Joint review prepared by the World Health Organization and the World Bank

Health financing in Ukraine: reform, resilience and recovery

Synthesis report

Draft for consultation

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Abbreviations

AC	Accounting Chamber
AMP	Affordable Medicines Programme
AR-DRGs	Australian-refined diagnosis-related group
CDB	central database
COVID-19	coronavirus disease 2019
EML	Essential Medicines List
EU	European Union
GDP	gross domestic product
HeRAMS	WHO Health Resources and Services Availability Monitoring Surveys
IDPs	internally displaced people
IMF	International Monetary Fund
INN	international nonproprietary name
MISs	Medical Information Systems
NCD	noncommunicable disease
NEML	National Essential Medicines List
NHSU	National Health Service of Ukraine
OOP	out-of-pocket
PCC	Public Control Council
PHC	primary health care
PMG	Programme of Medical Guarantees
PPP	public–private partnership
RDNA	Rapid Damage and Needs Assessment
SOP	standard operating procedure
TB	tuberculosis
UHC	universal health coverage
VHI	voluntary health insurance

1. Introduction

Beginning in 2015, the Ukrainian Government started to discuss fundamental reforms to the health financing system, with the goals of improving access to health care for the population and providing enhanced financial protection from excessive out-of-pocket (OOP) payments. This culminated in the adoption of the Law on Government Financial Guarantees of Health-care services in 2017, which established a unified benefit package called the Programme of Medical Guarantees (PMG) and established the National Health Service of Ukraine (NHSU) to serve as the single purchaser for this programme. Under the PMG and in line with international evidence of best practices for health financing reforms for universal health coverage (UHC), entitlements would continue to be funded through general government revenues, a single set of entitlements for all Ukrainians would be guaranteed; and funds would be increasingly centralized, replacing the decentralized and fragmented system that preceded reform. In addition, payment to health facilities would transition to capitation in primary health care (PHC) and activity-based payments in specialist and inpatient care (supported by a unified national e-health information system), aligning the provision of care with population needs and generating a stimulus for facilities to strive towards greater efficiency and quality of care.

WHO and the World Bank have published two joint reviews of these health financing reforms: a first in 2019 *(1)*, and another in 2022 *(2)*. The first of these examined progress across the first two years of implementation, highlighting achievements, identifying challenges and providing recommendations for further progress. By the time of the second report, and despite disruption due to the coronavirus disease 2019 (COVphcID-19) pandemic, these reforms had achieved several positive impacts. PHC enrolment had increased to include more than 70% of the population; and the NHSU had assumed management of the PMG and its companion programme, the Affordable Medicines Programme (AMP). The PMG had been expanded to include financing and coverage of specialized and emergency care, tuberculosis (TB) and mental health care and COVID-19 vaccination. Reforms to the PHC payment system were in operation and reforms to the payment system for specialist and inpatient care system underway, with reporting of hospital cases by AR-DRGs, in preparation for payment according to this method, established. The e-health system had become more sophisticated although this was mainly focused on capturing data needed for the NHSU to calculate payments to providers, as well as manage e-prescriptions and e-referrals.

Completion of the second report was swiftly followed by the full-scale invasion of the country by the Russian Federation, on 24 February 2022. Since the invasion, Ukraine's health system has been forced to operate in the context of war; Europe's largest since 1945. In this context, the current report – the third in the series of joint reviews – recognizes the impacts of the war on the ways in which health financing reforms continue to be implemented and argues for the importance of such an approach.

These impacts have been profound. As of June 15, 2024, there have been 1835 confirmed attacks on health care in Ukraine, resulting in 143 deaths and 346 injuries. There has been population displacement on a huge scale, resulting in large adjustments in both the demand for health care and its geographical distribution, while health needs have changed, intensifying in a range of areas, including emergency medical services, trauma and burns, rehabilitation and mental health conditions. The economic shock caused by the war has also had a major impact on the fiscal space available for government health expenditure and on households' ability to pay for health care directly. This report highlights the important role played by the post-2015

reforms in strengthening the health system's response to these war-related impacts. It also recognizes that the economic, demographic and epidemiological shocks created by the war call for even bolder action to prioritize institutional capacity, transparency and accountability in expenditure, to enhance efficiency and to enable sustainable improvements in equity of access, financial protection and quality of care.

In this synthesis of the third report, the key overarching policy considerations are outlined (Section 2); key impacts of the war on the health financing context are highlighted (Section 3) and key recommendations and specific actions for meeting UHC goals of improved access are defined, including increased affordability for patients and enhanced quality of care (Section 4). Achieving these UHC goals in the context of the fiscal constraints Ukraine now faces will require attention to efficiency, together with institutional strength, transparency and accountability (Section 5). After the conclusion, two annexes are included. These summarize the recommendations made (Annex 1) and show how they can work when combined to ensure an even greater impact on health financing policy objectives, including in the context of the war (Annex 2).

2. Over-arching messages

The current health financing reforms have enhanced the resilience of the health system to the effects of the pandemic and the war. Ukraine has maintained universal population coverage under the PMG, ensuring that all citizens and permanent residents can access essential health services with financial protection. This approach has proven to be a strength of Ukraine's health system, particularly in the context of war-induced population displacement. In addition, reliance on general government revenues for health coverage, rather than wage-linked entitlement and contributions, mitigated the funding and coverage disruptions generated by the war's economic effects. Central pooling of funds and their management by NHSU, allowed continued financial coverage in territories affected by war that had lost their own locally generated revenues. More explicit definition of services covered under the PMG allowed the Government to develop COVID-19 packages during the pandemic and respond to specific new needs arising from the war, including rehabilitation and mental health *(3)*.

Safeguarding public financing and investment in health is critical – more so in the difficult economic and demographic context brought about by the war. Health is a human right and an important determinant of human capital; which, in turn, underpins longer-term economic growth and social resilience. The dire impact of the war on population health and the demographic profile of Ukraine underscores the need for a well-performing health system: one that has the capability to restore and maintain the health of Ukrainians, so that each citizen is able to contribute fully to their economy, society and household. Ukraine needs to prioritize health appropriately among the competing demands for the allocation of scarce public funds.

Efficiency in the health system is critical in the view of Ukraine's significant fiscal constraints faced due to the economic impact of the ongoing war. Calls for continued improvements in efficiency are not about reducing spending; rather, they are about maximizing value for money, ensuring that health, human capital and broader social welfare gains are maximized for every hryvna invested. No single silver bullet policy measure can deliver improved efficiency; rather, a combination of measures – in health financing, service delivery and governance – need to work together to achieve this objective. In addition, trade-offs between efficiency and access to health services in rural areas, preparedness and security considerations also need to be considered.

Continued prioritization and implementation of PHC is important. A strong, well-funded, high-quality PHC system – focused on delivering the most cost-effective interventions – is essential for efficiency of the overall health system. Such a system delivers the best value for money, reaches the most people and provides a viable alternative to relying predominantly on costly hospital-based care. PHC is the patient's gateway to the rest of the health system, including referrals to specialist care and prescriptions for medicines in the AMP. PHC is also at the centre of the humanitarian response in the most war-affected areas and for the most affected populations. Therefore, PHC needs to be adequately funded; and to ensure value for money, its performance must be monitored.

Investments in recovery from the damage and disruptions caused by the war offer an opportunity to build back better, enabling progress towards a more modern, optimally designed health-care delivery network. Recovery needs for investment are estimated at US$ 14.2 billion until 2033, including US$ 873 million immediately needed in 2024 *(4)*. Health authorities in Ukraine need to define a future vision for health service delivery, incorporating a

strengthened role for PHC and an optimized hospital network, ensuring that investments in recovery are used to realize this vision *(5)*.

Achievement of the Government's strategy for improving health services cannot be delivered by health financing reforms alone. Complementary reforms in health service planning, regulation and capital investment planning are also needed. Health authorities have begun planning and approving more efficient hospital networks, alongside policies for transitioning from inpatient-based care models towards day-patient, outpatient and community-based models in surgery, mental health, TB treatment and rehabilitation. A critical challenge remaining is to define the package of policy tools needed for implementation of these plans and policies. This will require closer coordination between central and oblast health authorities. Further steps to strengthen health-care provider governance, financial management and accountability are needed as well.

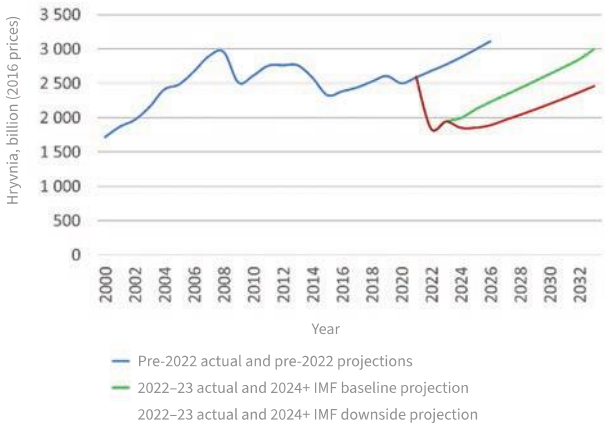
Strong, accountable and transparent institutions at the central and oblast levels are needed to successfully implement reforms and maintain public trust over a sustained period. Ukraine's health system needs to demonstrate how it will deliver sufficient value for money, quality, financial protection, accountability and equity in access to essential health care. Strong, competent institutions are essential to carry out technical functions for health financing. Accountability for performance is needed for continued commitment by society at large and for the Ministry of Finance and external financiers to continue to allocate adequate resources to health. Transparency in decision-making, with appropriate participation from key stakeholders, is essential for credibility in reforms and trust among the population. The impact of the war has made it more difficult to achieve these objectives; however, their importance remains paramount, and progress can still be made on the road to recovery and a more sustainable future. Health financing reforms already established have provided policy-makers with the tools needed to further improve the performance of the health system.

3. Context for implementing reforms

The context in which current health financing reforms are being implemented has significantly changed since their introduction in 2018 and since the first two related reports were written. This report covers a period that includes the latter phases of the COVID-19 pandemic and the war brought about by the Russian Federation's full-scale invasion in February 2022. Both crises have had major economic, social, health and health system impacts. On the international political front, the European Council took a decision in December 2023 to open European Union (EU) accession negotiations with Ukraine, a development that will shape policy priorities in Ukraine in the medium and long term, as well as create new opportunities for the country to receive EU assistance.

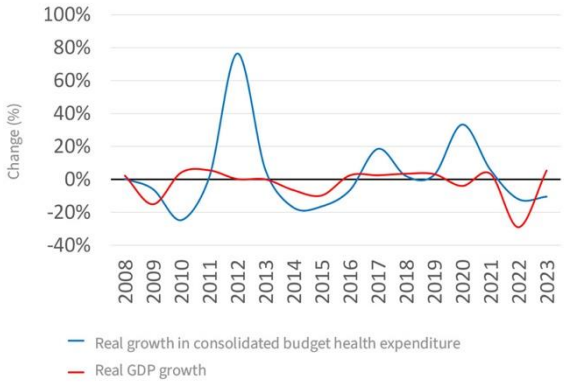
Russia's full-scale invasion struck a devastating blow to the Ukrainian economy and disrupted the country's progress towards long-term macro-fiscal stabilization. Since 2015, Ukraine had realized sustained economic growth and macro-economic stability, successfully navigating the economic impacts of the pandemic. The full-scale invasion in February 2022 directly damaged Ukraine's productive capacity – destroying physical infrastructure, killing and displacing people, undermining human capital and disrupting trade and investment. In 2022 real GDP fell by 28.8%, contracting to its 2000 level (Fig. 1). The International Monetary Fund (IMF) has forecast that it will take at least until 2030 to reach pre-2022 economic levels.

Fig. 1. Ukraine's GDP in constant prices



Sources: hard data: State Statistics Service of Ukraine *(6)*, projections: International Monetary Fund *(7)*, budget data: State Treasury Service of Ukraine *(8)*.

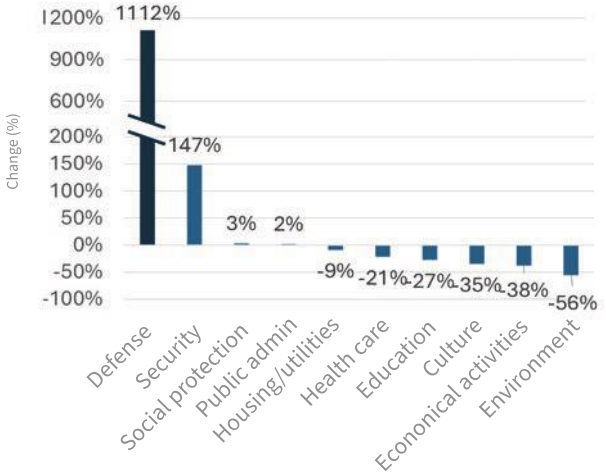
Fig. 2. Dynamics of GDP and consolidated health expenditure



Sources: hard data: State Statistics Service of Ukraine *(6)*, projections: International Monetary Fund *(7)*, budget data: State Treasury Service of Ukraine *(8)*.

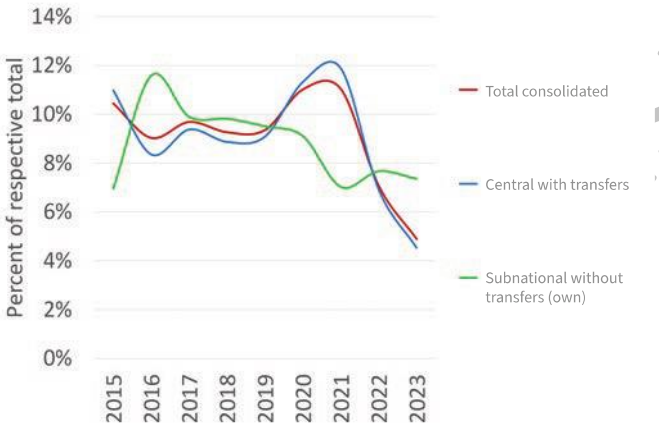
Changing priorities during the war placed further pressure on available public resources for health. This economic shock, combined with the prioritization of defence and security within the budget, put public spending on health under duress. Actual consolidated public expenditure on health declined by 12% in real terms between 2021 and 2022. In 2023, despite growth in real gross domestic product (GDP), real health expenditure continued to decline, bringing the overall fall in real consolidated spending during these two years to 21.3% (Figs. 2 and 3). As the composition of expenditure shifted towards defence and security, the health sector's share of the consolidated budget reduced from 11% in 2021 to 4.9% in 2023 (Fig. 4).

Fig. 3 Change in real consolidated budget expenditure by function, 2021–2023



Source: State Treasury Service of Ukraine *(8)*.

Fig. 4. Share of health expenditure from overall budget spending (2015–2023)



Source: State Treasury Service of Ukraine *(8)*.

Government spending is highly dependent on external financing. The economic impact of the war has dramatically reduced the availability of domestic resources for health; even as public spending grew significantly, increasing the general government deficit from 4% in 2021 to 15.7% of GDP in 2022, or approximately 24% of general government spending. External support is currently expected to cover most of this deficit. In December 2023 the Government approved a seven-year Revenue Strategy *(9)*, aimed at strengthening domestic revenue mobilization and financing the country's wartime and reconstruction needs. Among other measures, the Strategy proposes increasing excise taxes on products with adverse public health effects in order to bring both fiscal and health benefits. It also proposes a significant adjustment to the existing personal income tax system, explicitly tied to the post-war financing needs of social sectors.

The repercussions of the ongoing war extend to increased poverty and food insecurity. The proportion of Ukrainians living in poverty increased from 5.5% to 24.1% in 2022, pushing an additional 7.1 million people into poverty and setting back 15 years of progress *(10)*. Of households reporting food shortages within a 30-day period in November 2023, the total was 9% as per World Bank monthly surveys from April 2023. The labour market continues to face

high uncertainty, with employment rates having plummeted by 15.5% (equivalent to 2.4 million jobs lost) and output per person decreased by 13% compared with pre-war levels. All these factors underscore the profound and lasting impact that the conflict has inflicted on Ukraine's socioeconomic landscape *(4)*. Increased poverty levels also diminish the population's ability to pay OOP for essential health services and medicines and increase their risk of impoverishment due to OOPs.

Population movement induced by the war has been substantial, with potentially disruptive implications for the implementation of population- and activity-based health service financing mechanisms. The full-scale invasion led to an estimated eight million people leaving Ukraine and the internal displacement of millions more. The pre-war population of Ukraine was estimated at 43.3 million in January 2022 *(11)* but had fallen to 35.6 million by July 2023.[1] While many Ukrainians subsequently returned to the country, by November 2023 there were still 6.2 million Ukrainians registered abroad, of whom 94% were registered in Europe *(12)*. In addition, another 3.7 million were internally displaced *(13)*, half of these originating from two oblasts – Kharkivska (22%) and Donetska (24%) *(14)*. United Nations High Commissioner for Refugees survey results between January and February 2024 concerning the intentions and perspectives of refugees and internally displaced people (IDP) indicated that, while a majority (65% of respondents) planned to return, an increased proportion were either undecided or planning not to return (24% and 11% respectively, compared with 18% and 6% in April–May 2023). These data imply a smaller ongoing population and, therefore, a diminished economic potential for Ukraine in the near future.

Significant humanitarian support for meeting the essential needs of affected populations has been mobilized in the response to the war. The Ukraine Humanitarian Needs and Response Plan 2024 *(16)* guides emergency response services and enables access to basic services for IDPs, non-displaced people and returnees. This fosters cooperation for durable solutions through the provision of basic services to 7.8 million people in need, 3.8 million of whom have been targeted by health actors in locations where government-provided services remain challenging to access. This is fewer than in 2023, reflecting more targeted support. By the end of 2023, Ukraine had received an estimated US$ 181 million in humanitarian aid allocated to health sector. In 2024 an estimated US$ 52 million is available, which will meet only 35.7% of the estimated needs for the year *(17)*.

New demands for health services arising from war. In spring 2024, Ukraine was in a state of protracted emergency with the main health threats considered to be violence and conflict, mental health, noncommunicable diseases (NCDs), infectious disease outbreaks, maternal, newborn and child health, and sexual and reproductive health. While NCDs, particularly cardiovascular diseases and cancer, account for 91% of all deaths before the age of 70 in Ukraine, according to the Public Health Situation Analysis, the most important national health issues in 2024 were related to measles, HIV, TB, NCDs, environmental health risks and an increased risk level for conflict-attributed injuries and gender-based violence in the front-line oblasts. In 2023 measles and hepatitis A outbreaks were observed due to ongoing humanitarian emergencies, increased population mobility, suboptimal vaccination coverage and interruptions in surveillance, among other factors *(18)*. The ongoing conflict has exacerbated requirements for mental health support, with approximately 25% of the population in need of such services. The Health Needs Assessment showed that while overall in Ukraine, the proportion of people too

[1] Ukraine: subnational population statistics. In: Common Operational Dataset on Population Statistics [online database]. New York: United Nations Population Fund; 2022 (Reference date: July 2023; unpublished data).

anxious to perform their usual daily activity has decreased from 15 to 12% (and from 16 to 14% for IDPs), while for those living in areas of active hostility this proportion increased from 14 to 16% *(19)*. Over a quarter of households have a member with a disability (28%), and almost half of respondents (44%) reported elevated blood pressure *(20)*.

Martial law has had limited impact on the health reforms. The President of Ukraine implemented martial law on the first day of the full-scale invasion. This extended powers to government and the military command and temporarily limited some of the constitutional rights of citizens. However, the right to health, which is one of the constitutional rights, is not affected by the implementation of martial law. The legislative framework approved for health financing reforms remains effective, and the main elements of these reforms are not impacted by martial law, although implementation of some aspects are affected. For example, governance arrangements for hiring heads of health-care facilities (and government officials) do not currently require an open and competitive selection process; implementation of "cluster network" hospital reforms have been put on hold in six oblasts most affected by the war and until lifting of martial law *(21)*. Similarly, the establishment of supervisory boards at the level of health facilities is not mandatory until six months after the lifting of martial law.

Compared with circumstances during the first year of the war, access to care has improved, including for PHC; and people are deferring essential care less often. However, according to the Health Needs Assessment, the barriers that persist are the cost of medicines and treatment, time and transportation. In addition, some barriers such as refusal by providers to provide care and unavailability of services were reported, particularly for IDPs. People living close to areas with active hostilities or that have experienced hostilities in the past, have less access to family doctors and medicines compared with the rest of the country *(19)*.

The war has caused significant damage to infrastructure and service delivery, but the need to rebuild provides an opportunity to increase efficiency and quality of care. The effects of the war have been examined several times in Ukraine, both through the WHO Health Resources and Services Availability Monitoring Surveys (HeRAMS) *(22)* and the Rapid Damage and Needs Assessment (RDNA), jointly prepared by the Government of Ukraine, the European Commission, the United Nations and the World Bank *(4)*. The HeRAMS survey found that structural damage to health facilities was primarily concentrated in the northern, eastern and southern regions of the country due to conflict-related incidents. Access to water in health facilities was most limited in the southern oblasts impacted by the Kakhovka dam destruction in June 2023 *(21)*. The full-scale invasion has also resulted in significant shortages of health-care workers, particularly in eastern Ukraine *(23)*. The most recent RDNA report estimates that as of December 2023, the total cost of direct damage to health sector infrastructure and buildings was US$ 1.4 billion, with the most affected oblasts being Donetska, Kharkivska and Luhanska. The costs of reconstruction and recovery needs for the health sector, including provision for improved designs and service delivery models, were estimated at US$ 14.2 billion for 2024–2033, including US$ 873 million immediately needed in 2024 as prioritized by the Ministry of Health. If a positive opportunity was to be identified in this crisis, it would be in the potential to build back better, bringing about greater efficiency and enhanced quality of care, by reducing excess capacity in hospital infrastructure, expanding capacity in PHC and strengthening multidisciplinary responses to health needs *(24)*.

Improving transparency, efficiency and accountability in public administration has been a significant focus of policy-makers in recent years in Ukraine. The key institutions established during the health reform have shown resilience but have become fragile due to the impact of

the war and now need to be strengthened again. These institutions, including the NHSU, Medical Procurement of Ukraine and the Ukrainian Public Health Centre, could achieve better value for money with further improvements and strengthening. The implementation of the public administration reform, launched in 2016, has been hampered – initially by the pandemic and subsequently by the war. Merit-based competitive recruitment of staff is frozen, and civil servants' salaries have become decreasingly competitive compared with the private sector, accompanied by staffing ceilings being reduced within the NHSU. These factors have led to increased reliance on externally funded technical assistance and are now putting the essential reinforcement of health system foundations at risk.

EU accession offers an opportunity to reinforce and accelerate reforms, and to further strengthen transparency and accountability. The European Council has decided to open accession negotiations with Ukraine, and although the country's health system remains a national responsibility, accession calls for the convergence of professional standards and regulation of medicines and medical devices within the EU single market, as well as portability of health coverage and data exchange among Member States. In addition, as EU structural funds become available for Ukraine to support convergence, it may choose to prioritize the health sector for modernization (as several recently joined Member States have done). The European Council's first annual enlargement report has highlighted several health-related areas in which Ukraine needs to improve, including strengthening transparency and accountability; addressing informal payments; strengthening data completeness and credibility for decision-making; improving budget transparency; and strengthening medium-term budgeting for health.

4. Improving health financing and health system performance

The Law on Government Financial Guarantees of Health-care services (Law 2168) sets out the key principles and objectives underpinning health financing reforms. These comprise:

- equity and financial protection – provision of equal public guarantees, universal and fair access to necessary health services and medications under the PMG;
- efficiency and cost–effectiveness – targeted and rational use of funds;
- sustainability – predictable and planned volume of health services and medications;
- quality – of health services and medications provided;
- transparency and accountability – for financing of PMG benefits and related regulations and processes and full disclosure, transparency and accountability of all participants in the PMG; and
- competition and absence of discrimination of health-care providers.

This section of the report provides an assessment of the progress made in using health financing functions to achieve these objectives; it identifies challenges and provides recommendations for action using a health financing toolkit and approach. A combination of measures, including complementary reforms in health service delivery and regulation, are needed to achieve significant progress towards each objective.

4.1 Ensuring services and medicines included in the PMG and AMP meet priority health needs and are cost–effective

This section outlines the current situation and recommendations that can ensure changes in the benefits package covered by the PMG achieve progress over time towards the overarching health system performance objectives of ensuring universal and affordable access to essential health services and ensuring cost–effectiveness to make the best use of PMG funds.

The health financing reform has marked a transition from a vague constitutional commitment to provide free health care for all, towards a more transparent and accountable basis for decision-making based on priorities. The 2017 Law on Government Financial Guarantees of Health-care services began a pivotal shift within Ukraine's health-care system, moving away from its heavy dependence on implicit service rationing and towards a more transparent and methodical approach to prioritization. Regulations require that the PMG is defined according to a country's health priorities, ensuring coverage for essential services, cost–effectiveness, service efficiency, financial protection from health costs and equitable access *(25)*. These criteria help to quantify the trade-offs that policy-makers must consider under current financial constraints. The PMG comprises service packages and the medicines included in the AMP, which together define population entitlements regarding what can be expected within a publicly funded health system.

The methodology and principles for priority-setting for services covered by the PMG are not yet sufficiently transparent. Health priorities for 2020–2024 were defined by the Ministry of Health, but with little publicly available documentation, and are currently very broad, offering limited guidance to the NHSU as to how to address priorities, especially considering a limited

budget. From the initial five prioritized areas (better management of cardiovascular diseases, diabetes, asthma and cancer, as well as improved services in childbirth and neonatal care), Ministry of Health priorities have expanded to a broader list that includes PHC and outpatient care, mental health care - including PHC-level mental health care and multidisciplinary mental health teams at community level, single-day surgery, neonatal screening, emergency medical care, medical services for war veterans, public health and epidemiological control – including HIV/AIDS and TB services at PHC level, broader access to essential outpatient medicines, medical education, health-care quality improvement and the strengthening of electronic health data and services. Changes have often been made without following any explicit methodology or set of principles, and with little public explanation. Often new packages supported new service models, rather than new treatments to meet health needs. Only one package has been given reduced priority, as COVID-19 response was scaled back after the pandemic. Some of the changes to the PMG made in 2023 reflected health needs caused by the ongoing war, including providing increased mental health services at PHC level and intensive inpatient rehabilitation care. Three new packages were introduced in 2024, reflecting Government steps to transfer services from the Ministry of Health budget to the PMG: organ transplantation, hematopoietic stem cell transplantation, and priority treatment of infertility using assisted reproductive technologies. Over time, the number of service packages has steadily increased from 33 in 2020 to 44 in 2024; not always leading to broader service coverage or defining content more explicitly, but more introducing new payment modalities or service delivery models.

The current system of defining the PMG as packages is unsuitable for defining benefits or effectively communicating to patients their entitlements. The underlying structure of PMG packages is not uniform or standardized. The current set of packages uses a combination of diseases (such as cancer or TB), types of care (PHC, emergency medical, inpatient and outpatient care) and supportive input-based payments (such as for preparedness). Different packages have very different levels of detail (for example, single service item packages versus general outpatient specialist services package). Different approaches may create duplications of, and gaps between, different packages. Variation in the detail of packages and the number of packages can make it confusing for patients to understand their entitlements. Some specific services and conditions are explicitly stated in package titles, while others are included in broader packages by service delivery settings (for example, TB treatment is mentioned in the package title and service description, while treatment of hepatitis C is not, but both services are included in the benefits package).

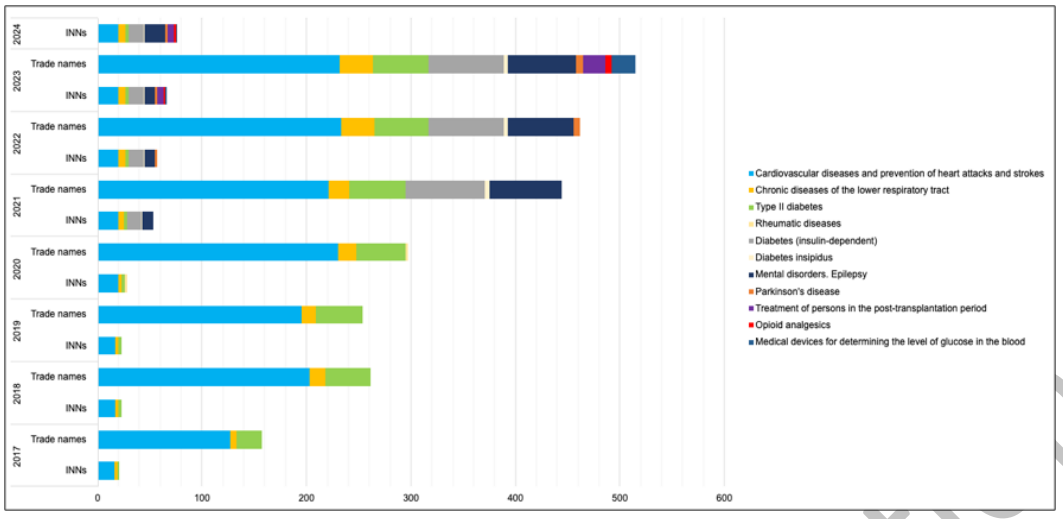
Ukraine needs a broader strategic approach to consistently build and enforce evidence-informed clinical practice. The Ministry of Health has attempted to prioritize care by defining some packages more explicitly and expanding upon its negative list of services. However, reliance on negative lists of excluded services and treatments to ration care can compromise access and affordability. A preferred approach is to reduce ineffective and cost-ineffective care by changing clinical practices towards more cost-effective methods. The detailed clinical content of services in international practice is usually defined in clinical guidelines and patient pathways that complement each benefits package, while the purchaser uses contracting to promote compliance through monitoring and financial incentives *(26)*. Guidelines should be based on evidence and cost–effectiveness. However, the status of guidelines in Ukraine at the present time is uncertain, with many legacy guidelines in need of review; as well as a need for permission to start to observe international guidelines; all of which could potentially lead to differing clinical practices of varying cost–effectiveness. This instability makes it difficult for the NHSU to incentivize better, more cost-effective clinical practices. The inconsistent application of

evidence-informed clinical practices also makes it challenging to align PMG entitlements with the actual service that patients receive, jeopardizing the NHSU's role in ensuring universal access to the services included in the PMG.

The AMP has the potential to be a vital component of the PMG, complementing PHC in cost-effective management of the burden of disease and providing financial protection for the ongoing cost of necessary prescription drugs. Medicines included in the AMP are accessible to the population either free of charge or at subsidized prices. The list of medicines covered by the AMP is defined using international nonproprietary names (INNs), and the NHSU can then propose new medicines for Government approval, taking into consideration various factors for coverage, including increasing access to medicines for priority diseases as determined by the Ministry of Health *(27)* and reallocating medicines from central procurement to the AMP. Related evidence and the cost–effectiveness of "new" drugs is intended to be assessed by the Ministry of Health and the health technology assessment department of the State Expert Centre at the point of their inclusion to the National Essential Medicines List (NEML), and the AMP should only include medicines that are approved and on the NEML. However, these assessment processes are not followed consistently for all NEML and AMP medicines – given that domestic capacity for health technology assessment is still evolving, the Government is considering making INN medicines on the WHO essential medicines list pre-qualified for NEML inclusion where they are competitively manufactured domestically.

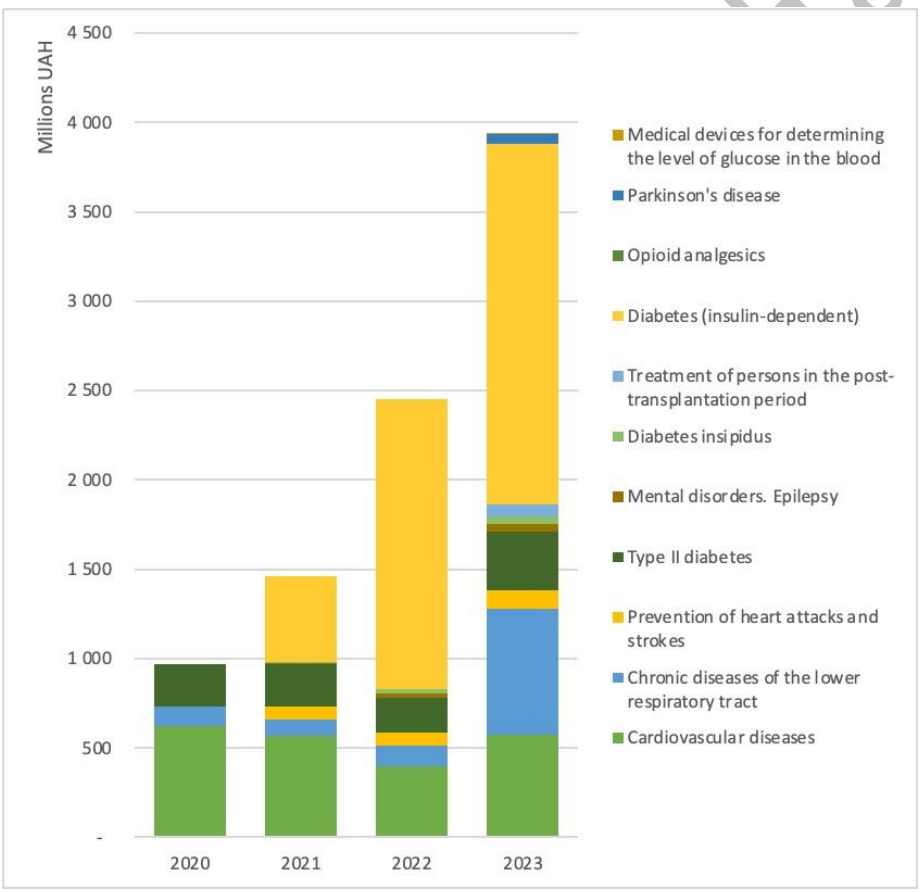
The AMP has significantly expanded the number of conditions it covers, as well as the INNs and brands per those conditions, but the basis for this is not fully in alignment with the NEML, nor is the link with clinical guidelines clear (Fig. 5). For 2024–2027, NHSU priorities are to expand coverage for cardiovascular combination medicine, medical devices, mental and behavioural disorders, oral therapy for diabetes and anticoagulants. While only three of the 10 INNs introduced in 2024 were on the NEML, all were on the WHO Essential Medicines List (EML). Medicines included in the AMP need to be aligned with applicable and cost-effective clinical guidelines but given the uncertain state of such guidelines and the variance in accepted international best practices, such alignment is not readily achieved. The cost of AMP has increased four-fold since its introduction, with diabetes medicines accounting for about half of the overall budget in 2023 (Fig. 6). Cardiovascular diseases, chronic lower respiratory diseases and type 2 diabetes affect the most patients, accounting for 80% of prescriptions. The cost of mental health medicines has also increased ten-fold, with a three-fold increase in unique patients and a ten-fold increase in repeat prescriptions filled, reflecting (in part) the increased demand due to the war.

Fig. 5. Coverage of AMP 2017–2024



Source: Ukraine.ua

Fig. 6. AMP cost and composition 2020–2023



Source: Ukraine.ua

In summary, the NHSU manages the content of PMG prioritization according to broad priorities set by the Ministry of Health, but greater transparency is urgently needed to ensure accountability, legitimacy and value for money. Despite the lack of clear regulatory guidance concerning methodologies and processes that can decide among the numerous trade-offs in

PMG fund allocation across competing priorities, the NHSU is overseeing a complex analytical system to ensure compliance with the broadly-outlined Ministry of Health priorities in the face of tightening fiscal constraints. To make this system more accountable and to enhance the legitimacy of prioritization choices to patients and taxpayers, the next (urgent) step is to make this system more transparent (in particular, to scrutiny from the Government or the Public Control Council (PCC): participatory, evidence-informed and clearly codified.

4.1.1 Recommendations to improve cost–effectiveness of PMG coverage

Action 1. Revise the PMG and AMP based on evidence and clear criteria

- Ensure that PMG prioritization and benefits inclusion are based on evidence, meet the criteria laid out in legislation, are transparent in methods used, are subjected to cost–effectiveness and budget impact analysis and informed by transparent and balanced stakeholder consultation.

Action 2. Approve cost-effective clinical guidelines and support implementation through financing instruments

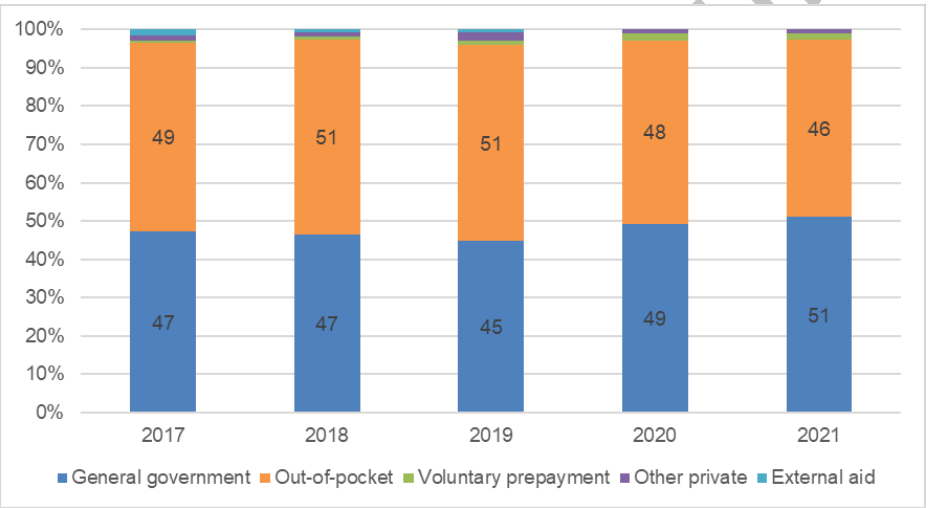
- Complement the PMG benefits package by developing standardized, approved clinical guidelines aligned with PMG and patient pathways that NHSU can support through contracting, monitoring and financial incentives.
- Ensure that medicines included in the AMP are aligned with applicable evidence-informed clinical guidelines.

4.2 Financing and purchasing to improve access, equity and financial protection

This section discusses the situation and recommendations for progress towards health system performance objectives of financial protection affordability for patients, and equitable access to essential health services, aligned to the varying health needs of local communities.

The remarkably high OOP cost of health-care spending in Ukraine presents a significant risk to financial protection, and hence, progress towards UHC. With half of the country's current health expenditure funded directly by OOP payments (Fig. 7), and 96% of the population reporting that they have made an OOP payment (as of 2021), improving protection against financial hardship for Ukrainians remains a priority for health financing reform. In 2021 the incidence of catastrophic health-care expenditure by households in Ukraine was 17% – the third highest across all countries in the WHO European Region. Catastrophic spending is also concentrated in the poorest consumption quantiles; pushing pushed 11% of households into poverty in 2021, mostly affecting older people and rural residents *(29)*.

Fig. 7. Distribution of recurrent health expenditure by source of Funds, 2017–2021

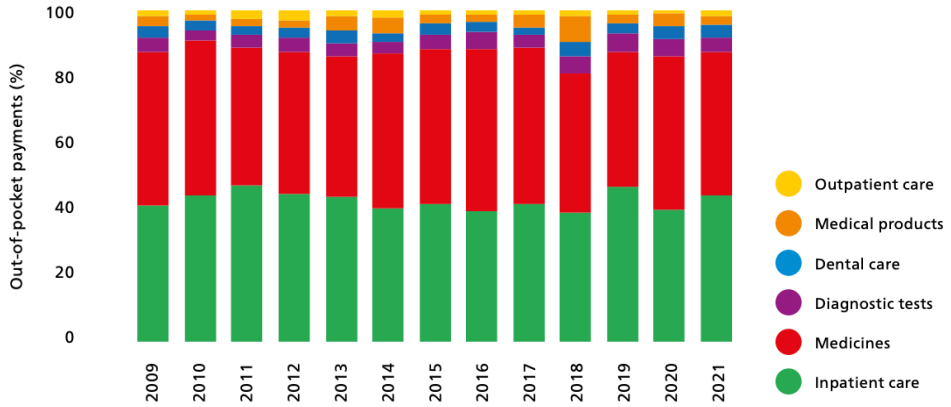


Source: WHO *(28)*.

The key drivers of catastrophic OOP spending and unmet health needs are expenditures on medicines and inpatient care. In 2021 54% of all patients' spending on health was identified as expenditure on medicines for outpatient and inpatient treatment, while 25% of all OOP expenditures were spent on inpatient services. Consequently, medicines and inpatient care are the primary drivers of catastrophic spending on health, accounting for 44% and 43%, respectively (Fig. 8). Official user charges for PMG services (copayments) are nearly non-existent for all types of health care, except for medicines, but informal payments are widespread.[2]

[2] An informal payment is defined as the cost of health-care services paid by patients to service providers for services included in the PMG and outside the scope of official user charges.

Fig. 8. Breakdown of OOP payments in households with catastrophic health spending by type of health care, 2009–2021



Source: WHO *(29)*.

Ukraine faces the challenge of realizing access to essential medicines that are included in the AMP. Out of the 515 medicines defined in the AMP at the start of 2024, which comprised 61 INNs, 192 must be available for free and the rest subsidized to different extent in pharmacies participating in the AMP. According to the Ministry of Health, about 20 000 villages (89% of all villages in the country) have no pharmacy, contributing to dramatic differences in real access to AMP drugs in urban and rural areas *(30)*. According to NHSU data from January–February 2024, 85% of e-prescriptions issued in cities were filled and received by patients, while in villages 80% were filled, although only 22% were filled in the villages where the prescriptions were issued. To address the challenge of access to the AMP, the Government is undertaking several measures, including more predictable and stable 3-year contracts for the 1342 pharmacies operating 14 508 pharmacy points; introducing a new service delivery modality using mobile pharmacies, including in regions affected by hostilities and de-occupied in 2022; and starting mail delivery of medicine using the national postal operator Ukrposhta.

More proactive and strategic purchasing approaches can be applied to ensure access to pharmacies to fill AMP prescriptions. NHSU monitoring of access to pharmacies and PHC providers needs to be followed up with proactive steps to fill the gaps in coverage, including expanding the above measures, approaching existing pharmacies in the areas that do not yet participate in AMP, providing incentives or developing additional regulation. A first step towards expanding physical access was taken by the Government in 2024 by obliging pharmacies which rent premises in public facilities to sign a contract with the NHSU.

Informal payments exist in multiple forms in the Ukrainian health system, contributing to the high level of OOPs. Patients are often asked to purchase medicines and consumables during hospitalization, make cash payments to health personnel and provide payments known as "charitable donations" that are intended to be voluntary, but in practice may be determined and communicated by providers. The causes of this high prevalence of informal payments in Ukraine are complex and have several economic dimensions (insufficient public financing, low salaries for health-care workers and inefficiencies in health-care systems), governance dimensions (poor provider accountability and management of health facilities) and sociocultural

dimensions (patients' expectations that payments will result in higher quality of care) *(29)*. Worryingly, in 2023, 37% of health workers retained a positive attitude towards cash-based informal payments – far higher than the figure of 14% in 2020. Among patients, there has been no change in approving perceptions, with only 9% reported in both years *(31)*.

There has been a decrease in the incidence of OOP payments to health professionals and so-called "charitable donations", but the challenge remains significant. For PHC the decrease has been substantial since the start of the health financing reform; by 2021, 21% of people who used PHC reported making cash payments, down from 62% in 2018 *(32)*. For specialized outpatient care, the frequency of cash payments and "charitable donations" decreased between 2020 and 2023. In 2023 9% of patients reported making a "charitable donation" compared with 12% in 2020; 5% reported making an OOP payment to a health professional during their last outpatient specialist visit compared with 8% in 2020; and 18% reported paying for consumables compared with 39% in 2020 *(33)*. For inpatient care, payments are both more frequent and more substantial. In 2023 15% of inpatients reported that they had made charitable donations to a facility,[3] and 16% that they had made OOPs to health personnel, compared with 26% and 21% respectively in 2020 *(34)*. In 2023, the average OOP payment to health professionals was 5300 hryvnia and the average charitable donation was 3400.[4] In 2023, 86% of hospitalized patients reported buying medicines for inpatient treatment, which indicates some improvement since 2020, when 94% of patients reported purchasing medicines during their hospitalization.

Payments perceived by patients as formal are decreasing but are still the most significant driver of OOPs for hospitalized patients. In 2023 18% of patients reported making a formal payment compared with 33% in 2020 *(31,32)*. Average payments were around 12 200 hryvnia and were made for better wards (13%), diagnostics (32%), services not in the PMG (21%) or for hospitalization overall (54%). Most patients (64%) believed they would not receive the same quality service free of charge. Despite this, providers' reporting on revenue to the NHSU does not correspond to patient surveys, as officially paid services account for a very small share – 2.3% of health-care provider revenues in 2023 according to NHSU data *(34)*, and it is possible that patients perceive such payments as formal when in reality, they are payments for service included in the benefits package and as such, are not recorded as paid services by health-care providers.

Considering the deeply rooted and complex nature of informal payments in Ukraine, tackling this problem requires a comprehensive and long-term strategy. Ensuring that PMG payment rates adequately cover the cost of service delivery is important. Building trust is also essential, as low trust in public authorities can lead people to adhere to the so-called "unwritten laws" that make informal payments acceptable. Enhancing the population's awareness of their entitlements and obligations; for example, through easy-to-understand information concerning the formal user fee obligations for PMG services – is important. Facilitating easy reporting of incidents of informal payments, while preserving anonymity, if necessary, could help to build a zero-tolerance culture towards informal payments. In this respect, civil society organizations can play a greater role by acting as watchdogs. Long-term, comprehensive health system strategies such as establishing adequate tariffs and scaling up enforcement capacity in the health sector and beyond, combined with short-term, targeted actions such as raising population awareness

[3] Health index survey 2023, Health Index Ukraine, unpublished data.

[4] Compared with the minimum salary for a doctor in Ukraine of 20 000 hryvnia in 2023.

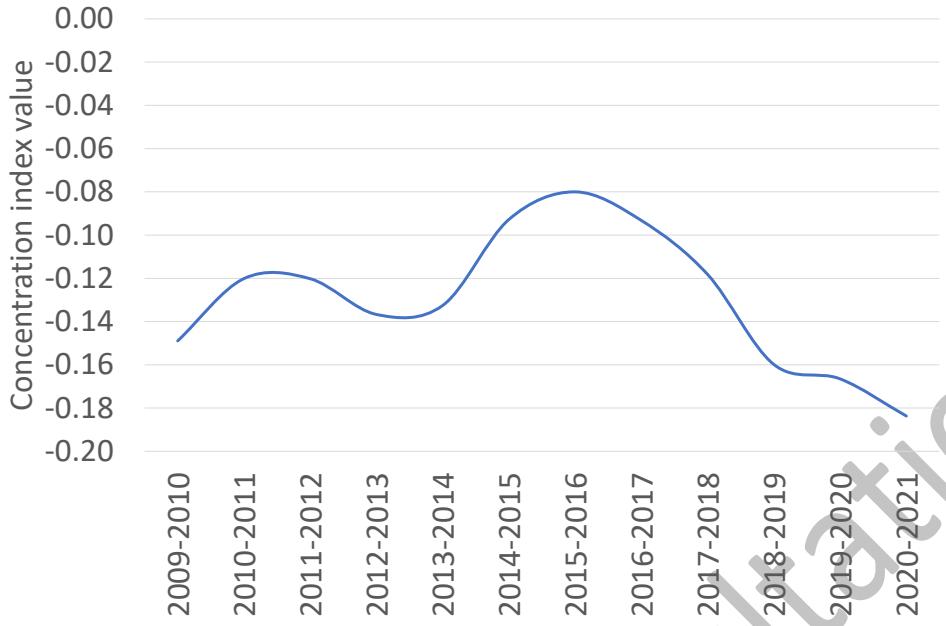
about entitlement and improving transparency by simplifying patient reporting on incidents of informal payments are all needed to tackle this complex challenge.

The most frequently proposed solutions for filling the gaps in public and increasing private funding to providers for PMG services invariably fail or may have adverse consequences. In Ukraine, interest groups have proposed allowing private providers to charge patients on top of NHSU reimbursement rates (so-called "balance billing") on the grounds that existing rates do not adequately cover the costs of service delivery; and facilitating the growth of voluntary health insurance (VHI) to protect patients against OOPs. In the same context, introducing copayments in public facilities is often discussed as well. Balance billing has the potential to undermine equity of access and financial protection, as well as fuel price increases for health services. Consideration of VHI as a method for covering copayments must be carefully assessed for its potential impact on equity of access and financial protection, as it may lead to shifts in the costs of essential services onto patients who are unable to afford VHI. In general, if copayments are introduced, they must be based on clear policy objectives and realistic expectations and they should be carefully designed to be limited, simple, transparent and protective of poorer households, for example with copayment exemptions, fixed, flat rates and an explicit annual limit *(35)*.

Unmet health-care needs driven by OOP payments and other barriers are an important driver of health inequity in Ukraine. Not only do OOP payments disproportionally impact the poor in Ukraine, resulting in deeper impoverishment, they also impede access to care when people need it but cannot pay or face other barriers. The share of households with unmet health-care needs decreased from 22.7% to 21.2% between 2016 to 2021, but economic disparities in access to care have widened, with the affluent experiencing faster advancements compared with poorer groups. Due to this, the overall level of socioeconomic inequities in access has increased. The concentration index,[5] which measures the deviation of unmet health-care need across income distribution from the full equality line, changed from -0.08 to -0.18 during these years (negative values and position above equality line indicate that the poor are worse off; Fig. 9 and Fig. 10) *(36)*. This impact may be higher because of the war, given the significant increase in poverty. The required actions to reverse this trend would be the same as those for improving financial protection as discussed above.

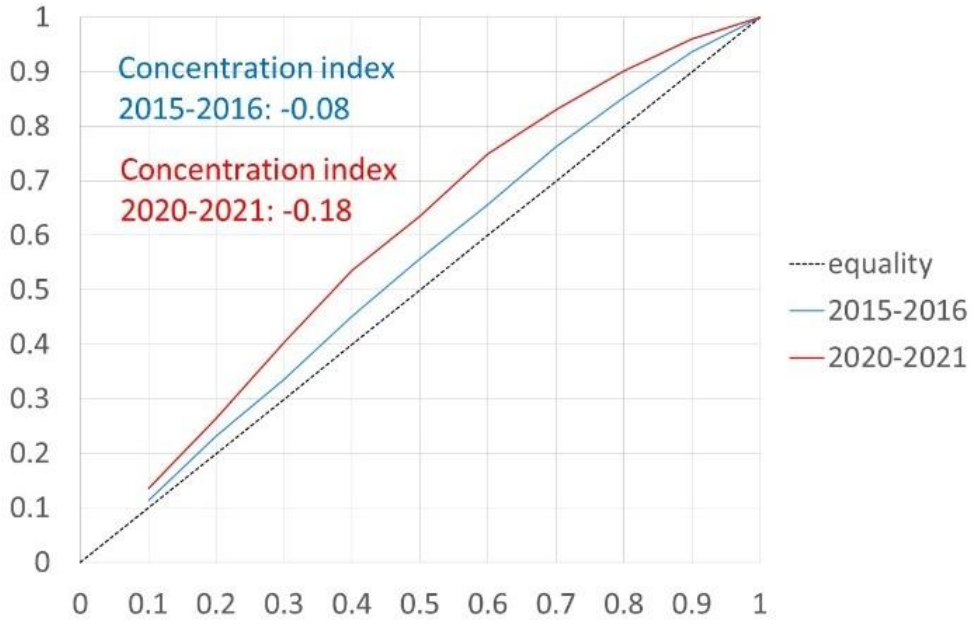
[5] Fig. 10 shows the change in the shape of the concentration curves plotted for the two-period moving average of the overall level of unmet need (measured as the share of households reporting such need). Each curve plots the cumulative percentage of the unmet health-care need against the cumulative percentage of households ranked by income deciles. The blue curve depicts income distribution of unmet need from 2015–2016, and the red shows the situation as of 2020–2021. During this period, the curve moves further away from the full equality line. Illustrating this, the concentration index, which measures the area between the concentration curve and the line of equality, fell from -0.08 to -0.18 (Fig. 10).

Fig. 9. Changes in the concentration index of inequity in distribution of unmet health-care needs



Source*: Authors' calculations based on State Statistics Service (6).*

Fig. 10. Changes in the concentration curves of inequity in distribution of unmet health-care needs



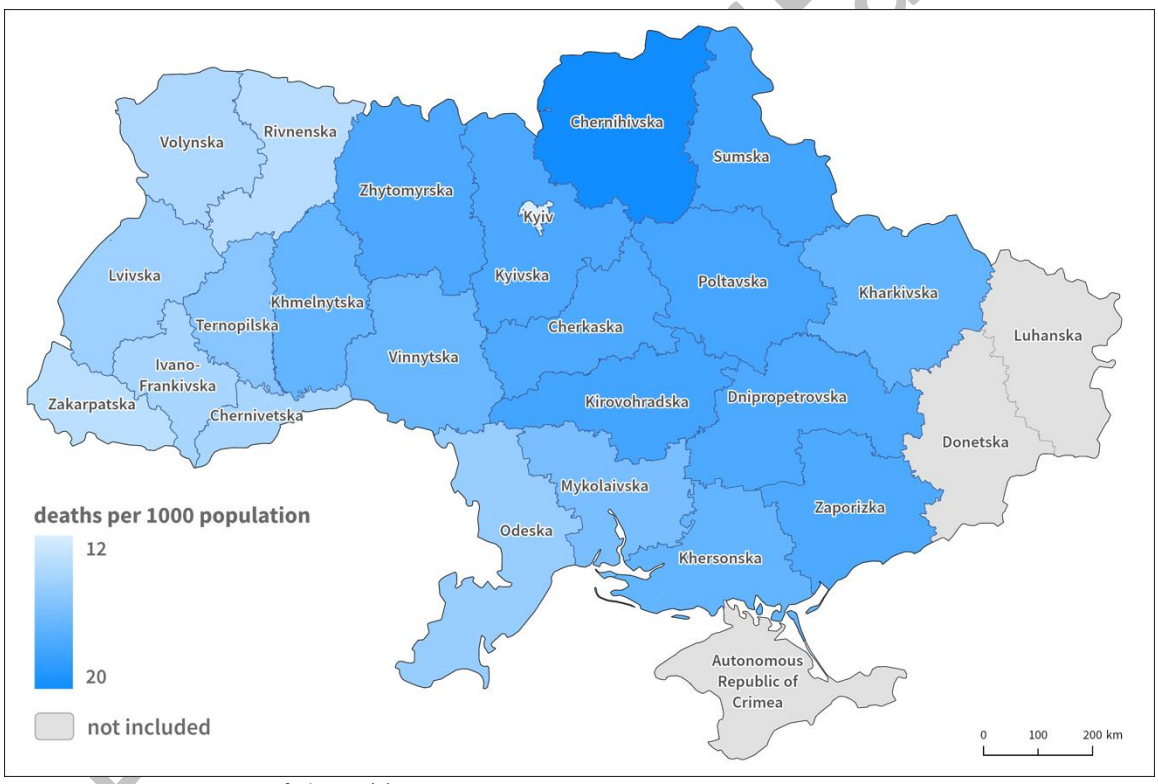
Source: Authors' calculations based on State Statistics Service *(6)*.

The equity-enhancing features of Ukraine's health financing reform are a foundation on which to build. Universal entitlement for all based on residence has avoided barriers found in other types of health systems such as employment-based social health or private insurance. As noted above, this has proved important during times of pandemic and war. PHC financing that follows patients' choice of providers provides equal funding of these services to all residents. Central pooling of funds to the NHSU reduces the dependence of health service providers on local governments that can have differing levels of ability to pay. It is recommended that Ukraine

build on these foundations, adjusting where needed to strengthen the equity-enhancing aspects of reforms.

The resource allocation and purchasing of PMG services needs to respond to inequality in the distribution of the disease burden across oblasts. Even before the full-scale invasion, health needs varied significantly by region. In 2021 the overall mortality rate (not standardized by age structure of population) was significantly higher in the North-East, including Chertnihivska and Sumska oblasts, but also northern rayons of the adjacent Zhytomyrska, Kyivska, Poltavska and Cherkaska oblasts (Fig. 11).[6] Spatial differences in mortality attributable to particular diseases are also significant: for example, deaths from neoplasms are highest in the south-east of Ukraine (Fig. 12), while the mountainous areas of Zakarpatska, Ivano-Frankivska and Chernivetska oblasts have historically had higher rates of child mortality. The social, economic and health impacts of the war have likely increased variations in need for health services in front line regions as well as in other regions receiving IDPs.

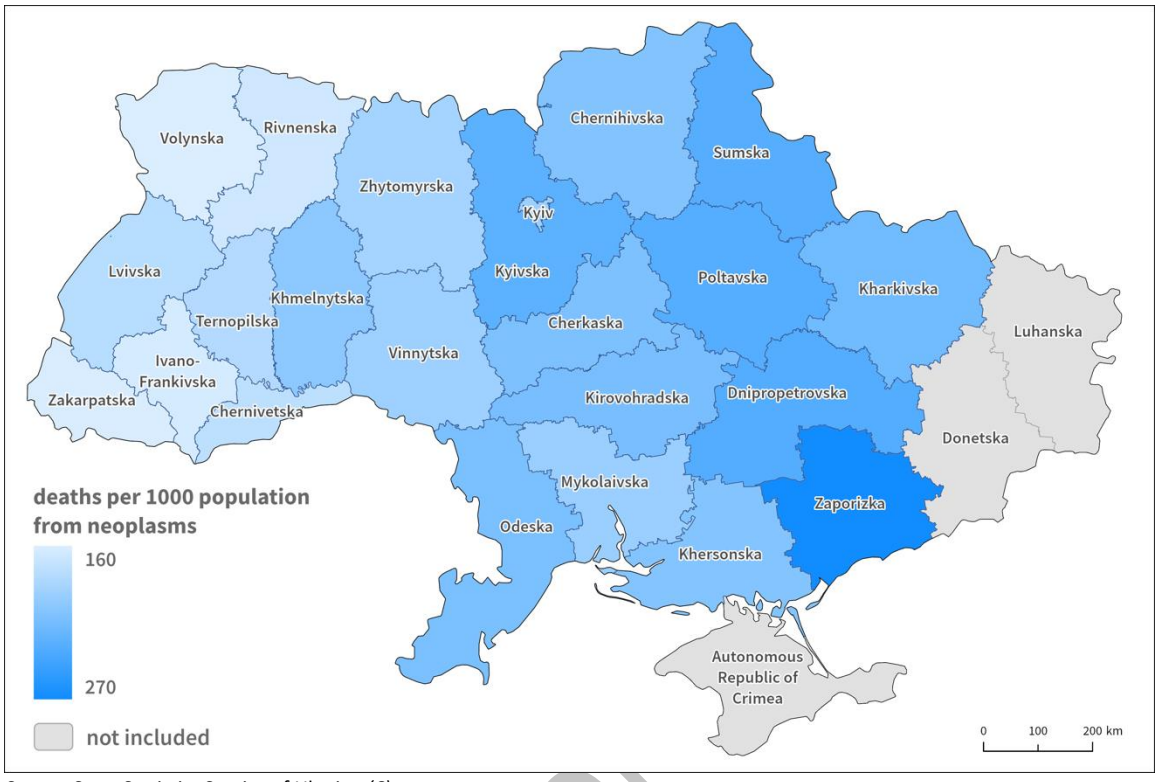
Fig. 11. Number of deaths per 1000 of present population in Ukraine in 2021 by region



Source: State Statistics Service of Ukraine *(6)*.

[6] The highly uneven mortality distribution within these oblasts is blurred when represented in oblast-level maps. For example, Zhytomyrska and Kyivska oblasts both have higher mortality levels typical for the north-east, but these are counterbalanced in a regional representation by lower mortality in some of the rayons located closely to Kyiv and Zhytomyr (the two cities with the lowest mortality in the country) *(36)*.

Fig. 12. Number of deaths from neoplasms per 1000 of present population in Ukraine in 2020 by regions



Source: State Statistics Service of Ukraine *(6)*.

Per capita spending on essential medical services has been relatively equal across oblasts over a long period (both pre- and post-reform). Government health spending per capita (PHC, specialized and emergency care), was relatively equal across oblasts in 2018 – with the coefficient of variation (measuring how spread out the values are relative to the average), at 11.3%. This was achieved through central government funding to subnational governments, designed to equalize the funds available across oblasts, prior to the reform's full implementation (Table 1). With the centralization of pooling in the post-reform environment, variation in PMG spending across oblasts has further decreased, with the variance at 10% in 2021. Yet, variation is significant for subnational government expenditures to meet their responsibility to cover the capital expenditures and utility costs of their health facilities they "own", as well as discretionary other costs complementing the central PMG funding. The previous health financing reviews have recommended pooling all health-care financing of PMG services at the NHSU level to ensure a more equitable allocation of resources. There is also large variation in per capita health spending under the AMP, most likely reflecting unequal utilization of access to affordable medicines that is discussed in more detail elsewhere in the report. This analysis is of periods before the full-scale invasion by the Russian Federation and the actual situation is affected by large population movements and war damages on health infrastructure.

Table 1. Variations in government spending in health across oblasts

	Spending per capita - total for Ukraine (UAH)				Coefficient of variation across oblasts			
	2018	2019	2020	2021	2018	2019	2020	2021
Total healthcare spending	**3 006**	**3 344**	**4 612**	**5 384**	**...**	**...**	**...**	**...**
Subnational budgets	2 418	2 340	1 335	875	13.4%	16.7%	28.6%	48.4%
Central governemnt - PMG (all packages)	89	453	2 477	3 289	58.6%	8.3%	9.4%	9.2%
Central governemnt - HC other programs	498	551	800	1 220	...	...	...	...
Spending on primary, specialized, and EMC	**2 251**	**2 513**	**3 470**	**3 785**	**11.3%**	**11.4%**	**7.9%**	**10.0%**
Subnational budgets	2 161	2 077	1 017	532	10.8%	14.5%	23.9%	47.6%
PMG (excluding AMP)	89	436	2 452	3 253	58.1%	8.5%	9.4%	9.2%
Memorandum items								
NHSU AMP	17	24	35	62	36.5%	49.2%	55.1%	73.7%
Subnational budgets:								
Medical recreation facilities (0734)	38	31	18	14	97.4%	38.5%	72.0%	131.3%
Other spending (0763)	220	219	273	295	59.0%	62.9%	67.2%	76.7%

Source: Authors' calculations based on World Bank *(37)*.

Disparities within oblasts also pose equity challenges, including between rural and urban communities, as well as in isolated and/or economically depressed communities. As the post-pandemic and invasion status quo has enabled the population to a certain degree to start to manage their own health care needs more directly, the improvement in the level of self-reported unmet health needs has been less pronounced for rural residents. Some rural *hromadas*, are particularly vulnerable, including those without enough taxable employment to fund basic public services *(38,39)*. These communities are less likely to invest in or provide adequate funding for public health-care facilities, including at PHC level, despite the presence of greater health needs driven by social determinants such as mental health disorders or alcohol and drug addiction. Responding to such needs requires a combination of social and health-care policy measures to improve welfare, social inclusion and access to essential health services.

The humanitarian sector has filled gaps and complemented weakened health services in the most war-affected areas. In 2023 the Ukraine humanitarian health cluster comprised 113 international and domestic organizations with the aim of coordinating responses under the 5 W framework – *Who is doing What, Where, When, for Whom*. The health cluster estimates that about 90% of humanitarian assistance is directed to PHC, with the largest share of support directed to service delivery and medical supplies. As part of their role in the response, health partners have adopted an approach to direct service delivery that complements the role of the national health system. Service delivery modalities have been also adapted to the context and mobile outreach teams are being used to overcome access issues, increase proximity to people and communities in distress, enhance preparedness to respond to acute needs. As of 2023 about 40 partners were providing mobile outreach services to improve access to essential care. To improve the effectiveness of the response, elements of so-called "task shifting" have been introduced to different extents in three dimensions: to communities (to empower them to have an active role in their health and well-being); to technology; and to other members of the

extended PHC team, which may include psychologists, social workers or lay workers to contribute to the continuum of health and social care. While response, recovery and reform coexist, their proportions depend on local context: a detailed service package and harmonization of practices would significantly improve the response capacity to build back better in line with the reform progress towards UHC.

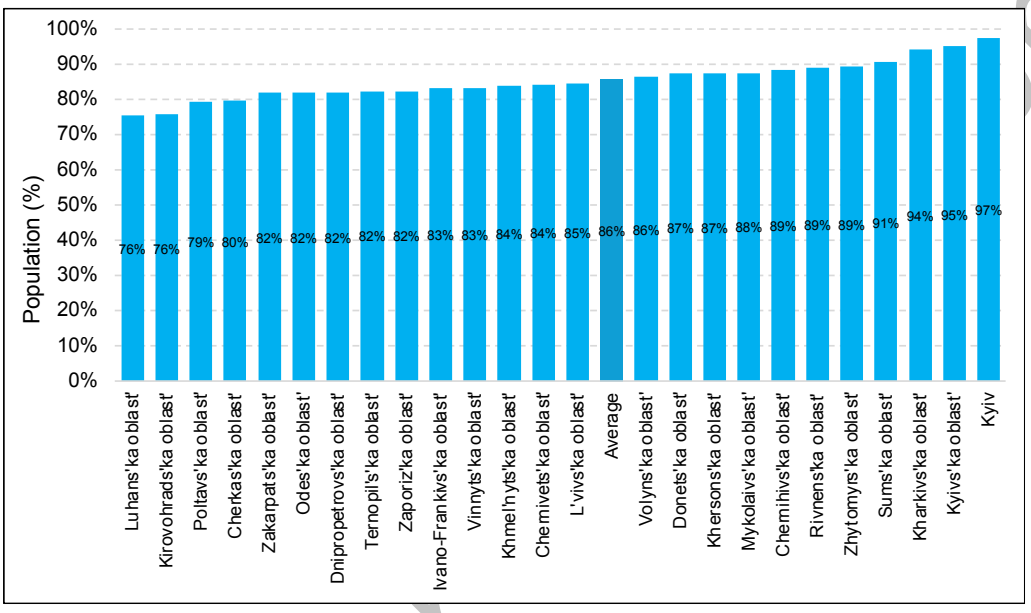
Oblast-level planning of purchasing volume and case-mix of services meeting the needs of local populations can help to improve access to care for patients and efficiency of resource use. Despite low variance in per capita public spending on health across oblasts, NHSU data (albeit not fully comprehensive) suggests significant variation in utilization of services across oblasts, seemingly unrelated to population need.[7] These inequalities in utilization have likely increased during the full-scale war as a result of reduced provider capacity in the active conflict zones. The use of historic levels of service provision per provider to determine contracted volumes made sense when introducing new payment methods based on volume of activity (consultations, hospital admissions), but this is no longer suitable for effective planning and contracting, particularly in the face of substantial population movement and ability to provide services in war-affected regions and under the adverse impacts of financial incentives discussed in this report. Increasing the responsibility and authority of the NHSU's interregional departments to plan and contract for the volume and mix of services to be purchased in each oblast would allow them to take proactive steps to increase the volume of services that are underprovided or decrease the volume of services where there is evidence of over-provision; and also, more effectively address needs of specific communities. The NHSU is keen to initiate regional needs-based planning and purchasing and to transition to this model for as many services as possible. An important part of this approach in the future will be planning to fill gaps left by withdrawal of humanitarian assistance from areas close to active conflict. Reliable local population data are crucial for health needs assessment, benchmarking service utilization and identifying possible over- or under-provision of services. While the country faces challenges of incomplete information about population structure, estimations can be used to plan the volume of services more strategically. Oblast-level planning and purchasing also requires strengthening NHSU interregional departments to engage local government and military administrations in active conflict areas, as well as engaging with local providers and preparing and monitoring cost and volume contracts with individual providers.

Completing patient registrations with PHC providers and keeping these up to date are crucial for realising access to PMG benefits, including access to PHC, referral to specialized services and AMP. About 14% of Ukrainians are yet to sign a declaration with their PHC provider and significant variation exists across regions (Fig. 13). These gaps need to be filled; there has been significant internal population movement due to the war, but this is not reflected in the number of people changing their registered PHC provider. On average, only 2.8% of people changed their registration across oblasts during 2022 and 2023 and only an estimated 19% of displaced people did so (Fig. 14). Although IDPs with formal status are eligible to receive PHC services without a declaration, for continuity and quality of care and for ensuring that NHSU funds reach the correct PHC providers, updating declarations to reflect the pattern of service provision is important to improve access to services to population and the efficiency and equity of PHC

[7] As of 2021 the regions in the north east and south east had generally higher percentages of people seeking medical help, and these areas also reported relatively higher levels of unmet health-care needs. In contrast, Ukrainians living in most oblasts in the west, as well as in Dnipropetrovska, Kharkivska oblasts, and the city of Kyiv, sought health care more frequently, but were also less likely to have their needs unmet. Two outstanding special cases were mountainous regions of the Carpathians and in the Vinnytska oblast, where health care was both most frequently requested and most frequently reported to be unavailable *(6)*.

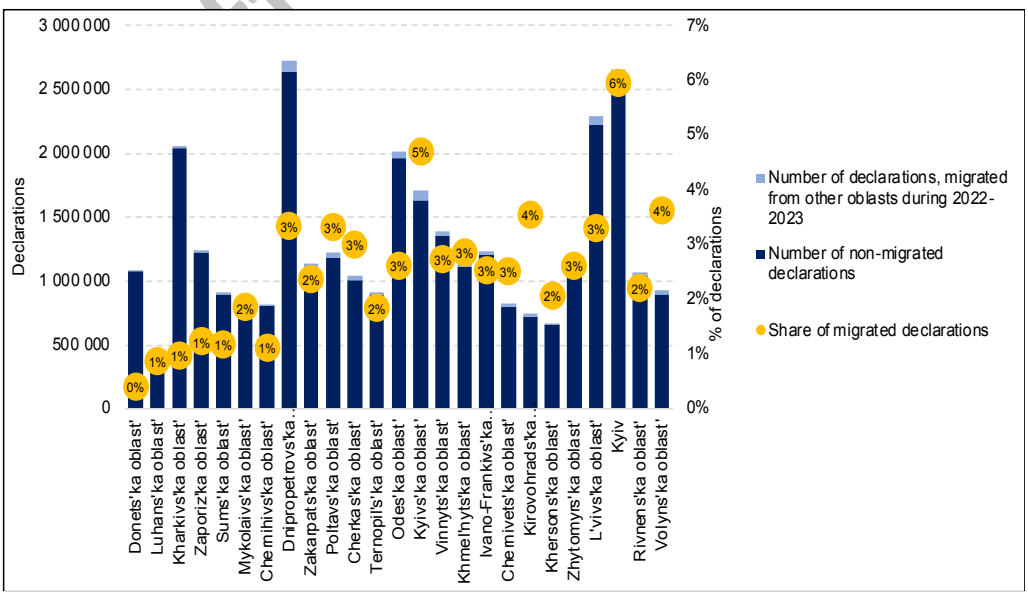
financing in terms of PHC providers. Surveys suggest that administrative and informational barriers are obstacles for completing and/or changing one's declaration with a PHC provider. Ensuring access to PHC is at the core of humanitarian response in war-affected regions and for IDPs in other regions. The changes in the number of declarations may impact the financial viability of PHC providers, and therefore affect the continuity of service provision in rural or conflict-affected areas. Therefore, lump-sum payments could be considered to compensate for fixed costs and labour costs of providers and to offset loss in revenues due to a limited number of people in the local area, ensuring sustained access to services for people in such localities.

Fig. 13. Share of population who have signed a declaration with PHC provider by regions, 2024



Source: NHSU data: number of declarations as of 01.01.2024 (moz.gov.ua).

Fig. 14. Number of people changing their PHC provider across oblasts (2022–2023) by region



Source: NHSU data: number of declarations as of 01.01.2024 (moz.gov.ua).

Population access to PHC services is hampered by urban–rural differences in the health workforce and uneven access to complementary services. About 30% of the population of Ukraine live in rural areas, compared with only 18% of PHC doctors and 24% of PHC nurses. Providers in remote, high-need or de-occupied and conflict-affected areas are disadvantaged. The NHSU applies a coefficient of 1.2 to the capitation rate for providers in mountainous areas. However, in 2023 less than 4% of all providers received this. In addition to the core package, PHC providers can apply for additional packages such as TB Directly Observed Therapy services, HIV care, opioid substitution treatment, mobile palliative care, COVID-19 vaccination and a PHC-specific package for mental health. The NHSU allocates extra funding for these extended packages, but decisions about whether to apply for the packages are made by the provider. Consequently, the uptake of additional PHC PMG packages has been limited and uneven, potentially further compromising equity of access to these services across different localities (Table 2). When considering consolidating these optional packages into the core PHC package, their content and requirements should be carefully assessed for universal access. As new or updated service delivery models emerge at PHC level, such as mobile outreach and patronage services for children, these services should be integrated into the core PHC PMG package for all providers to facilitate equity in access, with a phased roll-out if necessary.

Table 2. Share of PHC providers offering additional PHC services, 2020–2023

Package	% of PHC providers			
	2020	2021	2022	2023
Mental health/PHC	NA	NA	0.001 (2 providers)	35.3
OST	3.21	2.43	2.70	2.50
HIV	2.55	3.72	4.60	4.50
Palliative care – mobile service	4.16	9.64	15.20	21.30
TB directly observed therapy at PHC level	NA	21.80	24.60	20.50
COVID-19 vaccination	NA	55.30	53.60	NA

Source: NHSU data: number of declarations as of 01.01.2024 (moz.gov.ua).

Ukraine needs to consider increasing financial incentives and expanding eligibility to providers operating in areas of low population density and long travel times to PHC facilities and consider the higher cost of service delivery in remote and conflict-affected areas and/or pockets of exceptionally high health need. Access to PHC services could be improved by temporarily allowing a higher number of declarations per family physician without reducing capitation[8] payments in rural and conflict-affected areas with a high population-to-physician ratio – for example, due to IDPs. There is anecdotal evidence that this reduced capitation payment discourages providers from asking people to re-register. This could create access

[8] Capitation payments are reduced if a provider has more than an optimal number of patients (900 for a paediatrician, 1800 for a family doctor or 2000 for a therapist). From these thresholds, coefficients are applied at 10% increase increments from 0.616 to 0.123, until at the 50% increase threshold the capitation rate for additional people becomes 0.

challenges in areas with many IDPs, where family doctors have left, while those remaining already have a high number of declarations. Temporarily suspending the reduced capitation payment would support PHC providers that choose to take on more declarations. In areas where quick solutions are required to support access to PHC services and medicines, the mobile outreach services approach has, as part of a broader humanitarian response, proven to be effective *(40)*.

Equity can also be improved through patient-centred care responding to specific health needs and socioeconomic circumstances. The e-health system could be further developed to systematically collect comprehensive information on individuals' social circumstances, health information and service use at the PHC level. This improved data collection is critical for enabling PHC providers to prioritize care for patients with higher health needs, tailor care to individual needs and for informing policy adjustments. It could also facilitate tracking patients who have not interacted with their PHC doctor for extended periods, helping to maintain an updated patient list and understand the underuse of PHC services.

4.2.1 Recommendations to improve access, equity and financial protection

Action 1. Act to realize universal access to PMG services

- Continue to prohibit all NHSU-contracted providers (public *and* private) from balance billing for PMG services.
- Simplify and remove the administrative barriers people face when seeking to sign, recertify or change declarations with PHC providers.
- Review and define relevant content of current "complementary" packages at PHC level to be consolidated into a single, unified PHC package to be accessible at every PHC facility and update the core PHC package accordingly.

Action 2. Act to reduce geographical imbalances in access

- Undertake oblast-level needs-based strategic planning for health services to be purchased by the NHSU, incorporating all available data – including from humanitarian agencies and local stakeholders. This should include addressing needs and local service gaps arising from withdrawal of humanitarian providers.
- Allow, on a temporary basis, a higher number of declarations per family physician without tapering capitation payments in rural and war-affected areas with a high population-to-physician ratio; e.g. due to a concentration of IDPs in the local area.
- Introduce additional lump-sum payments for PHC providers in rural and conflict-affected areas with low populations; e.g. due to people leaving areas close to active hostilities. Additional payments for new service delivery models, such as mobile outreach PHC services, could also be introduced to sustain access to care in areas where there are no active service providers.

Action 3. Act to limit OOP spending on medicines

- Undertake proactive measures to make AMP drugs accessible to rural populations and monitor impact on utilization by underserved populations.
- Monitor to ensure that free and highly subsidized brands for each INN in AMP are available in AMP pharmacies and take action when they are not.

Action 4. Act to reduce the incidence of informal payments

- Implement targeted, short-term measures to simplify patient reporting concerning incidents of informal payments and engage civil society organizations as watchdogs to monitor and report on informal payments.
- Develop a comprehensive and long-term strategy to tackle informal payments, including more adequate reimbursement by the NHSU, explicit rules within provider contracts which are enforced, scaling up monitoring and enforcement capacities and improving the management and accountability of health facilities.

4.3 Purchasing to enable providers to improve efficiency and quality

This section provides a situation analysis and recommendations for progressing towards health system objectives of improved efficiency, sustainability and quality of care.

The NHSU has made progress in using key purchasing tools to influence efficiency and quality of care: these include, health needs assessment, new provider payment methods, costing and pricing, selection of providers and contracting and monitoring. However, there is unrealized potential for a more strategic allocation of resources in terms of: what services are purchased, in what volumes, from which providers, alongside changes to the design of the contracting system. Some weaknesses in current purchasing approaches are leading to adverse performance outcomes.

The key disadvantage of the current contracting system is that decisions on whether to contract and the selection of packages to be contracted, are made by providers. This makes the purchaser's role reactive, not proactive and weakens its influence on the provider network. Currently, providers submit applications for the package(s) they would like to contract for, with the NHSU having no power to reject applications unless contract requirements are not met. This may lead to: (a) supply induced demand, inefficient fragmentation and low quality care when many providers apply for packages they have not received before for the purpose of raising revenues (most recently observed for rehabilitation services) and, conversely (b) under-provision of services and uneven access where providers do not apply for packages (as discussed in Section 4.2).

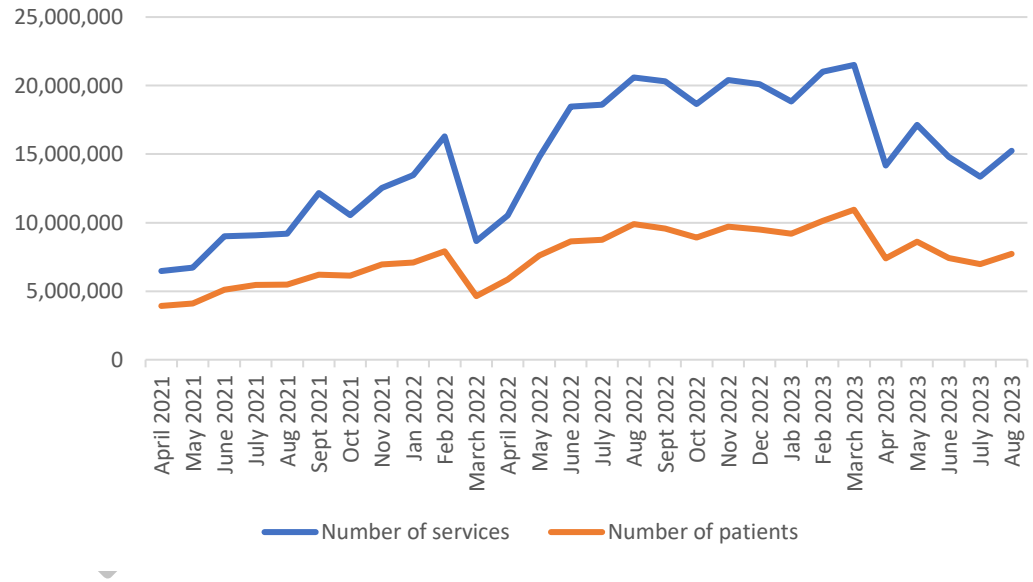
Ukraine lacks the effective provider licensing system to ensure safety and quality of care and uses the provider requirements within every PMG package as substitution for it *(41)*. In this situation the NHSU has had to develop provider requirements which set out these minimum standards. Currently the NHSU does not have sufficient staffing capacity to monitor and enforce these requirements. In the long term, the role of licensing, accreditation and quality assurance system should be separate from any contracting process and explicitly assigned to an institution which would have necessary capacity to perform this function.

Current practices in defining the volume of services to be purchased is not based on the population health needs but replicates providers' production capacity and may also be influenced by "gaming". As noted above, the volumes of services within PMG contracts are mostly defined using historic levels of service provision by providers. There is an incentive for providers to report increased volumes each year to qualify for a larger contract the following year. The NHSU is beginning to make use of better methods; for example, forecasting changes in utilization based on needs estimates for surgical interventions, incidence of polytrauma, burns and for inpatient rehabilitation services related to the impact of the war, as well as potential decreases, such as in childbirth-related services. However, the NHSU is hampered by data gaps. Although e-health data are incomplete for 2021 and 2022, data from 2023 indicated a significant increase in inpatient care with aggregate growth of 30% in comparison with 2021; and moreover, at a time when a significant part of the pre-war population had left the country as well as accounting for increased demand because of war related casualties. (Fig. 15, Fig. 16). Some conditions where "gaming" the system would be more difficult; for example, pregnancy and childbirth – showed significant declines. Overprovision of services in a given year may trigger budget reallocation from other packages. These may come from savings; use of reserves (1% of total programme budget); or the application of a budget-neutrality formula. The budget-neutrality formula, which the NHSU uses to control spending within a budget ceiling per

package, applies a coefficient that decreases the payment rate to offset the cost of growth in volume of services. This practice was applied in 2023 to pay for the increased number of specialized outpatient services. However, long-term reliance on the budget neutrality formula may lead to negative consequences if providers respond to falling tariffs by shifting more of the cost of service provision onto patients. These risks should be closely monitored by the NHSU. A more strategic approach to managing volume risk should be developed based on increased use of health needs assessments and forecasting to set volume in contracts, combined with in-year monitoring of volume of care and dialogue and negotiation between NHSU and providers where there is significant variance in volume of care compared with contract.

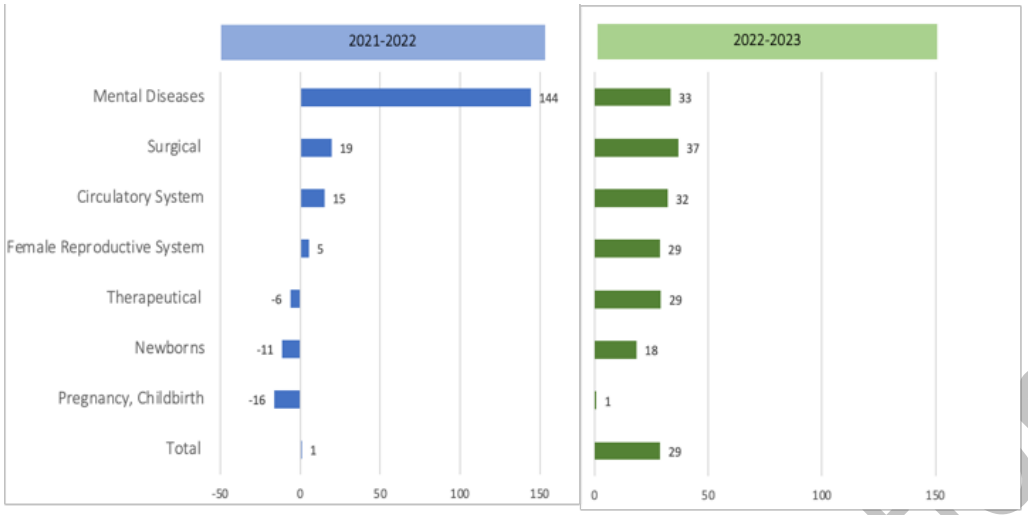
Using a more strategic approach in defining case-mix and volume of services within PMG contracts will help to increase overall programme efficiency and support service delivery modernization, optimization and quality improvement. The Ministry of Health's strategy for creating modernized hospital networks – discussed in more detail in sections below – involves consolidation of some services into higher-volume centres with the capacity to provide quality care. However, the current provider-driven contracting process has led to fragmentation, rather than consolidation. To support the Ministry's strategy, the NHSU needs to be able to specify case-mix and volume of services according to health need and contract proactively for hospitals in the network at appropriate level, as well as defining the content of and ensuring minimum standards for the care to be provided.

Fig. 15 Growth in outpatient visits per patient, 2021–2023



Source: NHSU data (moz.gov.ua).

Fig. 16. Change in the volume of inpatient admissions by major category, 2022–2023[a]

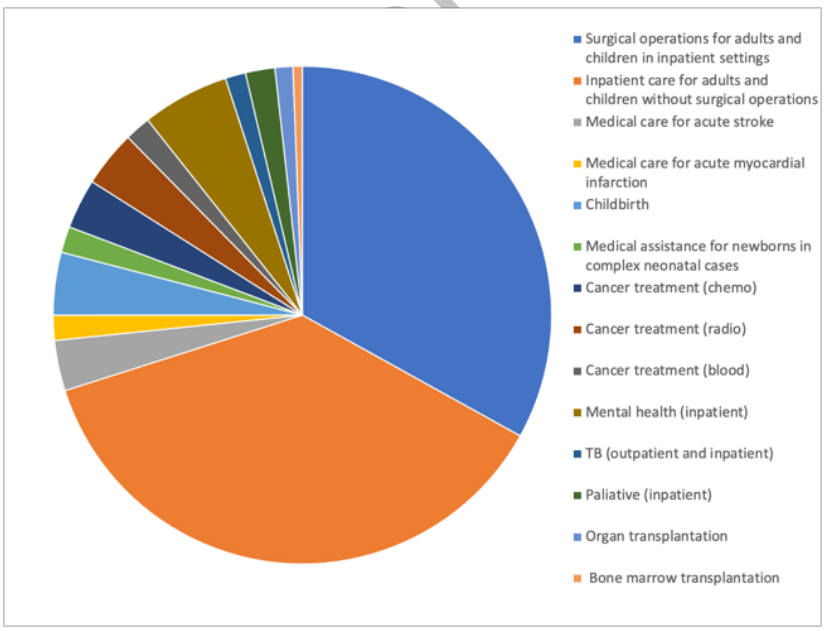


Source: NHSU data (moz.gov.ua).

[a]Data for 2023, annualized per 8 months

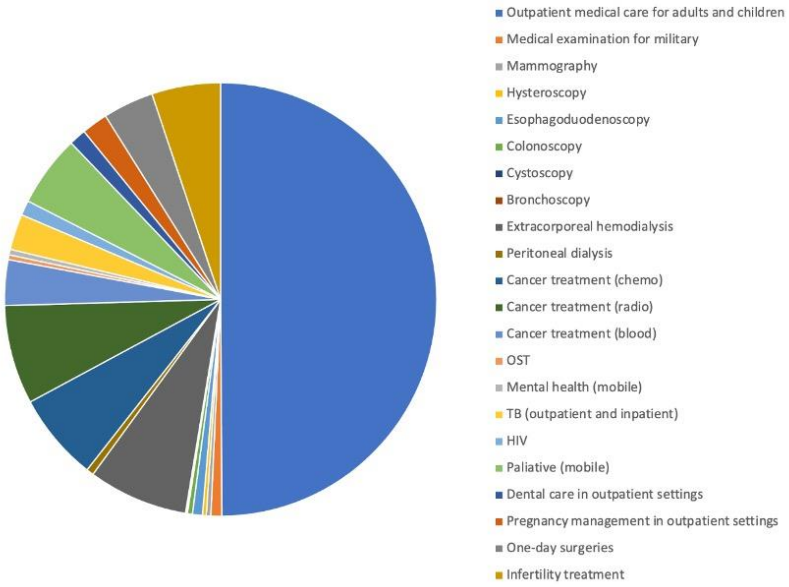
Ukraine uses the system of PMG packages of services for multiple objectives: budget planning, benefit package definition and communication, setting minimum standards, selection of providers, provider payments and contracting. The system of packages is organized around the three questions of strategic purchasing – the definition of scope of benefits (referred to as service specifications), provider requirements for contracting and payment methods and tariff rates. Volumes of services and the budget of PMG are organized according to the packages (Fig. 17, Fig. 18).

Fig. 17. Structure of inpatient care budget organized by service package, 2024



Source: NHSU data (moz.gov.ua).

Fig. 18. Structure of outpatient care budget organized by service package and cost, 2024

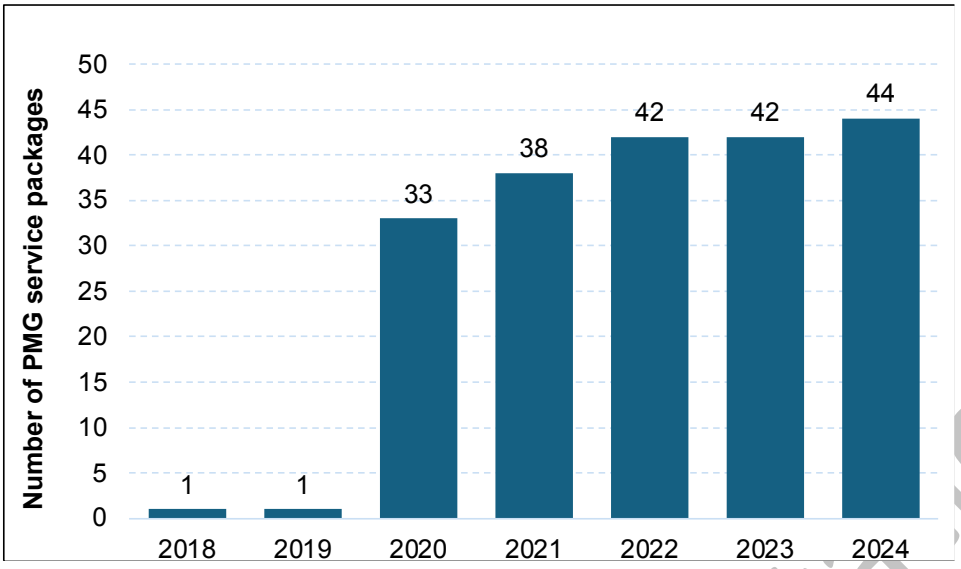


Source: NHSU data (moz.gov.ua).

Several disadvantages of the approach of defining and using packages were identified during reform implementation and use of this single instrument to meet multiple objectives is no longer effective. Section 4.1 (above) explained that the structure of the PMG packages is not suitable for defining and communicating the benefits package. Additional weaknesses and undesired effects of using the current package approach arise for budget planning and purchasing. These include the following.

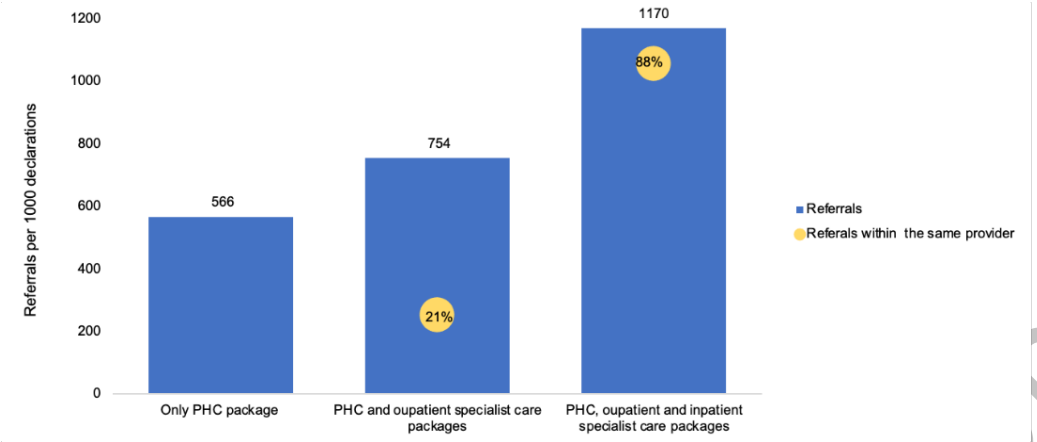
- **The proliferation and non-uniform structure of packages complicates budget planning, contracting and service standards and reduces flexibility.** The PMG includes both very broad and very detailed packages and organizing the budget based on the current structure of packages makes it difficult to see resource allocation by types of care. In 2024 the NHSU contracted facilities for 44 service packages overall and 28 packages jointly constituted only 10% of the total PMG budget (Fig. 19). The growing number of packages makes the system more complicated to manage in terms of the contracting process and the situation is further challenged by the annual contracting cycle and need to check provider compliance with service requirements for each package.

Fig. 19. Number of service packages in PMG



- **Misalignment of contracting incentives with the service delivery vision.** Although the NHSU sought to use contract specifications and requirements for new packages to purchase more selectively (i.e. only from providers with a high enough capacity to provide that specific service), the incentives created led to increases in the number of providers bidding for the package, further fragmenting the network, to the detriment of quality and efficiency of care. Providers tend to focus on applying for as many packages as possible and NHSU has limited ability to ensure that new providers really meet contract requirements. In some cases, the system of packages allows providers to "cherry-pick" the most profitable packages and not apply for contracts which seem to be less profitable. In the case of PHC contracts, outpatient specialist clinics and hospitals meet contract requirements – and a number of these have applied for a PHC package. Awarding PHC contracts to such providers has led to higher supply-induced referral rates. Capitation payment for PHC services does not incentivize productivity at such a level. Additionally, specialist clinics and hospitals are keen to increase the volumes of outpatient consultations paid on a fee-for-service basis, as discussed above. PHC doctors working in facilities that provide specialist care tend to refer patients more often and may offer a reduced scope of service in PHC (Fig. 20) *(42)*. As long as ambulatory specialist clinics and hospitals can still apply for the PHC package, closer monitoring is necessary to mitigate these risks. Stronger payment incentives may be needed for PHC providers to increase productivity.
- **Use of new packages for Government communication is creating advocacy incentives for stakeholders**. Introduction of new packages is often used by Government to highlight the importance of its PMG support for a specific service/area which is a high-profile concern. This creates incentives for stakeholders to advocate for more specific issue-based packages to attract more budget to this service without considering additional complexity for purchasing.

Fig. 20. Number of referrals per 1000 empanelled population by provider characteristic, 2022



Source: WHO *(44)*.

Ukraine should consider moving beyond the "package" approach and use different regulations, instruments and processes for PMG revision, provider payment and tariffication, budget planning and contracting. Benefits package development and provider payment and tariff revisions each require medium-term planned processes with more analysis, use of evidence, consultation and stakeholder engagement. Budget planning should be organized in broader categories aligned to service delivery structure to allow easier understanding of system priorities and expenditure structure. As Ukraine moves towards a cluster-based approach in the hospital sector, the structure of service delivery will become more homogeneous and it will make sense to have packages which will fit the scope of services provided by hospitals of each level, instead of contracting facilities through numerous small packages.

Introducing mixed provider payment methods for PHC could help to strengthen incentives for productivity and address the lack of reliable performance data, which poses significant barriers to understanding what PHC is delivering and challenges the justification for maintaining adequate resource allocation to PHC. Currently, financing of PHC providers is based on the number of patient declarations (differentiated by age), as is common in Europe; and PHC providers are only required to provide data on patient declarations to receive funding for most services. PHC providers vary widely in how much data they collect, with some larger local governments having developed richer systems for PHC data collection and monitoring, while others are doing very little. Incomplete and poor-quality data on services provided, alongside limited ability to analyse and act upon these data, have resulted in weak oversight of, and trust in, PHC performance and quality of care. Ukraine should consider implementing policies to systematically monitor various aspects of PHC care performance, including geographical and timely access and the quality of care provided. The monitoring data collected should be effectively used for benchmarking purposes and to provide feedback to providers and local authorities as owners of the facilities. It would also then be possible to revisit the existing performance-based payments to improve quality of PHC in priority areas – building on the NHSU's experience in this area. A system of top-up payments could be considered to incentivize providers to improve NCD management, including the cost of diagnostics that is currently very limited. Fixed lump sum payments could be considered to improve access in low-coverage areas as discussed in section 4.2.

Future purchasing strategy of outpatient-specialized services should support the policy objective of shifting more inpatient care into outpatient settings. This objective cannot be achieved with introduction of financial incentives alone and will require the service delivery vision being set first. It is recommended to move towards a system in which both outpatient and inpatient specialist services are provided by the same provider. In addition to supporting continuity of care, it would mitigate the impact of revenue losses when hospitalizations decline. Introduction of AR-DRGs (in combination with global budget) to pay for day surgeries is a good example of creating incentives for shifting care from inpatient to outpatient settings.

The provider payment system for inpatient care is evolving; and needs planned development over the medium term. The system used in Ukraine is based on AR-DRGs such as those used in some European countries such as Croatia, the Republic of Moldova and Romania. The previous health financing assessment report noted a high level of aggregation within the Ukrainian AR-DRG system and recommended increasing the number of AR-DRGs. In April 2021, Ukraine started using adjacent groups[9] from Australian Refined AR-DRGs and in 2023 country used 376 AR-DRGs to pay for most of the inpatient care cases. This is an increase from 131 in the initial phase of transition to AR-DRGs. However, the system retains a high level of aggregation compared with that of other countries, including the Australian one. In a sample of 286 000 cases from 1075 Ukrainian health-care providers, 53% of cases could be grouped into as little as 10 Ukrainian AR-DRGs. The same cases would require about 25 original AR-DRGs. Ukraine should continue to disaggregate AR-DRGs until achieving reasonable level of homogeneity of underlying costs. This would also require good quality clinical coding to mitigate the risk of "gaming". The previous report recommended to develop a pathway for hospital financing to transition from global budgets based on historic budgets to payments based on AR-DRGs. This remains relevant, but Ukraine needs to consider an appropriate balance between activity, output and global budget modalities, learning from different country experiences in Europe. It should be considered that AR-DRGs can also be used to set global budgets based on forecast needs, not only for volume-based payment.

Consistency of different inpatient care payment mechanisms and more transparency in tariff setting is recommended. In Ukraine, PMG packages are also used for a grouping process that may not be consistent with AR-DRG grouping. For example, the 18 subgroups for complex neonatal care in the package are not consistent with the single AR-DRG (P69) for complex neonatal care. Similar situations are observed in inpatient rehabilitation package and stroke treatment. AR-DRG weight adjustments that affect tariff settings have also not been transparent. Ukraine increased AR-DRG weighting selectively for certain priority interventions, including for pulmonary embolisms, during the COVID-19 pandemic in 2021, and select interventions for liver and pancreas and severe burns in 2024. Generally, it is advised that a coherent approach is used to review AR-DRG weighting across the board based on good understanding of underlying costs.

The AR-DRG-based hospital payment system may incentivize hospitalizations to increase admissions and readmissions. Initially, between 2019 and 2022, this risk did not materialize, most likely because of the impact of COVID-19 pandemic on elective inpatient care. However, more recently in 2022 and 2023, as discussed above, hospital admissions have increased at the time when population has decreased due to war-related outmigration. Moving to more

[9] Adjacent groups are intermediate categories with similar clinical features, they are based on main diagnosis or operating room procedures.

proactive purchasing practices based on population need, benchmarking performance and closely monitoring readmissions, are needed to mitigate that risk.

Insufficient resourcing of provider monitoring, data verification and audit functions has exposed the NHSU to an increase in claims that indicate "gaming" with reporting, if not fraud, since 2021 when the NHSU took on increased and more complex purchasing tasks. As discussed below, the low quality of e-health data submitted as the basis for payment by providers is now a major obstacle to other NHSU functions. These cannot be controlled and audited solely using algorithm-driven analysis of central databases (CDBs) and require an enhanced role for MRDs in data verification, monitoring and enforcing agreed contract terms.

From the beginning of the war, the NHSU has adapted to meet new challenges. In 2022 the NHSU temporarily implemented special transfers for a limited period to allow health facilities to meet new minimum salaries introduced by the Government. In 2023 special packages were introduced to ensure preparedness of health facilities as well as provision of care in areas of active hostilities and temporary occupied territories. The "readiness payment" was introduced to finance preparation of designated health providers to respond to possible threats throughout the country as determined by the regional Department of Health. The network of these providers was planned by the Ministry of Health, and one provider was identified for every 200 000 population. In 2024 the readiness package was supplemented with additional payments to designated providers tasked with responding to possible nuclear threats in oblasts in which there are nuclear power plants. The financing of facilities located on temporary occupied territories was terminated.

In the most war-affected areas, predictability of financing needs to be the overarching priority. In active conflict areas, the NHSU needs to make greater use of locally available data, including humanitarian data, HeRAMS and local stakeholder consultation (including local governments and military administrations) to update needs assessment and purchasing. Additionally, payment methods used in the context of war should create greater financial stability and predictability for facilities, with a combination of global budgets and output-based financing. A strict enforcement approach is not feasible or desirable for contract monitoring in active conflict areas where conditions often make it impossible for providers to comply fully with fast-changing contract requirements developed without understanding of the coping strategies needed to maintain access to care in this context.

4.3.1 Recommended purchasing actions to facilitate providers to improve efficiency and quality

Action 1. Purchase volume of services based on local population needs and in line with planned service delivery reform

- The NHSU should move towards population-needs-based planning of volume and case-mix of services to be purchased in contracts in each oblast changing the current approach where providers choose which packages to apply for and inflate the volume of services; this can be implemented by starting with selected services for which the quality of available information is higher.
- The role of MRDs should be developed in local health needs assessment, provider capacity assessment, contract negotiation and management, utilization reviews and the use of contracting providers and engagement with local government units to support optimization of the provider network.

- For contracting purposes, the grouping of services into packages should follow the vision of service delivery reforms. This will require a review of PMG packages system, which should fit with fit with patient pathways and avoid confusing gaps and overlaps between packages.

Action 2. Review provider payment methods and tools to compensate providers for the complexity of care they provide and encourage quality

- Introduce blended provider payment mechanisms, considering top-up payments for priority health conditions in PHC to incentivize improvements in quality and performance.
- NHSU should use contracts with PHC providers to enforce reporting of agreed PHC activity and performance data through the e-health system.
- Develop the purchasing strategy and service delivery vision to incentivize shifting care from inpatient to outpatient settings.
- Develop a medium-term (2–3 year) plan to guide, in a systematic fashion, further transition towards consistent provider payment methods for inpatient care. This should include achieving appropriate level of AR-DRG aggregation, appropriate balance of activity and output-based provider payment methods, transparent and credible practice for tariff setting and more targeted utilization review practices.
- Payment methods used in the context of war should create greater financial stability and predictability for facilities, with a combination of global budgets and output-based financing.

Action 3. Strengthen purchasing tools to control fraud and excessive claims

- Expand regulations to prevent health-care facilities from being contracted for both PHC and specialist services simultaneously to facilities providing ambulatory or inpatient specialist care, which leads to excessive referrals.
- Monitor and proactively act through automated methods and contract tools to identify and deter adverse provider behaviours that lead to excessive claims.
- Make short term changes to provide payment methods to reduce financial incentives for excessive claims where there is clear evidence of biased data.

4.4 Purchasing and complementary policies to modernize and optimize health service delivery with PHC as a foundation

This section provides a situation analysis and recommendations for progress towards health system performance objectives of improved efficiency, sustainability and quality of care through health service delivery reforms (supported by purchasing and complementary policy instruments to modernize and optimize health service delivery).

Health purchasing and service delivery reforms need to be aligned and coordinated to achieve improved health system performance. The health purchasing toolkit can support service delivery reform, but this will not be sufficient to address structural imbalances in the health system. To address these imbalances, a strategic vision is required and a range of policy measures, including regulations, changes to provider ownership and governance, and investments in infrastructure and human resources, will be needed. The health financing toolkit can also support service delivery reforms, as part of this broader package of policy measures.

PHC needs further strengthening to enable it to deliver higher quality care covering the most cost-effective interventions for common conditions. Strong PHC is essential for access and for the efficiency of the overall health system, delivering the best value for money, reaching the most population, providing a viable alternative to reduce the need for specialist consultations and admissions in the inefficient hospital sector.

For PHC to deliver on its potential access and efficiency promise and provide full value for money, changes to how PHC is purchased are needed, and need to be complemented by a reform of service delivery towards direct integration of smaller practices into networks and/or group practices, including mechanisms for including private providers in networks or groups. Since the start of reforms, the number of NHSU-contracted PHC providers has increased from 680 in 2018 to 2474 in 2024. The PHC network has also become more diverse with 49% of all PHC providers contracted by the NHSU being privately owned in 2023 (Fig. 22). However, most private providers are small practices, accounting for just 10% of total population enrolment in 2023 *(45)*. Small-scale providers may struggle to provide the whole scope of PHC services included in the capitation payment to their empanelled populations and hire the full complement of staff. While the number of PHC doctors has increased (Fig. 21), they lack sufficient nurse support, with a nurse-to-doctor ratio of 1:1 – far below the ideal ratio observed in countries with strong PHC systems. Group practices or networks are better placed to provide a wider range of diagnostic, preventive and treatment interventions and employ and train multidisciplinary teams.

Improving access to essential services in rural, sparsely populated areas may require expanding PHC to integrate a broader range of diagnostic and health services; a model of care that has been referred to as "PHC+".[10] This will require a combination of purchasing actions and service delivery reforms. Revisions to the NHSU's contracting principles for PHC, implementation mechanisms and enforcement may be needed *(46)*. Standard-setting, planning, capital investment in facilities and staff training and redeployment are also essential to improve upon the PHC model and provide better-integrated care.

[10] PHC+ refers to relatively large PHC group practices serving populations of 15–30 000 people in communities relatively far from hospitals. These expanded practices provide additional basic level services such as rehabilitation, mental health care, perinatal care or palliative care on an outpatient basis. There is additional scope for services such as imaging and laboratory diagnostic capacity, day surgery or even emergency services.

Fig. 21 PHC physicians, 2020–2023

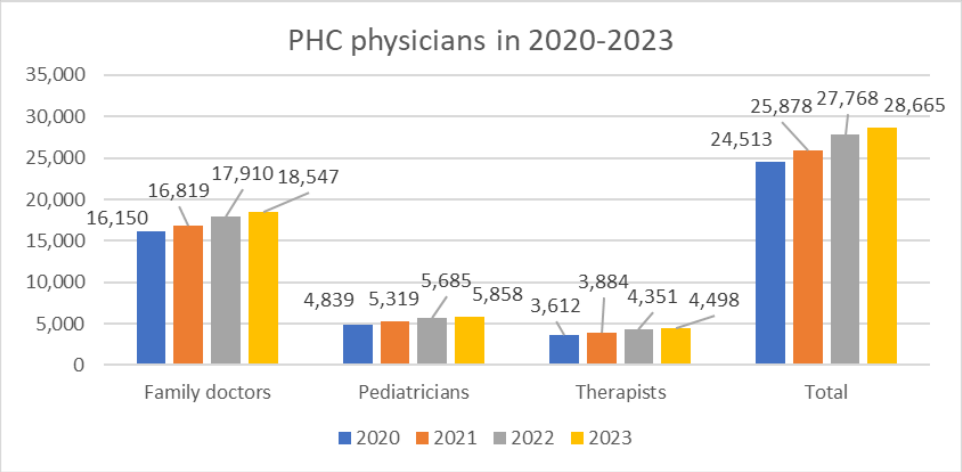
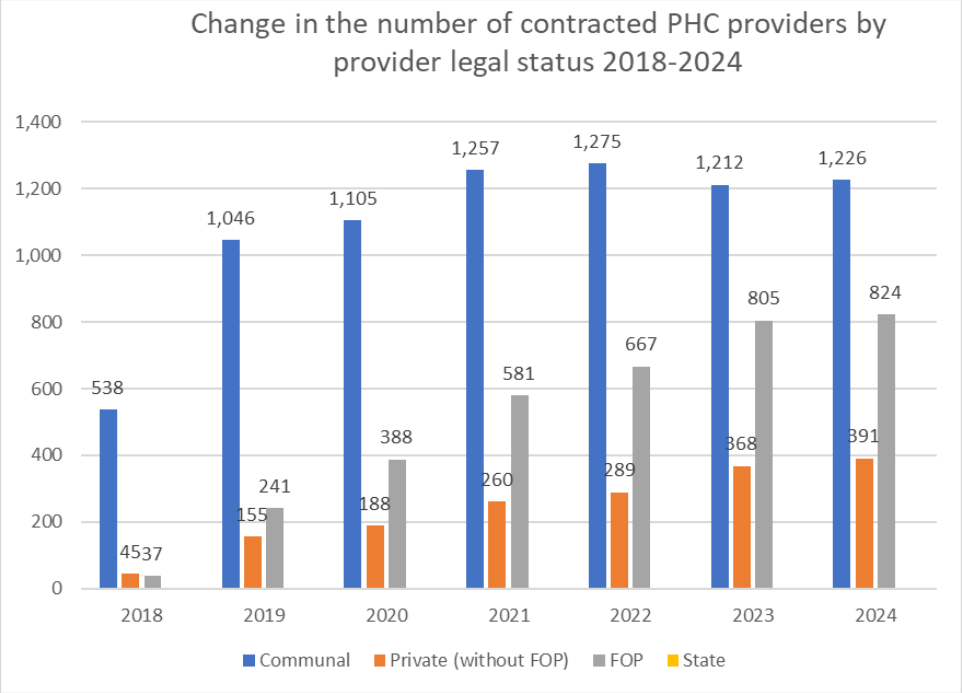


Fig. 22. PHC providers by legal status, 2018–2024

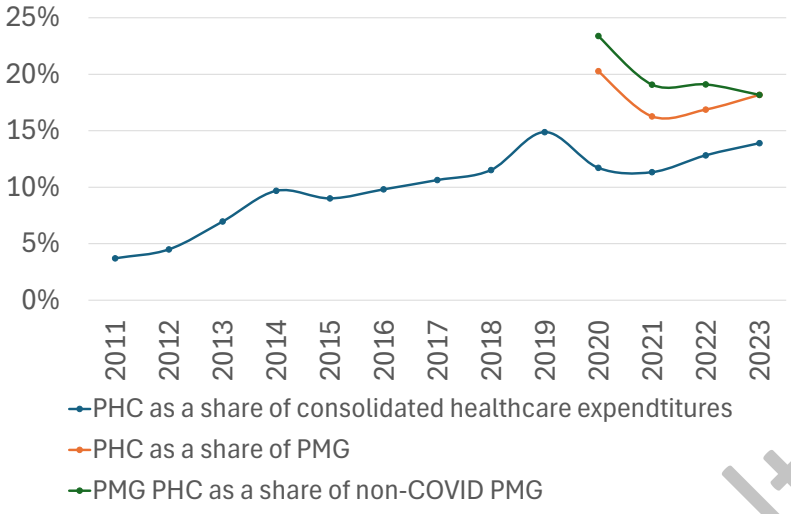


Source: Government of Ukraine *(46)*.

It is important for sustained progress and performance that PHC is adequately financed based on institutionalized, regular costing and that local government's share of financing is covered. At the launch of Ukraine's health-care reforms, financing for PHC was prioritized. However, the share of PMG devoted to PHC has decreased as other services were added to the PMG and the overall benefit package expanded (Fig. 23). Based on costing analysis *(44)*, the average per capita cost for providing PHC in 2024 was 878 hryvnia, which compares favourably to the official capitation rate outlined by the NHSU of 787 hryvnia. The calculated cost includes utility and capital costs that (by law) should be covered by local government. However, as noted above, local authorities' funding of health facilities is variable, due in part to their different priorities and financial constraints. In addition, private PHC providers do not receive local authority funds

to cover utility and capital costs. Overall, the system means that many PHC providers are underfunded to meet their costs.

Fig. 23. Share of PHC spending as a percentage of total health and PMG budget



Source: State Treasury Service of Ukraine *(6)*, Ministry of Finance BOOST Platform *(37)*.

Ukraine could, by 2040, meet most needs for acute hospital care with estimated 120 - 140 general hospitals serving about 300 000 population and 48 - 55 multi-profile specialized hospitals serving about 750 000 population each *(47)*. These hospitals would need to be technologically advanced and well connected to other levels of care, including ambulance services, strong PHC and long-term care. Ukraine still has a legacy of excessive hospital infrastructure supporting a model of care that remains too reliant on inpatient care for mental health, rehabilitation and other specialist services, In 2019 before the start of purchasing hospital inpatient care under the PMG, Ukraine still had 1640 hospitals. Hospital bed density remains significantly more than in comparable European countries (Figs. 24, 25). While hospital admission rates in Ukraine are similar to EU country averages, long hospital stays and suboptimal hospital bed occupancy rates indicate that significant opportunities for a more efficient health system have yet to be realized (Figs. 26, 27). In addition to a large network of hospitals, Ukraine has also inherited an extensive network of specialized outpatient facilities. However, this network, which included dispensaries, polyclinics, specialized mono-profile clinics and diagnostic centres, began to diminish in scale rapidly between 1993 and 2014, declining from 2514 facilities in 1993 to 1548 in 2014, and further to 646 in 2019 and 479 in 2021. It is important to note that the key arguments for efficient hospital infrastructure are economic sustainability, economies of scale and quality considerations that require a concentration of more sophisticated expertise and equipment. The resources spent on maintaining and operating excessive infrastructure can be freed up to finance variable costs of health care and directly benefit patients in a more streamlined and optimized hospital network. More consolidated specialist inpatient care services would also reduce the carbon footprint of health services per patient.

Fig. 24. Number of hospitals in Ukraine per million population, by type

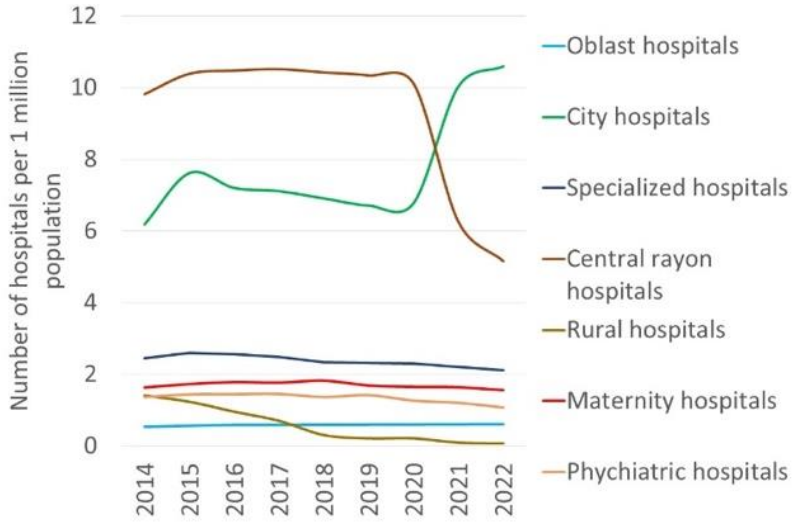
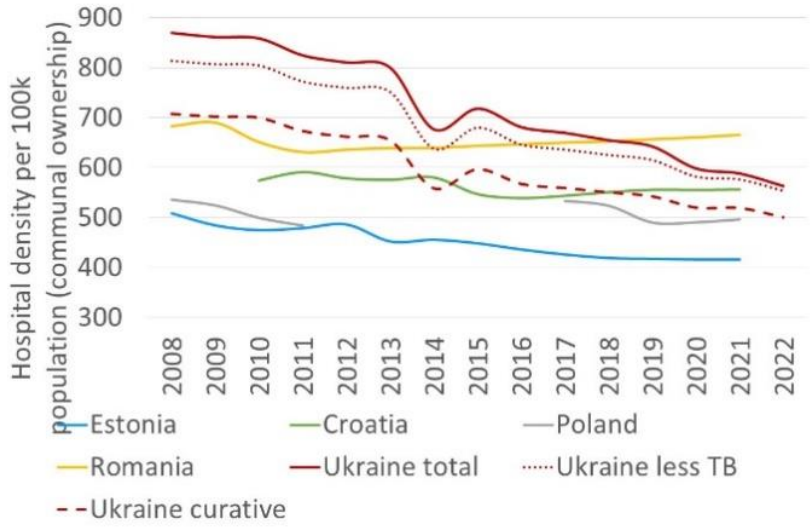
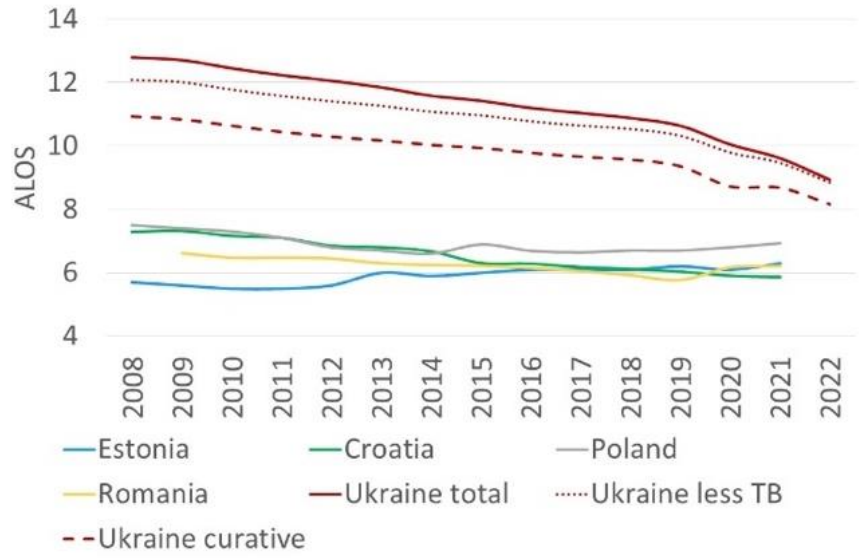


Fig. 25. Hospital bed density in Ukraine compared with selected central and east European countries



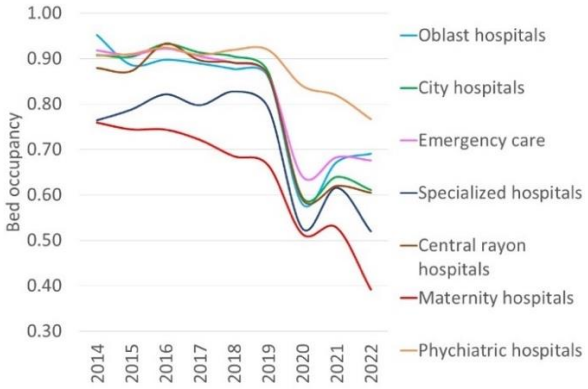
Source: State Statistics Service *(6)*, Ministry of Health Centre for Medical Statistics *(48)*, Eurostat *(49)*, OECD.stat *(50)*.

Fig. 26. Average length of stay in hospitals in Ukraine compared with selected central European countries



Source: State Statistics Service *(6)*, Ministry of Health Centre for Medical Statistics *(48)*, Eurostat *(49)*, OECD.stat *(50)*.

Fig. 27. Bed occupancy by type of hospital in Ukraine



Source: State Statistics Service *(6)*, Ministry of Health Centre for Medical Statistics *(48)*, Eurostat *(49)*, OECD.stat *(50)*.

Hospital mergers and/or networks significantly increase scope for organizational efficiency gains and can provide a pathway towards implementing a longer-term vision. The NHSU's output-based provider financing modality provides incentives for efficiency, but only limited improvement can be achieved if applied facility by facility in the current over-extended network. Since 2019 several service delivery initiatives have been launched that have the potential to provide the basis for the formation of hospital networks and for mergers. A nationwide "capable hospitals network" of 212 hospitals was developed in 2019, led by regional administrations and supported by master planning initiatives. This was based on the concept of "hospital districts", with a lead hospital identified for each. These capable hospitals were to be prioritized for investment and expected to merge with smaller facilities. In 2022 to further advance hospital restructuring, the Ministry of Health sought to replace the legacy system of oblast, municipal and rayon hospital organizations with a new comprehensive "clustered" hospital system based on population needs and as a step towards a more rational hospital network *(51)*. The organization of the cluster network considers administrative boundaries, geographical features,

road conditions, demographics, morbidity and mortality patterns and optimal patient pathways. The primary goal of the cluster network is to bring core hospital services closer to the patient while concentrating advanced and technology-intense services for more complex needs. Under this approach, hospitals are categorized into three groups: *above-cluster* hospitals for sophisticated specialized services, *cluster hospitals* (catchment population of 150 000) for general hospital services and *general hospitals* offering basic services (catchment population of 50–80 000). Compared with the capable hospitals network, the cluster network includes an additional 284 smaller hospitals – many of which are likely to struggle economically and be unable to provide high-quality hospital services. To realize the opportunities for efficiency gains, formal institutionalization of clusters, for example through regulations or the direct establishment of merged legal entities, would be needed to form a basis for the NHSU to align its contracting to the cluster network approach.

There have been significant changes in modernizing and consolidating select types of single-specialty hospital care through mergers and development of outpatient treatment, aligned with changes to NHSU purchasing. The NHSU now contracts selectively inpatient TB care from just one specialized facility per region, identified through Ministry of Health-led planned service delivery reform. Other TB hospitals and dispensaries had to merge with the principal hospital. Following this, in 2019 the 81 existing TB facilities, including 65 with hospital beds, were consolidated to 29 in 2022, 26 of which had inpatient capacity *(52)*. This reform was accompanied with integration of outpatient TB treatment into PHC (initially through a complementary TB package). Similarly, the number of hospital-based mental health-care providers has decreased during the post-reform period reflecting the increasing role of other, non-hospital-based providers of mental health care – – including PHC and community mental health teams and specialized services on outpatient basis *(53)*. The number of NHSU contracts for inpatient mental health services decreased from 192 in 2020 to 96 in 2023. The government has also consolidated acute care for myocardial infarction into 50 designated hospitals and applied the same approach to acute care *(54)*. To ensure the quality of obstetric care, the NHSU has established minimum thresholds for the number of deliveries per facility per month (although this is still low in international comparison), and the Ministry of Health has taken steps to establish a network of perinatal care centres that could in future be contracted selectively by the NHSU.

The concept of a singular medical space is important for the vision of health-care reform in Ukraine and provides further opportunities for pooling financial and human resources but adds to the challenge of optimization of the facilities network. The one medical space concept envisages that health services can be accessed by patients anywhere in Ukraine, including in facilities of so-called "parallel systems" and national-level facilities such as facilities for civil servants, the National Academy of Science and Ministry of Health facilities. Implementation of this vision requires integration of the budgets of these parallel systems and national facilities into the PMG. Some of the "parallel systems" and national level facilities have been contracted by the NHSU since 2023 and it is planned that all these facilities will receive funding for health-care services through PMG in 2025. Since the beginning of the full-scale invasion, the concept of one medical space was further expanded to the concept that civil and military health facilities should increasingly work as one system.

The full-scale invasion has had a significant impact on the hospital network, both calling for short-term adaptation and creating opportunity to build back better in line with a long-term vision. As of November 2023, the hospital facilities of 319 institutions had been damaged due to

the conflict. Of these, 50 institutions have not been able to continue to provide PMG services, including 12 facilities in Kharkiv, eight in Donetsk, six in Kyiv, five in Zaporizhzhia and four in the Dnipropetrovsk oblasts and eight facilities in Kyiv city. Out of these facilities, 16 were general multi-profile hospitals, 18 were specialized hospitals and 16 rehabilitation centres. Conditions in active conflict regions have also disrupted the supply of human health resources and functioning of services. This has impacted service availability in the short term, prompting emergency humanitarian response. It also calls for pragmatic adaptability by central health authorities over the enforcement of contract requirements. Despite such setbacks, there is an opportunity to build back better with a longer-term strategic service delivery vision as guidance.

Increased attacks on critical Ukrainian civil infrastructure, particularly for energy and heating, across all regions of the country have left millions of people without electricity, water and heating; and significantly affected service delivery. Stable electricity, heating, water supply and sanitation services are essential for ensuring uninterrupted medical care. Urgent investment in health-care infrastructure is needed to prepare for the 2024 winter and ensure energy resilience. There is also an opportunity to align these short-term investments with the broader service delivery vision for specialized care, both inpatient and outpatient *(4)*.

The full-scale invasion by the Russian Federation has also elevated priority health needs requiring a service delivery response, acting as an impetus to accelerate service delivery modernization reforms in mental health and rehabilitation services. More decentralized and diverse approaches are being considered for the delivery of mental health care. In addition to scaling up the availability of mental health services at PHC level, the Government is currently reviewing options for introducing outpatient mental health centres; albeit the model of care has yet to be developed and agreed upon, and financing mechanisms are still to be defined. In 2024 the Government outlined a plan to establish 30 modernized mental health centres in cluster hospitals; including that intensive inpatient rehabilitation would need to be operational in each cluster/above-cluster facility. By the end of 2023, only one third of these cluster and above-cluster facilities had been positioned to provide rehabilitative care. In addition to developing facility-based rehabilitative care, the Ministry of Health plans to launch community-based rehabilitation. Development of this model will entail service integration and the establishment of a three-tiered rehabilitation system. The vision for the implementation of community-based rehabilitation requires additional operationalization, including definition of the modalities of delivery of rehabilitation care at the community level, roles of key providers in the health sector and in other sectors, investments and ensuring a well-trained health workforce. Clarity concerning the service delivery model is needed to develop supportive purchasing mechanisms.

A forward-looking strategy for service delivery transformation is needed with a comprehensive approach to implementation, including explicit links to health financing and purchasing. Ukraine has come some way towards restructuring its service delivery network over the last 30 years, but current proposals need further development and more attention to the enabling environment for implementation. However, the severe financial constraints, urgent need for improvements to quality of care, and cost–effectiveness considerations all create pressure for more significant steps towards the development of a more rational network of service delivery. The future network could be organized and designed using modern European approaches and capable of accommodating shifts in models of care. Future development and consolidation of specialist outpatient services could be interpreted as part of hospital network development, providing both inpatient and outpatient care with possible outreach and support to PHC+ facilities.

The vision for service delivery modernization and optimization needs to consider lessons learned from the war for resilience. Recovery from war provides an opportunity to build back better**.** Recommendations from the joint report, "Priorities for Health System Recovery in Ukraine" *(55)* remain relevant and have been emphasized by this report. Reducing vulnerability of health care by having more emphasis on PHC could be an argument for prioritizing investments in PHC and PHC+. Network optimization that includes reducing the need for inpatient care and increasing the role of PHC makes the system overall more resilient. Hospital consolidation via networks and organizational mergers can also make the system more resilient, since hospital organizations can still have several campuses and services can be repurposed. Vulnerability can be reduced by the design of new hospitals. There are additional ways that countries can reduce vulnerability such as field hospitals, maintaining (strategic) stocks of modular operating theatres and key equipment, including spare capacity in the design of the main hospital network, designating suitable (permanent or easily erected) buildings as back-up facilities for non-acute care and cross-border care agreements. Adjustments to plans may be needed to ensure resilience in times of crises. Experience gained in current active conflict regions can inform future considerations on how best to integrate military and civil hospital systems, and how designated civilian hospitals can best organize their operations, including differences in peace and war time. Given the increase in needs for rehabilitation for the longer term, rehabilitation needs to be seen as integral part of the health services at all levels.

It is important to ensure that emergency response services are responsive to changing circumstances and aligned to both planned service delivery reforms and restructuring to help with transitions to recovery phases at an appropriate time. For this to be successful, continued strong collaboration is needed at the national, oblast and local levels**.** Joint planning in coordination meetings, technical contributions and information sharing have enabled the prioritization of emergency response interventions under the Humanitarian Response Plan consistent with Ukraine's health reform path towards UHC. Through Area-Based Coordination, the inclusion of civil society organizations and volunteer groups has helped to ensure coherence in response actions at the community and local levels. In 2022 the Ukraine Humanitarian Fund *(56)* provided funding for humanitarian interventions focusing on strengthening localization efforts while encouraging cash programming in complementarity to other allocations and in alignment with the Government's criteria and priorities.

Implementing the Humanitarian–Development nexus can minimize the creation of parallel systems which are often difficult to sustain beyond the timescale of an emergency response. For example, the content of PHC services in emergency settings should be a subset of the PHC services in regular settings, while medicines distributed by humanitarian partners should be aligned to those included in the AMP and EML. Lessons learned from the many models of mobile outreach in emergency settings can be consolidated into effective outreach in other hard-to-reach settings. In a state of protracted conflict, humanitarian support and national health systems need to work side by side and collaborate over time with a gradual "hand-over" process during recovery that is ongoing and ensures public resources will be available through any national system for evidence-informed care.

Government actions to enable greater participation of the private sector within the NHSU-contracted network need to be anchored to explicit policy objectives. It is important to articulate the strategic rationale for including the private sector in the NHSU's contracted network in each service domain (PHC, specialist outpatient or specialist inpatient care). Such objectives may include, for example, filling specific service gaps in specific geographical and/or

service domains; mobilizing private capital for investment and innovation; or expanding patient choice and competition in some services, thereby improving provider responsiveness to patient needs and the quality of care. Additionally, potential risks need to be understood and mitigated. For example, at the PHC level the challenge is the integration of small private providers within PHC networks to be able to provide the full scope of the PHC package. For hospital care, given already existing excess capacity, it is important that the contracting of private providers does not undermine efforts to rationalize service delivery. With a clear vision, strong regulations and contracts, fully inclusive health information systems and open, transparent and purposeful dialogue, they can continue to grow without detriment to the Government's key health policy goals *(42)*.

The NHSU should be empowered to utilize purchasing as a method for supporting service delivery transformation, building on promising early initiatives to purchase more selectively in line with approved plans for service change or based on explicit criteria. With a few exceptions, providers have been in the driving seat when deciding what and how many services to provide (subject to eligibility criteria). Promising initiatives that could change the status quo have been: (i) consolidating contracts for specific services in a defined geographical area among fewer providers, such as contracting inpatient TB care; and (ii) establishing criteria such as minimum service volume thresholds for eligible providers, such as for stroke (at least 240 cases per year), myocardial infarction (at least 40) and deliveries (at least 170 per year) that contribute not only to efficiency but also to better quality of care. Ukraine can also consider proactively and selectively purchasing defined case-mix and volumes based on cluster hospital networks, informed by population health needs assessments at the regional and local levels; and designing contract packages with cluster and above-cluster hospitals to include the full complement of their expected service mix. The NHSU could also utilize incentives and proactive contracting concerning what services to buy to drive the development of efficient service delivery models, such as day surgery or outpatient care modalities for mental health services, and preventive services at PHC level. Proposed multiyear contract commitments should initially be reserved only for cluster and above-cluster hospitals, or PHC and AMP providers with clearly defined roles in future health system designs.

Institutional, regulatory and governance changes for health-care providers are needed to support implementation and management of provider networks and mergers. Health financing reforms in Ukraine were complemented by increased autonomy for providers to provide flexibility in responding to incentives from the purchaser (NHSU) and demand for services. However, the system overall has remained fragmented among different owners – local, regional and national governments, including parallel subsystems managed by different ministries. Introduction of modern principles of management and corporate governance, such as independence, professionalism, inclusiveness and accountability, should be considered, with oversight by Supervisory Boards representing the owner and key stakeholders in community. This will require changes in hospital governance arrangements, legal status and updated qualification requirements for managers. Ukraine has taken steps towards setting up Supervisory Boards for all communal and state providers contracted by the NHSU in 2023 *(57)*. Strengthening management and governance of individual facilities would not solve; however, the fragmentation problem. To address this, management, legal and governance changes should be developed for merged facilities or for local facility networks, with their supervisory boards representing local government or other owners of each merged or network facility. This could allow networks to address internal efficiency through management actions agreed locally,

rather than posing a political challenge if changes can only be resolved by regional or national directives.

Using capital investment decisions and financing to modernize and optimize the service delivery network. Investments, including for recovery, should be seen as an important opportunity to modernize and consolidate Ukraine's service delivery network. Government and international partners in the RDNA estimate that recovery and modernization of the health service infrastructure will require about US$ 14.2 billion in investment over the next 10 years. Although some of these investment requirements are short-term priorities that are needed to quickly recover and address disruptions in service delivery, other investments should be put into a more strategic context for future health service network development, considering the country's demographic projections and economic realities. A consistent health service modernization strategy would provide stability and predictability to investors and provide comfort for allocative efficiency and sustainability. It would also be important to manage risks from fragmented decision-making where owners' fundraising initiatives, donor interests and politics could override strategic investment criteria. The war has mobilized significant international goodwill to support recovery efforts, but the flow of international aid has been directed through disparate channels, including the Ministry of Health, Ministry of Infrastructure and local governments, further complicating the management of investments. Capital planning exercises, currently undertaken at several different levels of government, should be centralized and professionalized. A clear set of decision criteria and modern planning, construction and equipment guidelines need to be used. This is a specialized field of expertise combining architects, engineers and medical planners, among others, which may require a dedicated organization separate but linked to the Ministry of Health.

In the context of public capital budget constraints, financing for investment may be attracted through engagement in public–private partnerships (PPPs), particularly for specific support services rather than full hospitals. Decisions about taking a PPP route should be made after capital planning and investment decisions have been made and as one among several (feasible) procurement options, taking full account of the direct and contingent future costs of PPPs. International experience shows that PPPs have a higher chance of success if applied to specific (support) services (lab, imaging) rather than to full entities such as hospitals. The latter is typically more expensive than the alternatives and requires specialist human resources to manage: resources that are normally unavailable to government authorities.

4.4.1 Recommendations for purchasing and complementary policies to modernize and optimize health service delivery

Action 1. Continue to strengthen the role of PHC in the system.

- Continue to prioritize and adequately fund PHC: both within the PMG and by local governments (who are responsible for paying utilities costs and providing support for capital investment). In the medium term, consider pooling utility funding from local government units to the NHSU to improve equity in financing and level the playing field between public and private PHC providers.
- Institutionalize within the NHSU a credible costing methodology for PHC services to ensure that the PMG budget allocation for PHC reflects changes in the services included and the costs of related inputs.

- Stimulate development of PHC networks to ensure universal access to improved and extended capacities at this level of care, supporting this with financial incentives for smaller solo or group practices to link up to networks, enabling providers to expand the scope of services.
- Move from one- to multi-year NHSU contracting for PHC and AMP providers.

Action 2. Align NHSU contracting with the service delivery strategy.

- Formalize in regulations the cluster network concept to support the modernization and optimization of the hospital network and use these to guide all future investment decisions, including those related to recovery in war-affected areas.
- Align NHSU contracting decisions for specialist services to the cluster network concept, using selective contracting to support the consolidation of specialized inpatient care in cluster and above-cluster hospitals.
- Move from one- to multi-year contracting for cluster and above-cluster hospitals.
- Articulate clear public policy objectives for NHSU contracting of private providers to deliver PMG services and take action to ensure that this does not undermine progress towards service delivery optimization objectives.
- Centralize and professionalize capital planning, supported by a clear set of decision criteria and modern planning, construction and equipment guidelines.

5. Strong institutions, accountability and transparency

Strong institutions, accountability and transparency are needed to successfully implement reforms. Competent institutions are essential when carrying out technical functions for health financing; accountability for performance is needed for continued commitment by the Ministry of Finance to allocate resources; and transparency in decision-making with appropriate participation of key stakeholders is vital for credibility of reforms and trust by the population. This section discusses the situation and recommendations for improving institutions' accountability and transparency, underpinning all recommendations from the previous chapters of the report.

In the highly dynamic environment of the war emergency during the past two years, Ukraine has maintained the institutional capacity and systems within the NHSU and Ministry of Health required to finance health services under the PMG, but these institutions have had to adjust and adapt the instruments introduced by the reform and have in turn become more fragile. The resilience shown by post-reform institutions and systems has made it possible for international partners to provide financial support to Ukraine's health system through the national budget, with the NHSU disbursing funds to providers via regular payments. Nonetheless, the effects of the war on the fiscal position and public sector staffing and administrative budgets have taken a heavy toll on the institutional capacity of the NHSU and Ministry of Health, as well as increasing demands on both, making it difficult to implement legacy plans to develop the capacity of each body. It is important to address priority areas of strategic and operational fragility in order to sustain the impressive resilience Ukraine's institutions have demonstrated over the last two years of full-scale war. The conditions of the war have necessitated fast, reactive decision-making; however, "crisis management" working methods place additional burdens on already limited capacity; may not make the best use of an increasingly constrained PMG budget; and create unrealistic implementation timeframes and revenue uncertainty for providers and local governments.

5.1 Clarifying and strengthening the governance of the NHSU and its ecosystem

Governance is a critical aspect of health financing arrangements, requiring stable policy direction, oversight and mechanisms for accountability to the Cabinet of Ministers, together with engagement with and transparency to stakeholders. It involves setting strategic direction, clear policy and legal frameworks and ensuring accountability for the NHSU together with clearly defined decision rights at governance and executive management levels. The Law on Government Financial Guarantees of Health-care Services (Law 2168) gives the Ministry of Health a strategic policy role, setting priorities for the PMG and health sector standards. It establishes the NHSU as a Central Executive Body responsible for the technical functions of drafting PMG proposals together with necessary analysis and consultation, analysing health needs, projecting demand for health services and purchasing the services under the PMG. The Ministry of Health and Ministry of Finance have joint responsibility for final approval of the annual PMG regulation and the annual PMG budget proposal, ultimately to be approved by Parliament. The regulations envisage this as a formal arms-length submission and approval process, but in practice the NHSU appears to have very limited technical autonomy to conduct an orderly, planned and timely process of PMG preparation and implementation each year. The Ministry of Health appears to have taken an increasingly hands-on role in PMG development

that, according to the Law, regulations and to international best practice, should be assigned to the NHSU *(58)*. It should be understood, however, that this situation has evolved in the context of a new agency with high turnover among key staff, all working under unprecedented and urgent pressures caused by the COVID-19 pandemic and immediately afterwards, the war. As the situation is now more predictable and manageable for most of the country, it is both possible and desirable to return to the use of planned, formal, disciplined processes and instruments for ministries to exercise their strategic policy and governance roles, enabling them to step back from continuous informal intervention in NHSU responsibilities.

Oversight could be strengthened through a governing body; a Council or Board acting on behalf of the Cabinet of Ministers that provides oversight to the NHSU and PMG, coordinates and aligns the roles of the Ministries of Health and Finance in approving the PMG and its budget, with roles and membership designed specifically for the role and status of the NHSU. The Government's plans as of 2021 to introduce a new system of performance-based oversight of policy implementation, overseen by the Cabinet of Ministers, could have complemented Ministry of Health–NHSU governance mechanisms, strengthening accountability: although implementation has been delayed due to the impact of war and martial law conditions. The recent approval to elevate the NHSU to the level of a Central Executive Body with Special Status could be an opportunity to enhance the capabilities and practices of the agencies responsible for oversight of the NHSU and the PMG through the creation of a supervisory board or oversight committee. This was also recommended in the 2022 World Bank health financing reform report *(2)*. Several of the existing Central Executive Bodies with Special Status have a governance body that provides oversight and have roles and memberships designed specifically for the role and status of the Central Executive Body. Based on evidence gathered from other health purchasing agencies in the region, the Board or Committee should be chaired or co-chaired by the Minister of Health and the Minister of Finance (or a senior representative) should be a board member *(59)*.

Formally approved strategic direction and reporting against performance indicators are needed for consistent, stable, arms-length steering of the NHSU. The 2019 and 2022 Reviews noted that, for good governance of the NHSU, it is important that the Government works with and through transparent formal instruments for agreeing upon strategic priorities for the PMG and performance expectations for the NHSU. For example, Ministry of Health formal approval of the NHSU's strategic plan for health financing could provide the basis for a more strategic, medium-term, arms-length relationship and avoid frequent informal or short-term interventions into the everyday work of the NHSU. Ideally, the strategic plan would also set performance indicators or criteria for the evaluation of success and strengthen the basis for the NHSU's accountability to the Government. The ministerial performance agreement with the NHSU Director could be aligned with this plan and guide the NHSU's operational planning. The NHSU has made progress by preparing a draft strategic plan, but this has not yet been approved by the Ministry of Health.

Alignment and consistency between the different lines of accountability is a critical success factor for effective governance of a strategic purchaser, as is consultation with stakeholder organizations, including patient groups and the public. This could be fostered by developing a coordination process between PCC recommendations and conclusions and the Government's own oversight processes of NHSU. The PCC fills the role of monitoring the activities and performance of the NHSU, reviewing its reports, approving conclusions regarding them and publishing its findings, but it does not have the powers or duties of a governance body: its

reports and conclusions are advisory only. However, PCC meeting reports could be placed on the agenda of the NHSU supervisory board or oversight Cabinet Committee proposed above. Recently the Cabinet of Ministers approved revision of the PCC regulation to ensure a more relevant mix of skills and experience; preventing conflict of interest; longer and overlapping terms to retain capacity; wider participation in the election of members and more effective methodical meeting and working practices . External accountability could also be enhanced by development of processes for direct consultation by the NHSU and the PCC with stakeholder organizations, patients and the public, as proposed in the revised draft PCC regulation.

Additionally, the NHSU has been directed to take on roles and functions beyond the de facto role of a purchaser to fill gaps in the health system. As noted previously, the NHSU itself provides a substitute for the absence of a well-functioning facility licensing and accreditation system to ensure minimum standards for health services under different PMG packages by defining and enforcing service quality parameters in its contract requirements for each package. The NHSU has also been directed by government authorities to assume responsibility for financial monitoring of contracted providers, going beyond its core responsibility, accounting for its own expenditures of PMG and demonstrating value for money. This is due to the lack of any system to monitor public funds utilization and accounting against economic and functional budget classifications by autonomous public providers of health services. These non-core roles are a burden on an already over-stretched NHSU and not sustainable.

A results-oriented form of external governance needs to be accompanied by the continued strengthening of internal and external systems of control and audit, and increased transparency of reporting. The public financing system for health has moved from a governance system based on external control of inputs and processes, to one based on results. This change is complemented by public financial management reforms in Ukraine, including programme budgeting with monitoring results indicators. The PMG is subject to external audit by the Accounting Chamber (AC), reporting to Parliament and the State Audit Service of Ukraine reporting to Cabinet of Ministers through the Ministry of Finance. A 2023 WHO case study of budget execution in Ukraine *(59)* identified risks as well as benefits from external auditing of the PMG due to the audit bodies' lack of tools and technical capacity to assess accounts by autonomous public and private providers that are now financed according to outputs rather than inputs. The first AC audit of PHC providers in 2021 led the AC to issue recommendations that contradicted international and EU-relevant good practices. The WHO report recommends building up technical capacity and dialogue between the audit institutions and the Government (and the reform champions in the Verkhovna Rada Health Committee) with the aim of deepening the AC's knowledge of reform and turning these audits into supportive measures to enable improvements in service provision and NHSU practice.

5.2 Transparent roles, methodologies and processes for decision-making concerning the PMG

PMG policy development and decision-making processes and roles of key actors and stakeholders need to be clearer, more evidence-informed, transparent, predictable and timely. The law requires approval of the PMG as part of the annual State Budget Law that sets a challenging but clear timetable and elements of the institutional framework and process for decisions. The PMG is to be drafted by the NHSU and sent to the Ministry of Health for approval. It needs to include the list of medical services covered by the PMG, specifications and

purchasing conditions for contracting providers, payment type and tariff. PMG development and implementation also needs a more medium-term planned process to provide opportunities for evidence-informed analysis, use of health needs assessment, meaningful participation and input from a broad-based group of stakeholders, data and information technology system development for implementation and reasonable information and notice periods for providers.

Key principles for making decisions on the PMG benefits package, provider payment methods and tariff-setting, PMG budget formulation and contracting need to be operationalized in methodologies for using evidence and data and stakeholder feedback. Separating the regulations and review and approval processes for these different components of the PMG (as recommended in Section 4.3 above) **would facilitate this.** A rapid review of PMG-related regulations for this Joint Review concluded that the concept, goals, criteria and methodologies for setting PMG priorities for services covered by the PMG are yet to be made explicit and transparent beyond the high-level principles set out in the Law on Government Financial Guarantees of Health-care services, particularly in terms of how it should be operationalized in terms of methods and processes for making trade-offs between criteria/principles for service rationing and resource allocation. The roles of Ministry of Health, Ministry of Finance and NHSU assigned by regulation are not always consistent and in practice, roles and processes are blurred by the custom of working informally in joint working groups, without clear Terms of Reference, often with changing membership and without codification of meeting deliberations and conclusions through agendas, papers and minutes.

Standard operating procedures (SOPs) for key NHSU functions, core activities and processes need to be systematically codified to ensure organization-wide clarity and responsibility in management and improve the NHSU's effectiveness. In particular, standard processes for health needs assessment, processing additions to PMG and reviews of existing benefits, costing and tariff setting, PMG budget formulation and allocation and claims management are yet to be established and approved. In some areas – such as contract management and monitoring of service delivery – SOPs and Ministry of Health regulations do exist, with progress recently having been made on formalizing the provider monitoring regime in a new Cabinet of Ministers' regulation passed in October 2023. This changes how the NHSU conducts monitoring, including strengthening its procedures for documentation review and site visits, in addition to ongoing automated monitoring *(60)*. However, many current regulations fall short of SOP good practice, as they do not provide clear definitions, responsibilities or guidelines for the uniform management of processes; coordination and consultation, internal decision-making and sign-off, and they do not define the role and functions of MRDs in respective areas.

5.3 Data challenges to support decision-making

Timely, reliable data and the capacity to analyse them are essential for almost every aspect of NHSU operations and strategic functions. A WHO team carried out a health information systems assessment in Ukraine in early 2022 which encompassed the e-health system used by the NHSU and related institutional developments in the context of the wider health information needs of the Ministry of Health, Ukrainian Public Health Centre and other agencies. The assessment recognized several strengths of the current health information system, including mandatory use by health-care providers of Medical Information Systems (MIS) endorsed by NHSU; the competitive market for MIS; online public reporting by NHSU through dashboards on its website; the development of the national CDB; the establishment of a dedicated State-

owned enterprise of the Ministry of Health to administer it; and the fact that 97% of health-care facilities (before the war) were connected to the CDB that hosts the e-health database. The Ministry of Health intends that the e-health system and the CDB form the core of a national integrated health-care database that could be used by other health sector agencies for monitoring various public health trends, statistical and analytical purposes and to inform important policy and strategic decisions. The assessment also suggested areas needing improvement: need for a longer-term strategy and coordination of fragmented systems; evolution towards an e-health system that goes beyond required data for claims management and interfaces with MIS within health-care facilities serving the needs of clinicians, patients and facilities management; need for data quality assurance mechanisms and feedback from end users; capacity for evidence-informed decision-making; strengthening cyber security; developing a comprehensive Health Information System legal framework and stronger data governance; and making e-health data available for secondary public health and academic research use.

Extensive war-related disruptions prompted the NHSU to relax requirements for recording and reporting data in the e-health system to allow providers to focus on maintaining basic services in the face of the full-scale invasion. War conditions undermined data quality and completeness in NHSU's e-health system and displacement of population and health-care staff made it much harder to allocate NHSU resources in line with need with population need. In active conflict areas, most providers are still unable to submit regular and complete data, including data required to trigger payments to health-care providers and enable monitoring of providers by the NHSU through the e-health system was limited. Nationally, the number of health facilities reporting e-health data dropped by approximately 10% in the first 3–4 months of the war, followed by another 10% by early 2023. This is consistent with findings of the Health Resources and Services Availability Monitoring System (HeRAMS) study conducted by WHO in 2023 where 83% of health facilities have full digital connectivity, 7% have partial connectivity and only 76% have fully and 4% partly available e-health systems *(22)*. The data-driven provider payment system was suspended from March–July 2022; providers simply received one twelfth of the annual contract amount. While regions outside active hostility areas returned to normal and the data entry situation has improved significantly, health-care providers in the occupied and frontline areas still have limited access to e-health and most have switched to the NHSU's "active hostilities" reimbursement package, which allows them to forego utilization data reporting.

The NHSU has been taking steps to improve and use data for decision-making. The NHSU has developed PHC Key Performance Indicators and uses some of these for financial incentives (vaccinations and NCD management). NHSU data analytics have started to detect patterns and variation in service provision, opening opportunities for corrective actions to improve quality such as management of hypertension and diabetes or child development monitoring. The NHSU has developed an analytical model for health needs assessment to inform planning and contracting that is currently limited due to data quality and completeness. It is developing a provider profiles database on critical parameters for assessing providers' ability and capacity to deliver health services and continues to develop algorithms using e-health data to detect errors, gaming and fraud. The NHSU is beginning to do more to check the validity of data, at least for the parts of the country where facility visits are possible, focusing on areas of concern such as significantly increased use cases of the "medical care for newborns in complicated neonatal cases" package at a time when the number of births had declined; and, to ensure that PHC providers update their enrolled populations and verify their declarations *(61)*.

Concerted effort by the NHSU will be required in 2024 and 2025 to comprehensively improve data quality. This would include institutionalized monitoring and sample-based data validation and audit and systematic data analysis to support decision-making. These steps will be required before data could be used as a basis for more robust health needs assessment, planning, budgeting, provider payment mechanisms and contracting. NHSU's ability to do this depends on whether it can continue to strengthen staffing in its information technology and analysis central functions and to build up its MRD capacity to carry out on-site monitoring and feedback to providers and data validation. NHSU could also consider options for strengthening incentives and sanctions for complete and accurate data provision by providers. In the medium to longer term, sustained data quality improvement would require an integrated health information systems strategy and roadmap.

The utility and scope of the e-health system should be expanded. A pitfall of the NHSU's e-health system, which is used solely for reimbursement purposes, is that providers only have incentives to provide the data needed to receive payment. They also have incentives to "game" the NHSU by manipulating and distorting data entered in the system to maximize reimbursement. This so-called "gaming" is a particular problem for packages and services that are paid for based on volume of activity (per case, per visit, per diagnostic procedure, etc.). The NHSU is now facing these problems to an extent that is a major barrier to NHSU operations, to efficient use of the PMG budget and to effective strategic purchasing of services to meet population needs. Over time, this problem can be addressed by linking e-health purchasing data more closely with underlying clinical data in the health providers' health management information system, serving both purchasing and clinical decision-making needs.

5.4 Strengthening and sustaining technical capacity

Ultralow funds for administrative functions compared with total funds managed may put the NHSU at risk of being unable to exercise its key functions. A comparison of purchaser governance in Ukraine and nine other countries in the region found that, in 2021, the NHSU had a lower administrative budget (as a share of total funds managed) than the other countries and staff numbers (relative to population size) that were a small fraction in comparison (Table 3). The figures in the table show actual staff numbers: although regulations permitted a staff ceiling of 1060, not all budget was allocated; instead, resources were allocated to improve conditions for existing staff rather than hiring additional. The impact of the war on staffing and budgets of the NHSU further eroded its scope to build up the capacity required for full functionality. The NHSU administrative budget approved for 2024 was 0.11% of total budget managed by the NHSU around one tenth of the percentage observed in established, well-functioning purchasing agencies in the region. On 29 December 2023 the Cabinet of Ministers adopted a resolution that limited the NHSU's maximum staff numbers to 348 compared with the previous ceiling of 1060, taking effect from 1 April 2024 *(62)*. The latest graded remuneration system for government agencies coming into effect in 2024 and the reduction to the wage fund further impedes the NHSU's ability to recruit and retain staff, particularly in MRDs and for some mission-critical skillsets. Under these overall financial constraints, the imperative for getting the best health care from the limited resources allocated to the PMG has become even more important, requiring robust NHSU capacity and systems at a time of continuously increasing complexity in the PMG services which the NHSU is purchasing.

Table 3. Multicountry comparison of purchasing agency staffing and administrative budgets

Country	Number of staff	Number of regional departments	Administrative costs (% of total funds managed)
Armenia	70 (2021)	-	0.3–0.5%
Azerbaijan	340 (2021)	11	Max 2%
Estonia	194 (2020)	4	0.95% (2020)
Georgia	439 (2021)	10	NA
Kyrgyzstan	277 (2021)	8	1.1% (2021)
Latvia	212 (2020)	5	0.7% (2020)
Lithuania	475 (2021)	5	1% (2020)
Moldova	295 (2020)	5	0.95% (2020)
Ukraine	322 (2021)	5	0.3% (2020)
Uzbekistan (1 pilot oblast)	25 (2021)	1 (pilot oblast)	Not available

Source: WHO *(58)*.

While more resources are needed to strengthen NHSU capacity, there is also scope for improvements in terms of organizational efficiency. A significant proportion – about 150 positions – of NHSU "overview" roles such as human resource management, legal, communications and front office staff could be reallocated to support core technical and operational functions. There could also be benefits from streamlining the organizational structure to facilitate coordination and reduce fragmentation of related functions. As part of an organizational structure review, the role and status of MRD heads, currently at the third level in the hierarchy, need to be elevated to empower them in representing NHSU to providers and local government; improving their salary level will allow recruitment of qualified and experienced professionals to this critical role.

Recommendations to strengthen institutions, accountability, transparency

Action 1. Strengthen transparency and accountability for the PMG

- Revise regulations, SOPs and the provisions in respective laws to ensure transparent, evidence-informed, formal and timely processes for decision-making concerning the PMG, and communication to stakeholders. This could be facilitated by separating regulations and processes for development and approval of benefits packages, provider payments and tariffication, budget formulation and contracting.
- Establish a governance body (board or council) to oversee the NHSU and coordinate PMG budget approval on behalf of the Cabinet of Ministers, with clear roles for the Ministries of Health and Finance to enable them to exercise both their strategic policy oversight over the PMG and their governance responsibilities for the NHSU in a coordinated way.
- Ensure any revised regulations facilitate stakeholder consultation at appropriate junctures on issues related to PMG benefits package revisions, provider payment revisions and changes to contracting methods and requirements.
- Clarify the role and strengthen the capacity of the Ministry of Health in setting minimum standards for providers, including new provider networks, thereby focusing the role of NHSU towards purchasing functions.

Action 2. Improve e-health data and information systems to support more efficient purchasing and better use of data

- Improve the NHSU's data quality, completeness and use of data for decision-making and provider monitoring, including increased MRD visits for data compliance and verification and strengthened contractual incentives and sanctions for providers to submit complete and accurate e-health data.
- Over the medium term, the Ministry of Health should develop its integrated health information strategy to better integrate providers' own MIS data into the NHSU e-health system as well as to promote the usage of NHSU data by a wider range of agencies for broader purposes.

Action 3. Strengthen NHSU institutional capacity to address current fragility and develop needs-based purchasing

- Give more flexibility to the NHSU to increase its administrative budget and staff ceiling under reasonable limits, linked to NHSU-managed funds and enabling the provision of competitive salaries for specified/scarce skills: subject to oversight by the proposed NHSU board or council.
- Increase MRD staffing to provide resources to expand the role of MRDs to encompass local health needs assessments; provider capacity assessments to improve the contracting process; contract management; and oversight and engagement with oblast health departments concerning local service plans and needs. In the short term, consider subsidizing this in part by reducing the number of corporate overview staff in the NHSU central office by 50 or more in order to increase technical and expert staffing in central office and MRDs.

6. Conclusion

The overall aim of the health sector in any country is to improve the health of its population while also protecting individuals and families from the sometimes severe economic consequences of paying for health care. For these goals, both the overall level of health and the degree of equity in its distribution are relevant. While difficult to control directly, these end-goals are supported by intermediate objectives that can be more directly influenced through health financing actions including efficiency; equity in the distribution of health resources and services; quality and transparency; and accountability of the health system to the population. In addition to these goals and objectives, resilience to crises became particularly relevant in the post-pandemic environment and is even more vital in the current wartime conditions.

All the objectives and goals of any health system are important, but not every aspect can be implemented at once or be pursued immediately. In the highly dynamic environment caused by the war, the Ukraine health financing system has had to adjust and adapt the instruments introduced by the preceding reform, but progress on these objectives remains the "north star", guiding its overall direction. There are critical links between recommended actions, with the overall aim being to align them for greater impact. Many of these actions are relevant to more than one objective, while also contributing towards health system resilience. In addition, many are interrelated and need to be implemented in a coherent and complementary manner to have the desired impact on a specific policy objective. Annex 1 outlines the key messages and recommendations proposed.

Annex 2 summarizes the critical pathways concerning how interlinked actions in the health financing toolkit can work together to achieve key health system and health financing objectives, as well as complement and support service delivery reforms targeted at those same objectives.

Even in the current difficult wartime conditions and with the fiscal constraints imposed by the war's economic impacts, Ukraine can move forward with reforms that will maximize gains in health, financial protection, equity and quality for the available resources. Strong and accountable institutions with transparent decision-making will be crucial for success. International partners are in place to provide technical and financial support towards the implementation of these reforms.

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Annex 1. List of recommendations

Key messages and recommendations	Reform objective	Short / medium-term
Key overarching messages		
Reform direction remains sound, reforms have been proven to increase the resilience of the health system to pandemic and war. Safeguarding public financing and investment in health is critical, and even more so in the difficult economic and demographic context brought about by war. Efficiency of the health system is important, as Ukraine is facing very significant fiscal constraints due to the economic impact of the war. Continued prioritization and implementation of PHC reforms is important for efficiency, cost–effectiveness and equity. Recovery from war damage offers an opportunity to build back better to a more modern and optimal health system. Complementary reforms in health service delivery planning, regulation and capital investment need to be coordinated with support from financing. Strong, accountable, and transparent institutions are needed to successfully implement reforms and maintain public trust over a sustained period.		
1 Recommendations to improve cost-effectiveness of PMG coverage		
1.1 Actions to revise the PMG and AMP based on evidence and clear criteria		
Ensure that PMG prioritization and benefits inclusion are based on evidence, meet the criteria laid out in the legislation, are transparent in methods used, are subjected to cost-effectiveness and budget impact analysis, and informed by transparent and balanced stakeholder consultation.	EF, EQ, FP, Q	MT
1.2 Actions to approve cost-effective clinical guidelines and support implementation through financing instruments		
Complement the PMG benefits package by developing standardized, approved clinical guidelines aligned with PMG and patient pathways that NHSU can support through contracting, monitoring and financial incentives.	EF, Q	MT
Ensure that medicines included in the AMP are aligned with applicable evidence based clinical guidelines.	EF, Q	MT
2 Recommendations to improve access, equity and financial protection		
2.1 Actions to realise universal access to PMG services		
Continue to prohibit all NHSU-contracted providers (public *and* private) from balance billing for PMG services.	EQ, EF	ST
Simplify and remove the administrative barriers people face when seeking to sign, recertify, or change declarations with PHC providers.	EQ, EF	ST
Review and define relevant content of current “complementary” packages at PHC level to be consolidated into a single, unified PHC package to be accessible at every PHC facility and update the core PHC package accordingly.	EQ, EF	MT
2.2 Undertake oblast-level needs-based strategic planning of health services to be purchased by the NHSU, incorporating all available data - including from humanitarian agencies and local stakeholders. This should include addressing needs and local service gaps arising from withdrawal of humanitarian providers.	EQ, EF	MT
Allow, on a temporary basis, a higher number of declarations per family physician without tapering capitation payments in rural and war-affected areas with a high population-to-physician ratio.	EQ, FP	ST
Introduce additional lump-sum payments for PHC providers in rural and conflict-affected areas with low populations. Additional payments for new service delivery models, such as mobile outreach PHC services, could also be introduced to sustain access to care in areas where there are no active service providers.	EQ	MT
2.3 Actions to limit OOP spending on medicines		
Undertake more proactive measures to make AMP drugs accessible to rural populations and monitor impact on utilization by underserved populations.	EQ, FP, Q	MT
Monitor to ensure that free and highly subsidized brands for each INN in AMP are available in AMP pharmacies and take action when they are not.	EQ, FP	MT
2.4 Actions to reduce the incidence of informal payments.		

	Implement targeted, short-term measures to simplify patient reporting on incidents of informal payments. Engage civil society organizations as watchdogs to monitor and report on informal payments.	FP, T&A	MT
	Develop a comprehensive and long-term strategy to tackle informal payments, including more adequate reimbursement by the NHSU, explicit rules within provider contracts, scaling up monitoring and enforcement capacities, and improving the management and accountability of health facilities.	FP, T&A	LT
3	**Recommended purchasing actions to facilitate providers to improve efficiency and quality**		
3.1	**Actions to purchase volume of services based on local population needs, and in line with planned service delivery reform**		
	NHSU should move towards population-needs-based planning of volume of services to be purchased in contracts in each oblast; this can be implemented by starting with selected services for which the quality of available information is higher.	EF, EQ, Q	MT
	Develop the role of MRDs in local health needs assessment, provider capacity assessment, contract negotiation and management, utilization reviews, and use of contracting providers and engagement with local government units to support optimisation of the provider network.	EF, EQ, Q	MT
	For contracting purposes, the grouping of services into packages should follow the vision of service delivery reforms. This will require a review of the PMG packages system, which should fit with patient pathways and avoid confusing gaps and overlaps between packages.	EF, Q	ST/MT
3.2	**Actions to review provider payment methods and tools to compensate providers for the complexity of care they provide, and encourage quality**		
	Introduce blended provider payment mechanisms considering top-up payments for priority health conditions in PHC to incentivize improvements in quality and performance.	Q, EF	ST/MT
	NHSU should use contracts with PHC providers to enforce reporting of agreed PHC activity and performance data through the e-health system.	EF, Q	ST/MT
	Develop the purchasing strategy and service delivery vision to incentivize shifting care from inpatient to outpatient settings.	EF, Q	MT
	Develop a medium-term (2–3 year) plan to guide, in a systematic fashion, further transition toward consistent provider payment methods for inpatient care. This should include achieving appropriate levels of AR-DRG aggregation, balance of activities and output-based provider payment methods; alongside transparent and credible practices for tariff setting and more targeted utilization review practices.	EF	MT/LT
	Payment methods used in the context of war should create greater financial stability and predictability for facilities, with a combination of global budgets and output-based financing.	EF	ST
3.3	**Actions to strengthen purchasing tools to control fraud and excessive claims**		
	Expand regulations to prevent health-care facilities from being contracted for both PHC and specialist services simultaneously to facilities providing ambulatory or inpatient specialist care, which leads to excessive referrals.	EF	ST
	Monitor and proactively employ automated methods and contract tools to identify and deter adverse provider behaviours that might lead to excessive claims.	EF, T&A	ST/MT
	Make short-term changes to provide payment methods to reduce financial incentives for excessive claims where there is clear evidence of biased data.	EF	ST
4	**Recommendations for purchasing and complementary policies to modernize and optimize health service delivery**		
4.1	**Actions to continue to strengthen the role of PHC in the system**		
	Continue to prioritize and adequately fund PHC - both within the PMG and by local governments (which are responsible for paying utility costs and providing support for capital investment). In the medium-term, consider pooling utility funding from local government units to the NHSU to improve equity in financing and level the playing field between public and private PHC providers.	EF, Q	MT/LT
	Institutionalize in the NHSU a credible costing methodology for PHC services, to ensure that the PMG budget allocation for PHC reflects changes in the services included and the costs of related inputs.	EF, Q	ST
	Stimulate development of the PHC networks, to ensure universal access to improved and extended capacities at this level of care, supporting this with financial incentives for smaller solo or group practices to link up to networks, enabling providers to expand the scope of services.	EF, Q	MT

	Move from one-year to multi-year NHSU contracting for PHC and AMP providers.	EF	ST
4.2	**Actions to align NHSU contracting with service delivery strategy**		
	Formalize in regulations the "cluster network" concept to support the modernization and optimization of the hospital network, and use this to guide all future investment decisions, including those related to recovery in war-affected areas.	EF, Q	MT/LT
	Align NHSU contracting decisions for specialist services to the "cluster network" concept, using selective contracting to support the consolidation of specialized inpatient care in cluster and above-cluster hospitals.	EF, Q	MT/LT
	Move from one-year to multi-year contracting for cluster and above-cluster hospitals.	EF	MT
	Articulate clear public policy objectives for NHSU contracting of private providers to deliver PMG services, and taking action to ensure that this does not undermine progress towards service delivery optimisation objectives.	EF, Q	ST/MT
	Centralize and professionalize capital planning, supported by a clear set of decision criteria and modern planning, construction, and equipment guidelines.	EF, Q	ST/MT
5	**Recommendations to strengthen institutions, accountability, transparency**		
5.1	**Actions to strengthen transparency and accountability for the PMG**		
	Revise regulations, SOPs and the provisions in respective laws to ensure transparent, evidence-informed, formal and timely processes for decision-making and communication to stakeholders. This can be facilitated by separating regulations and processes for development and approval of benefits packages, provider payment and tariffication, budget formulation and contracting.	T&A, EF	ST
	Establish a governance body (Board or council) to oversee the NHSU and coordinate PMG and PMG budget approval on behalf of the Cabinet of Ministers, with clear roles for the Ministries of Health and Finance to exercise their strategic policy oversight over the PMG and their governance responsibilities for the NHSU in a coordinated way.	T&A	ST
	Ensure revised regulations establish stakeholder consultations at appropriate junctures on issues related to PMG benefits package revision, provider payment revisions, and changes to contracting methods and requirements.	T&A	ST
	Clarify role and strengthen capacity of the Ministry of Health in setting minimum standards for providers, including new provider networks, thereby focusing the role of the NHSU towards purchasing functions.	T&A, Q	MT
5.2	**Actions to improve e-health data and information systems to support more efficient purchasing and better use of data**		
	Improve the NHSU's data quality, completeness and use of data for decision making and provider monitoring, including increased MRD visits for data compliance and verification, and strengthened contractual incentives and sanctions for providers to submit complete and accurate e-health data.	EF, T&A	ST/MT
	Over the medium term, MoH should develop its integrated health information strategy by to better integrate providers' own MIS data into NHSU e-health system and also promote use of NHSU data by a wider range of agencies for wider purposes.	EF, EQ, Q	MT/LT
5.3	**Actions to strengthen NHSU institutional capacity to address current fragility and develop needs-based purchasing**		
	Give more flexibility to the NHSU to increase its administrative budget and staff ceiling under reasonable boundaries linked to funds under NHSU management and allow it to pay competitive salaries for specific niche skills, subject to oversight by the proposed NHSU board or council.	EF	ST
	Increase MRD staffing to provide resources for an expanded role played by MRDs in local health needs assessments, provider capacity assessments to improve contracting processes, contract management and oversight, and engagement with oblast health departments over local service plans. Consider reducing the number of "corporate overview" staff in the NHSU's central office by 50 or more to directly increase technical and expert posts in central office and MRDs.	EF, EQ, Q	ST/MT

Note: EF: efficiency; EQ: equity; FP: financial protection; O: other; QU: quality; T&A: transparency and accountability.

Annex 2. Recommendations organized by objective

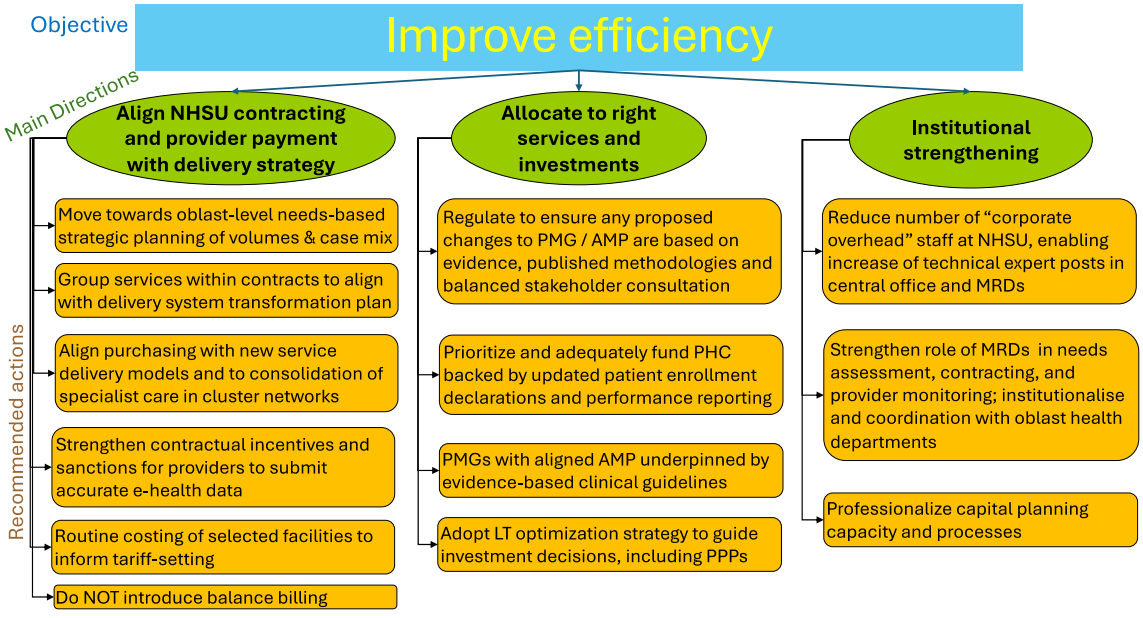
Aligning recommended actions through critical links allows for greater impact. The recommendations of this report are proposed as actions in the domain of health financing that can address some of the causes of under-performance of the health system. These actions are not meant to be implemented in isolation, but rather as part of a coordinated package of health reforms. In many cases, the proposed health financing actions would reinforce related or primary measures carried out in other domains such as service delivery. The following figures summarize most of the recommendations in the report, focusing on five key policy objectives for which further improvement is needed:

- efficiency
- financial protection
- equity in service use
- quality and accountability
- transparency.

An overview is provided in the following charts.

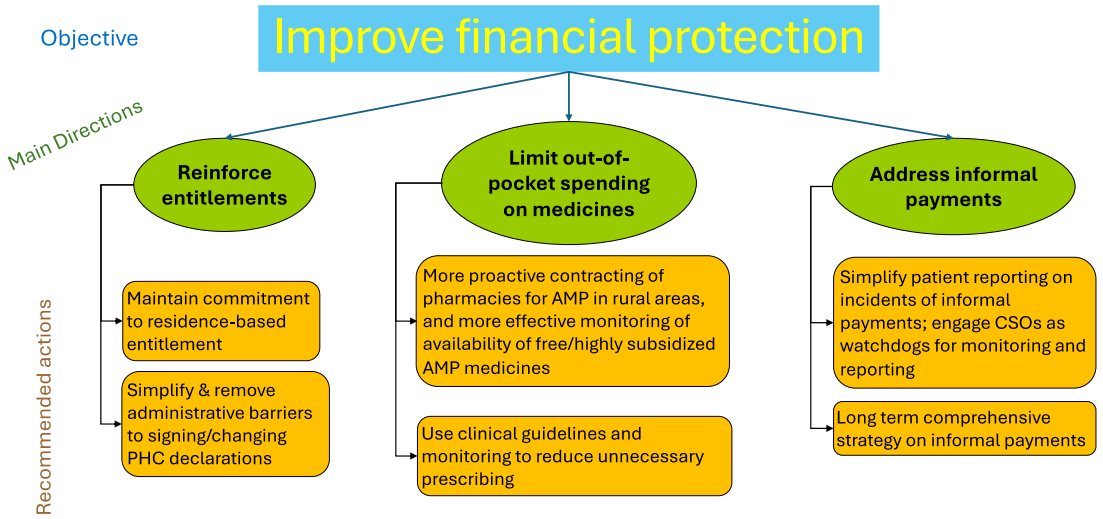
Addressing the primary manifestations and drivers of inefficiency in the Ukrainian health system requires the coherent implementation of a multifaceted strategy (Fig. A2.1). One dimension of this challenge is allocative efficiency; in short, ensuring that the health system delivers the correct services. Improvements in the PMG development process are aimed at prioritizing the most cost-effective service mix, as is the overall shift towards a PHC focus. In both the near- and longer-term development of the health system, this is reflected in the actions intended to optimize the service delivery network, supported by capital planning and investment. There are also long-standing structural inefficiencies in the current delivery system, and aligning NHSU contracting mechanisms and the structure of the PMG with shifts in facility governance must be done in a manner that is consistent with the longer-term vision. Achieving this vision also requires strengthening sectoral institutions at multiple junctures, most notably the NHSU and in particular its technical capacities, but all entities responsible for capital planning and investment require input and reinforcement.

Fig. A2.1 Summary of proposed actions to improve efficiency



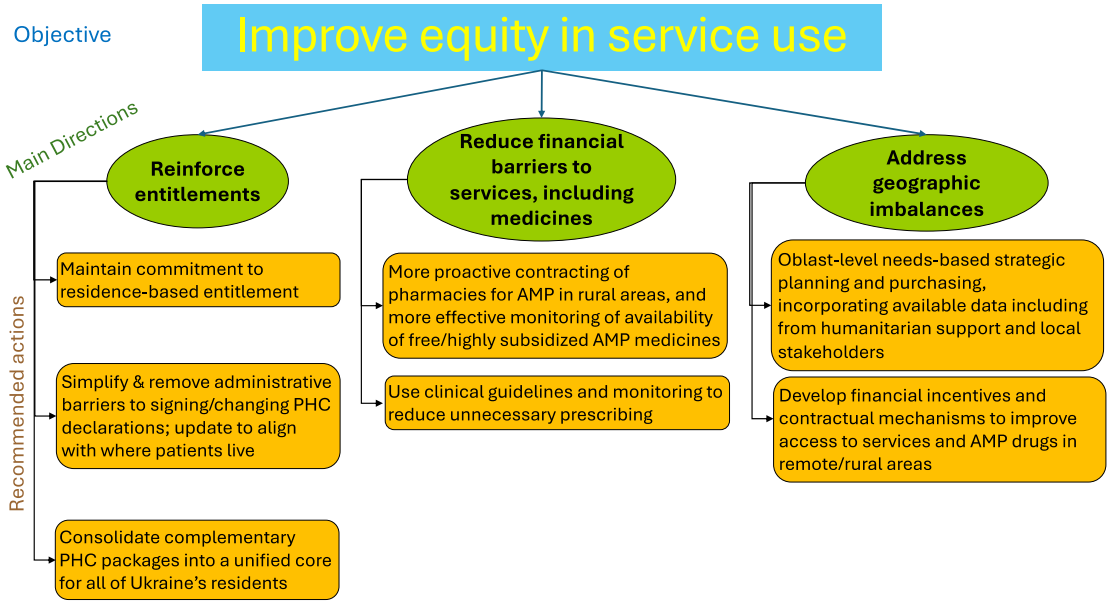
The recommended actions to improve financial protection for Ukrainians are directed in three main directions (Fig. A2.2). First is to preserve the core tenet of the 2017 reform: residence-based, non-contributory entitlement as a right for all. Realizing this right requires effort to ensure that all citizens are registered with a PHC provider, particularly IDPs considering the current invasion. The second and third directions address the key drivers of OOP spending in Ukraine: expenditure on outpatient medicines, and informal payments made in hospitals. The key instrument for improving the affordability of medicines is the AMP, while efforts to reduce excess prescriptions and reduce procurement prices also contribute to the Government's ability to mitigate increases in the cost of medicines at the point of use. Addressing informal payments in hospitals requires a longer-term, comprehensive approach, although these recommendations incorporate certain actions that can be implemented in the near term.

Fig. A2.2. Summary of proposed actions to improve financial protection



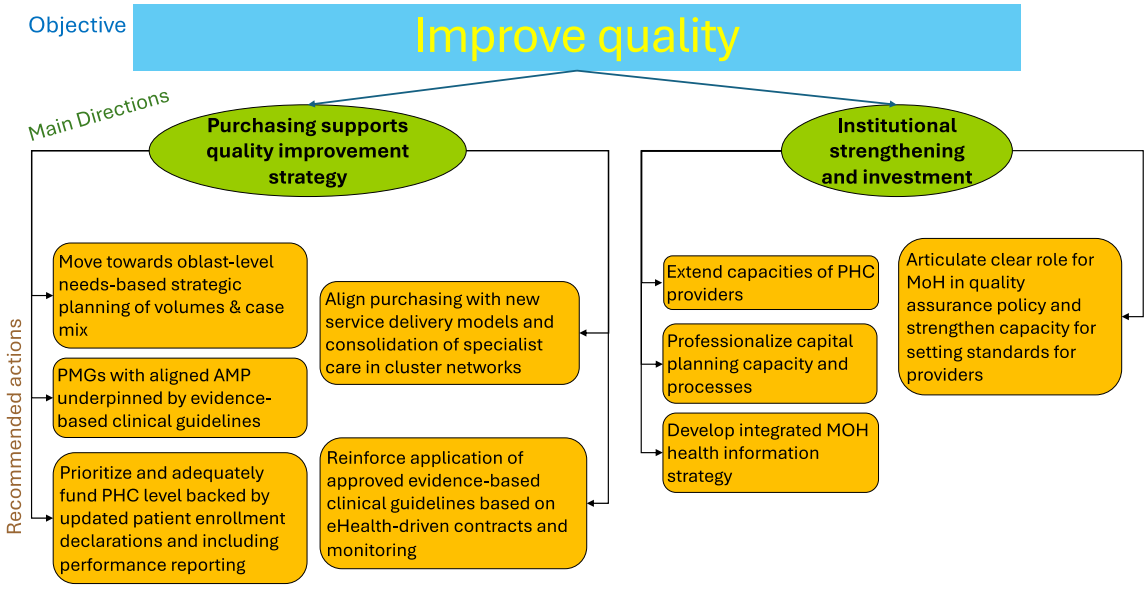
Improving equity in service use means reducing the gaps between the need for services and their use (Fig. A2.3). Inequities exist across all household income levels, as well as varying on geographical bases; and the war context and internal displacement have also had significant effects. One factor that drives inequity in service use is also a driver for financial hardship: the need to pay OOP at point of use. Hence, the main directions indicated for improvement have similarities to actions that are needed to improve financial protection. Concerns with equity in access mean that in this instance there is a financial barrier to access, and people in the most need of services often cannot access them. The actions needed to reinforce entitlements and reduce the need to pay directly for medicines and services (formally and informally) show similar parallels. Inequity in service use manifests again on a geographical basis, and the third direction for action shown in the figure includes approaches to redressing imbalances in the distribution of health resources that drive inequities in service use.

Fig. A2.3. Summary of proposed actions to improve equity in service use



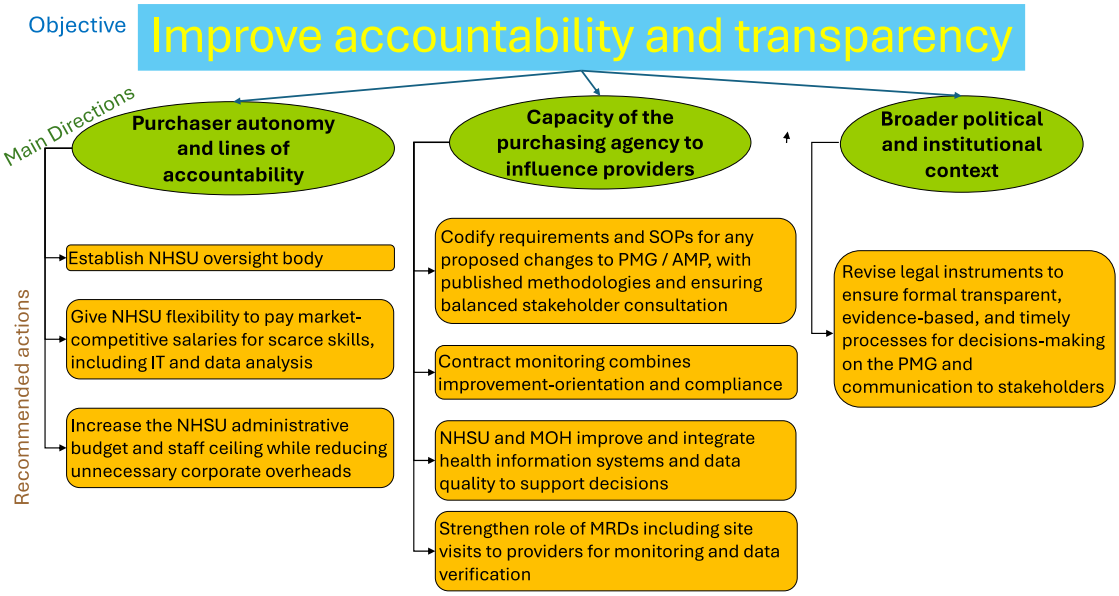
While health financing instruments are not the main drivers of quality improvement, the proposed actions can certainly play a supportive role (Fig. A2.4). This is contingent on how effectively the NHSU aligns and deploys its contracting and payment instruments, along with its underlying data systems, in support of quality improvement. For example, reinforcing the implementation of evidence-informed clinical guidelines using monitoring and feedback based on NHSU contracts and data systems can support gradual improvement. Strengthening the institutions active in quality improvement and clarifying their respective roles and responsibilities is also critical for a coherent implementation process.

Fig. A2.4. Summary of proposed actions to improve quality



Strong institutions, transparency and accountability underpin the success of all reforms. In Fig. A2.5, the actions focus directly on the NHSU. The first main direction relates to the balance between the autonomy and accountability that the NHSU is subject to, recognizing that it is not a policy-making entity but rather an important executing agency for policy, and hence must be governed in such a way as to ensure responsiveness to policy priorities. It must also be adequately and sustainably funded. The second key direction relates to how the NHSU influences the provision of services, primarily as reflected in actions that improve the transparency of decision-making for the PMGs through to explicit measures aimed at increasing use of evidence and analysis, consultation and procedural fairness. Third are actions driven from within entities distinct from the NHSU, but which influence its ability to fulfil its mandate effectively. Problems of accountability and transparency can also manifest in other ways, including informal payments as referred to in Fig. A2.2.

Fig. A2.5. Summary of proposed actions to improve accountability and transparency



The complex causes of health system problems do not lend themselves to single so-called "magic bullet" solutions. Several conclusions are evident from these figures; firstly, the importance of specificity in terms of how performance issues manifest, as a driver towards a tailored agenda, rather than generic reform. Closely linked to this is the need for a coordinated approach involving multiple policy instruments within health financing, as well as from other functional health system areas. It is also evident that many of these proposed actions serve multiple objectives, particularly in terms of the changes needed to strengthen the role of the NHSU. Isolated changes alone will not get the job done, but it is equally important to note that the direct need to respond to immediate challenges should not lead to a neglect of core requirements for ongoing institutional strengthening.

The WHO Regional Office for Europe

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