 71st session; EUR/RC71/6 Rev.1; https://apps.who.int/iris/bitstream/handle/10665/343157/71wd06e-rev1-PR-Response-LessonsLearned-210693.pdf).

13. The FAO–OIE–WHO Collaboration: sharing responsibilities and coordinating global activities to address health risks at the animal–human–ecosystems interface. A tripartite concept note. Paris: World Organisation for Animal Health; 2020 (https://www.oie.int/fileadmin/Home/eng/Current_Scientific_Issues/docs/pdf/FINAL_CONCEPT_NOTE_Hanoi.pdf).

14. Porta M, editor. A dictionary of epidemiology, 5th edition. Oxford: Oxford University Press; 2008 (https://www.oxfordreference.com/view/10.1093/acref/9780195314496.001.0001/acref-9780195314496).

15. McNabb SJ, Chungong S, Ryan M, Wuhib T, Nsubuga P, Alemu W et al. Conceptual framework of public health surveillance and action and its application in health sector reform. BMC Public Health. 2002;2:2. doi: 10.1186/1471-2458-2-2.

16. Mirza N, Reynolds T, Coletta M, Suda K, Soyiri I, Markle A et al. Steps to a sustainable public health surveillance enterprise: a commentary from the international society for disease surveillance. Online J Public Health Inform. 2013;5(2):210. doi: 10.5210/ojphi.v5i2.4703.

17. Baker EL, Koplan JP. Strengthening the nation's public health infrastructure: historic challenge, unprecedented opportunity. Health Aff (Millwood). 2002;21(6):15–27. doi: 10.1377/hlthaff.21.6.15.

18. André F, Kergadallan M-L, Zheleznyakov E. France: community partnership in multidisciplinary primary health care in France. Copenhagen: WHO Regional Office for Europe; 2021(https://www.who.int/europe/publications/m/item/france-community-partnership-and-transformation-in-multidisciplinary-primary-health-care-in-france-(2021)).

19. Giniyat A, Jurgutis A, Abeuova Z, Stetsyk V, Jakab M. Kazakhstan: multidisciplinary teams for better alignment of primary health care services to meet the needs and expectations of people. Copenhagen: WHO Regional Office for Europe; 2021 (https://www.who.int/kazakhstan/publications/kazakhstan-multidisciplinary-

teams-for-better-alignment-of-primary-health-care-services-to-meet-the-needs-and-expectations-of-people-(2021)).

20. United Kingdom: population health management: meeting the needs of the vulnerable during COVID-19. Copenhagen: WHO Regional Office for Europe; 2021 (https://www.who.int/united-kingdom-of-great-britain-and-northern-ireland/publications/m/item/united-kingdom-population-health-management-meeting-the-needs-of-the-vulnerable-during-covid-19-(2021)).

21. Czechia: community-based mental health services: a lifeline during COVID-19. Copenhagen: WHO Regional Office for Europe; 2021 (https://www.who.int/czechia/publications/m/item/czechia-community-based-mental-health-services-a-lifeline-during-covid-19-(2021)).

22. WHO guidance for climate-resilient and environmentally sustainable health care facilities. Geneva: World Health Organization; 2020 (https://www.who.int/news/item/12-10-2020-who-publishes-guidance-on-climate-resilient-and-environmentally-sustainable-health-care-facilities).

23. WHO Regional Office for Europe, The World Bank. Ukraine: review of health financing reforms 2016–2019: WHO–World Bank joint report. Copenhagen: WHO Regional Office for Europe; 2019 (https://apps.who.int/iris/handle/10665/346328).

24. Kutzin J, Cashin C, Jakab M, editors. Implementing health financing reform: lessons from countries in transition. Copenhagen: WHO Regional Office for Europe; 2010 (https://apps.who.int/iris/handle/10665/326420).

25. Indicators and data. In: Global Health Expenditure Database [database]. Geneva: World Health Organization; 2022 (https://apps.who.int/nha/database/Select/Indicators/en).

26. Thomson S, Sagan A, Mossialos E. Private health insurance: history, politics and performance. Cambridge: Cambridge University Press; 2020.

27. Thomson S, Cylus J, Evetovits T. Can people afford to pay for health care? New evidence on financial protection in Europe. Copenhagen: WHO Regional Office for Europe; 2019 (https://apps.who.int/iris/handle/10665/311654).

28. Sagan A, Thomson S. Voluntary health insurance in Europe: role and regulation. Copenhagen: WHO Regional Office for Europe; 2016 (https://apps.who.int/iris/handle/10665/326316).

29. Co-payment policy: considerations for Ukraine. Copenhagen: WHO Regional Office for Europe; 2021 (https://apps.who.int/iris/handle/10665/341727).

30. Bredenkamp C, Dale E, Doroshenko O, Dzhygyr Y, Habicht J, Hawkins L et al. Ukraine health financing reform: progress and future directions. Washington (DC): World Bank; 2021 (https://documents1.worldbank.org/curated/en/704581639720587025/pdf/Ukraine-Health-Financing-Reform-Progress-and-Future-Directions-Overview.pdf).

**The WHO Regional Office for Europe**

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

**Member States**

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

WHO/EURO:2022-5750-45515-65155

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