

Voices from the front line: perspectives on health system response and recovery in the war-affected areas of Ukraine

Setting the scene



In June 2024, the international community will convene in Berlin, Germany, for the annual Ukraine Recovery Conference (URC), with the goal of continuing dialogue and mobilizing sustained international support for reform, recovery and reconstruction in Ukraine. As an important determinant of human capital, economic growth, social cohesion and inclusiveness, the health system will again be an important focus of the discussions.

Since the Revolution of Dignity in 2014–2015, Ukraine has implemented fundamental reforms to the health system with the goal of accelerating progress towards universal health coverage. With the support of the World Health Organization (WHO) and other partners, these reforms continue to be rolled out, and even extended, in the context of the Russian Federation's war in Ukraine.

The reforms have been instrumental to the health system's response to the war. Across the country, high levels of access to health services and medicines have been maintained, even as needs have increased in many areas – including emergency medical services, trauma and burns care, rehabilitation, and mental health care – and as the geographical distribution of need has shifted due to large-scale population displacement.

The resilience shown by the health system is also a testament to the extraordinary efforts of local communities – regional and local governments, health facilities, clinicians and community representatives, including in the areas close to the war's front line. Amid constant attacks and war-related challenges, they will continue to play a critical leadership role. It is important that these front-line voices are heard to inform URC discussions on health system recovery, and to improve the timeliness, relevance, effectiveness and sustainability of international support.

Earlier reports focused on:

- (i) identifying a set of principles to guide health system recovery efforts in the short and longer term, in June 2022;¹
- (ii) defining a common vision of the critical priorities for health system recovery (in a joint report with the European Union, the United States Agency for International Development, WHO and the World Bank), in December 2022;² and
- (iii) presenting case studies of multistakeholder, including private-sector, involvement in health system recovery, in June 2023.³

This document focuses on further informing policy dialogue on Ukraine's recovery. It examines and highlights the experiences, perspectives and insights of local health-system stakeholders in some of the most war-affected areas of Ukraine. We focus on the challenges they face, the nature of their responses, and the support they need to strengthen their health system in the midst of the multiple impacts of war and continue on the path to recovery.

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^{1.} Principles to guide health system recovery and transformation in Ukraine. Copenhagen: WHO Regional Office for Europe; 2022 (https://iris.who.int/handle/10665/358446?search-result=true&query=Principles+to+guide+health+system+recovery+and+transformation+in+Ukraine&scope=%2F&rpp=10&sort_by=score&order=desc, accessed 6 June 2024).

^{2.} Priorities for health system recovery in Ukraine: joint discussion paper. Copenhagen: WHO Regional Office for Europe; 2022 (https://www.who.int/ukraine/publications/m/item/priorities-for-health-system-recovery-in-ukraine-joint-discussion-paper, accessed 6 June 2024).

Case studies of health system recovery in Ukraine: focus on the role of the private sector. Copenhagen: WHO Regional Office for Europe; 2023 (https://www.who.int/europe/publications/i/item/WHO-EURO-2023-7706-47473-69781, accessed 6 June 2024).





Introduction

Amid the Russian Federation's intensifying attacks on Ukraine's infrastructure and residential areas, civilian casualties are mounting.⁴ "Almost constantly, there are two or three seriously wounded children in our hospital," said the director of a children's hospital in the east of Ukraine. "Just yesterday, we admitted a child from Pokrovsk who is 11 years old. A piece of shrapnel went through her head. Now we are taking care of her. There are a lot of such children."

The health sector itself has been among the main targets of the attacks. As of May 2024, over 1800 attacks on the health system had been confirmed, resulting in 140 deaths and 338 injuries among health workers, patients and other civilians, including children.⁵

Beyond the direct destruction, the war has had wider impacts. Ukraine's economy today is about 25% smaller than in 2021.⁶ Poverty and unemployment rates have soared to levels not seen since the 1990s. Many households lack the means to pay for essential health services and medicines.

The number of people displaced – including 4.9 million people who have remained in the country – is of a scale unknown in Europe since 1945.⁷ The pattern of health-care demand across geographical areas has thus shifted both within and across regions, and needs have intensified in domains such as emergency medical services, trauma and burns care, rehabilitation and mental health care.

However, in this devastating context, Ukraine's health system has proved remarkably resilient: even in the most war-affected areas, core health system

Health Cluster, Ukraine: partners emergency response to attacks – update #9 as of 30 April 2024 as reported to the Health Cluster [website]. New York (NY): ReliefWeb; 2024 (health-cluster, accessed 6 June 2024).

Surveillance system for attacks on health care (SSA) [website]. Geneva: World Health Organization, 2024 (https://extranet.who.int/ssa/LeftMenu/Index.aspx, accessed 6 June 2024).

World development indicators [website]. Washington (DC): World Bank; 2023 (https://databank.worldbank.org/source/world-development-indicators, accessed 6 June 2024).

World Bank, Government of Ukraine, European Union, and the United Nations. Ukraine: third rapid damage and needs assessment (RDNA3) February 2022–December 2023. Washington (DC): World Bank Group; 2023 (https://ukraine.un.org/sites/default/files/2024-02/UA%20RDNA3%20report%20EN.pdf, accessed 6 June 2024).

functions have been maintained at a high level.⁸ WHO has worked closely with the Ministry of Health of Ukraine and more than 300 partners on the ground to address gaps in service delivery and to ensure that access to health care is sustained throughout the country.⁹ However, it is the health system itself – led by health authorities at the national, regional and local levels, and regional and local health facilities – that have led the response to the war, with WHO and partners playing a critical but complementary role.

"To be honest, we did not expect that the health system would be so strong, that it would be able to pass all the tests that it has faced," said the deputy head of a department of health in the east of Ukraine. "We were already completely exhausted after COVID-19, because our region was very much affected by it. No sooner had we dealt with this than we were hit by a new disaster. The challenges we experienced at the beginning of the war, they were unprecedented, but we were able to overcome them very quickly."

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Reforms undertaken in the aftermath of the Revolution of Dignity in 2014–2015, designed to accelerate progress towards universal health coverage, played an important role in supporting the health system's response to the war.

The reforms introduced a guaranteed benefits package – a programme of medical guarantees funded by the central government and managed by the National Health Service of Ukraine (NHSU), a single-payer agency. For the first time, all Ukrainian residents were able to enrol with a family doctor of their choice.

By February 2022, some 32.5 million Ukrainians (82% of the population) had enrolled to use the service, and this figure has continued to increase during the war. Access to essential health services and medicines has mostly been sustained, despite the extent of outward migration among health workers and the fact that many regions have faced diminishing locally generated revenues. 12,13

New needs arising from the war have been addressed, including in the form of additions to the affordable medicines programme, new funding packages for mental health at the primary health-care (PHC) level, and complex inpatient rehabilitation services.

- 8. Frontline oblast needs assessment: Factsheet based on the data collected in frontline areas of Dnipro, Donetsk, Kharkiv, Kherson, Mykolayiv, Odesa, and Zaporizhzhya oblasts. Copenhagen: WHO Regional Office for Europe; 2024 (https://www.who.int/ukraine/publications/m/item/factsheet-based-on-the-data-collected-in-frontline-areas-of-dnipro-donetsk-kharkiv-kherson-mykolayiv-odesa-and-zaporizhzhya-oblasts, accessed 6 June 2024).
- 9. WHO emergency response in Ukraine and refugee-receiving countries. Annual report 2023. Copenhagen: WHO Regional Office for Europe; 2024 (https://iris.who.int/handle/10665/37669/?search-result=true&query=WHO+emergency+response+in+Ukraine+and+refugee-receiving+countries.+Annual+report+2023&scope=&rpp=10&sort_by=score&order=desc, accessed 6 June 2024).
- Can people afford to pay for health care? New evidence on financial protection in Ukraine 2023. Copenhagen: WHO Regional Office for Europe; 2023 (https://iris.who.int/handle/10665/376538?search-result=true&query=can+people+afford+to+pay+for+healthcare+ukraine&scope=&rpp=10&sort_by=score&order=desc, accessed 6 June 2024).
- Health needs assessment of the adult population in Ukraine: survey report October 2023. Copenhagen: WHO Regional Office for Europe; 2024 (https://iris.who.int/handle/10665/3759677search-result=true&query=Health+needs+assessment+of+the+ad ult+population+in+Ukraine%3A+survey+report+October+2023&scope=&rpp=10&sort_by=score&order=desc, accessed 6 June 2024).
- HeRAMS Ukraine status update report May-October 2023. Geneva: World Health Organization; 2023 (https://www.who.int/publications/m/item/herams-ukraine-status-update-report-may-to-october-2023-en, accessed 6 June 2024).
- 13. Frontline oblast needs assessment. Factsheet based on the data collected in frontline areas of Dnipro, Donetsk, Kharkiv, Kherson, Mykolayiv, Odesa, and Zaporizhzhya oblasts. Copenhagen: WHO Regional Office for Europe; 2024 (https://www.who.int/ukraine/publications/m/item/factsheet-based-on-the-data-collected-in-frontline-areas-of-dnipro-donetsk-kharkiv-kherson-mykolayiv-odesa-and-zaporizhzhya-oblasts, accessed 6 June 2024).



Reform and resilience

"The reform has had a lot of impact," said the chief doctor at a PHC facility on the outskirts of Zaporizhzhya, the capital of Zaporizska Oblast in which 70% of the territory is occupied by the forces of the Russian Federation. "The easiest example I can tell you about is asthma. Before the reform, people were not receiving proper care, because combined inhalers were too expensive for them. Now that combined inhalers have been added to the programme, a lot of patients finally have a way to treat their disease, to treat their symptoms, because they can receive those inhalers for free. Obviously, we would like for this programme to be expanded and to include, for example, additional medications."

Many of the city's health facilities have seen increased demand for care from internally displaced persons (IDPs), those forced to move from the occupied areas or areas closer to the front line.

"Approximately, in our area, we have more than 9000 registered IDPs, and that is a challenge for us," said the chief doctor. "Each of our family doctors has to care for many more patients than we are capable of. Instead of providing care for, perhaps, 1500 people, my colleagues and I have up to 3000 to care for. That is the general situation in family medicine in this area."

Under the constitution of Ukraine, and operationalized by the post-2015 reforms, IDPs, like all Ukrainians, have a guaranteed, non-contributory entitlement to health care. This guarantee remains in place for IDPs.¹⁴

^{14.} Adjusting health financing for people fleeing conflict: policy guidance for countries in Europe. Copenhagen: WHO Regional Office for Europe; 2022 (https://iris.who.int/handle/10665/352793?search-result=true&query=Adjusting+health+financing+for+people+fleeing+conflict%3A+policy+guidance+for+countries+in+Europe&scope=&rpp=10&sort_by=score&order=desc, accessed 6 lune 2024).

However, after relocating, a relatively small proportion of IDPs choose to re-enrol with a new family doctor. Reasons for this are complex, but are likely to include administrative barriers. As the NHSU pays family doctors according to the number of patients they enrol, IDPs' reluctance to re-enrol can create financial pressures for PHC providers, impeding their ability to mobilize the resources they need to meet local needs.



Even if patients do re-enrol, the NHSU pays a lower capitation rate beyond the "optimal" number of 1800 patients. This is designed to safeguard quality of care, but it can create financial challenges for PHC providers experiencing significant increases in local demand due to the influx of IDPs.

The situation is different at the hospital level, where the flow of funds from the NHSU is based on the volume of services rather than the number of patients enrolled. According to the head of a department of health in an oblast in the south of Ukraine, volume-based payments have been helpful in this regard, allowing them to provide services to people from neighbouring areas in which the war's impacts constrain access to care.

"We understand that, in areas even closer to the front line [than we are], the situation is very difficult, and we have provided services to the affected residents in certain key areas: oncology, childbirth, heart attacks and strokes."

She continued, "The patient has the right to choose where to be treated. They are not limited by the fact that they are from a different oblast [as it was before the reform]; they can receive full medical care here in our facilities. If they receive an electronic referral, that is sufficient for us. The [NHSU's electronic health] system does not see where the patient is from. It sees their electronic code, and based on this code, we can be paid for the treatment that they receive from us."

Although there are many common challenges, the war has had differing impacts on hospitals in different parts of the country. Some have experienced growth in both the demand for services (due to inward migration of people) and their capacity to supply services (due to inward migration of health workers), stimulating growth in their activity and revenues. Others, including some close to the front line, receive funds from the NHSU on the basis of global budgets rather than service volumes, allowing them to sustain their operations despite the decline in size of the local population.

Workforce challenges

Other hospitals have experienced an adverse combination of increased demand, including from IDPs, alongside a reduced supply capacity due to health workforce shortages, as some health workers have joined the military or relocated to safer areas.

"Everyone has their own motives – some have a family, others have experienced trauma," said a senior doctor at a city hospital located close to the front line. "There was a doctor who worked for us and, while she was on duty, her apartment was hit by a rocket. Later, she was in tears. She said to me: 'I can't sleep, I can't do anything, I'm sorry.' What can I say? A young girl, 25 years old. What can I say to her – 'Don't go'?"

The senior doctor added, "Very few young specialists are entering the local health system. So, we need to bear in mind these differences in experience. You know, there may be a surplus of health workers in Zakarpattia [a region in the western part of Ukraine, comparatively far from the front line]. Lviv may have no problems with personnel. But who will we have here?"

While the war's proximity is the dominant driver of health workforce shortages, the doctor pointed out that additional financial support could make a difference. "We try our best to keep people, we try to increase salaries, but our ability to do so is not endless. We might say, let's increase salaries by 3000 *hryvnia*, but, currently, this is on the budget of the facility. At the regional level, budgets are limited."

Indeed, in previous years, the mandatory minimum wage for doctors located in areas with active hostilities was 40% higher than for other parts of the country. However, in the context of the financial constraints now facing central and regional authorities, this obligation was removed at the beginning of 2024.

Now, the challenges facing hospital managers can be severe, and the concept of recovery can seem abstract or remote in the context of day-to-day adversity. "Have you seen the attacks on our infrastructure? During one attack, the shock wave moved my car from one lane to another. That is our reality. So, the very concept of recovery, well, it can seem, you know, like trying to skin a bear that hasn't been killed yet," the doctor concluded.

For many of those working in front-line health-care facilities, safeguarding their operations today is the first step towards recovery in the future. In this context, the constrained supply of new medical graduates and their limited ability to retain them present serious threats to the viability of the health system. Ensuring adequate numbers of health workers is therefore a core component of support for Ukraine's recovery and reconstruction.





"For us, the front line is very close, there is a constant risk of military aggression – and, of course, that makes recruitment and retention difficult, because students want to go to Kyiv as well as the central and western oblasts," the head of a department of health in an oblast in the south of Ukraine told us. "Our challenge is to create a strong medical ecosystem, with medical institutions that are powerful enough to allow young students to realize themselves, right? Notwithstanding the effects of the war, they will have a desire to work in such institutions."

Alongside ongoing workforce challenges are the more direct effects of military action. "As for our city, I think you will have noticed that it has suffered a great deal of destruction. The same thing has happened to many of our hospitals. A missile attack on [one of our multi-profile hospitals] completely destroyed the outpatient building. Our own children's hospital was hit by cluster bombs."

The official from the department of health continued, "And then, we've had a range of other complicated problems. We had no water supply for a long time, for several months [after the destruction of the Kahovka Dam]. We've had to build wells for almost every hospital. Then we had the blackouts. Our facilities had to be backed up by generators. And we had a few problematic issues with shelters. We had to remodel basements or build new structures. Now, we understand all the necessary components, right?"

The multiple faces of recovery

Health system leaders are not waiting until the end of the war for recovery – they are acting now, responding to changing and intensifying health needs today.

"We understand that a very large percentage of military personnel return with psychological and physical rehabilitation needs," said the head of an oblast department of health in the country's south-west. "We understand that there are families that need support, children who are traumatized, who are constantly waiting for an [air raid] alarm. This is already on their minds. These are among the challenges we have to deal with. That's why, despite all the things we expect in the future, we are building a health system for today. We are installing solar panels and individual boilers, drilling wells. We are doing everything we can to ensure that our institutions are autonomous and independent, and can continue to provide health care."

For local health system leaders, it remains important that, even in wartime conditions, national and regional health authorities remain in the lead, providing routine services and dealing with emergencies as they occur, with humanitarian agencies playing a critical, but complementary, role.

"The humanitarian support – food and clothes and basic medicines – of course they are important. But we have to be mindful about the potential drawbacks," said the head of the department of health in an oblast in which active hostilities continue. "We have to ensure that people's access to medicines via humanitarian aid, for example, does not stop people turning to their PHC doctor, for example, does not prevent IDPs from re-enroling. We want people engaged in the system – obtaining services in primary care and affordable medicines in pharmacies. If people can rely on humanitarian aid, they become used to it, and they do not see the importance of PHC providers."

Conclusions

The health authorities, hospitals and PHC facilities we visited, all of whom are serving communities close to the front line, have demonstrated remarkable resilience in the face of unprecedented challenges. They are operating at the hard edge of the war.

Without health care, there is no community, because the quality of life, the life expectancy, everything drops tremendously. A person who is ill and without access to health care will not be able to rebuild the country after the war is over. They will not be able to provide additional economic support for the system in general, and for local communities. So, the health system, as always, needs to be a top priority.

Their testimonies speak to an urgent need for increased support, but also the importance of this being routed through, and in support of, local health systems – ensuring that they can maintain their leadership in the response to the war and build on this for recovery.

Several things can be done to support them at domestic and international levels. In the former case, some technical financial fixes may be considered. Some facilities at the PHC level, where the population-to-physician ratio has risen sharply due to inward migration, may be disadvantaged by the current payment system. In such cases, the incremental reduction of capitation payments above the "optimal" level of 1800, which may impede access, could potentially be adjusted.





Conversely, in areas very close to the front line of active conflict, where a falling population impacts the viability of PHC providers, there is a case for supplementing capitation with lump-sum payments to ensure sustained access to services for the people that remain.

At the hospital level, too, the recruitment and retention of sufficient workers can be a critical challenge. Here as well, regional differences can be stark; the nature and scale of the challenges are much more severe in the war-affected oblasts than in the rest of the country. Many of the key drivers of workforce shortages are, of course, non-financial in nature, but higher salaries may make a difference to staff recruitment, retention and morale.

In the longer term, other forms of support – including international support – may be needed to ensure that local medical education continues to be viable and able to attract and retain talented young people.

For health leaders in these areas, these are key elements of what "recovery" means. They have no doubt about the centrality of health system recovery to Ukraine's future social and economic development. They recognize that health is both a human right and an important determinant of human capital that underpins longer-term economic growth and social resilience.

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What comes next?

Currently, there is limited evidence on communities' experiences of, perspectives on and aspirations for health system recovery. Accordingly, WHO's future research will build on this document, incorporating a range of key informant interviews and focus group discussions that engage diverse population groups, local community representatives, and local clinicians in the most war-affected parts of Ukraine.

Our final report on this work will be published later in 2024. Our goal is to ensure that local communities' views are reflected in the planning and implementation of health system recovery efforts, helping to make such efforts more timely, relevant to context, effective and sustainable.

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