UKRAINE

reassessment of the sustainability of the opioid agonist therapy programme within the context of transition from donor support to domestic funding

EHRA
2023

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List of acronyms

AIDS	Acquired Immunodeficiency Syndrome
AMS	Academy of Medical Sciences
APH	Alliance for Public Health
ART	Antiretroviral Therapy
BASIS	Behaviour and Symptom Identification Scale
CDC	Centers for Disease Control and Prevention [USA]
CF	Correctional Facility
CMU	Cabinet of Ministers of Ukraine
CO	Charitable Organisation
COVID	Coronavirus Disease
EECA	Eastern Europe and Central Asia
EHRA	Eurasian Harm Reduction Association
EHRS	Electronic Health Record System
EIPHP	European Institute of Public Health Policy
EU	European Union
FG	Focus Group
GDP	Gross Domestic Product
GF	Global Fund
HCV	Hepatitis C Virus
HIV	Human Immunodeficiency Virus
IBBS	Integrated Biological and Behavioural Surveillance
ICD-10	International Classification of Diseases 10th Revision
ICF	International Charitable Foundation
IDP	Internally Displaced Person
IWG	Interagency Working Group
MF	Medical Facility
MoH	Ministry of Health

NCC	National Coordination Committee
NHSU	National Health Service of Ukraine
NiATx	Network for the Improvement of Addiction Treatment
NIDA	National Institute on Drug Abuse [USA]
NIH	National Institutes of Health [USA]
OAT	Opioid Agonist Therapy
OCHA	United Nations Office for the Coordination of Humanitarian Affairs
OST	Opioid Substitution Therapy (see OAT)
OWS	Opioid Withdrawal Syndrome
PAS	Psychoactive Substance
PEPFAR	United States President's Emergency Plan for AIDS Relief
PHC	Public Health Center of the MOH of Ukraine
PHCC	Primary Health Care Centre
PTDF	Pretrial Detention Facility
PTSD	Post-Traumatic Stress Disorder
SCES	State Criminal Executive Service of the Ministry of Justice
SEC	State Expert Centre
STI	Sexually Transmitted Infection
TAT	Thematic Advanced Training
TB	Tuberculosis
UIPHP	Ukrainian Institute on Public Health Policy
UNODC	United Nations Office on Drugs and Crime
WHO	World Health Organization
WHOQOL	World Health Organization Quality of Life

Executive Summary

In 2022, at the initiative of EHRA, the second assessment of the sustainability of the OAT programmes in Ukraine took place. The first study was conducted in 2020 [1]. The assessment aims to analyse the dynamics of the development of OAT programmes in the last two years, taking into account such factors as the transition from international donor support to domestic funding, the impact of the SARS-CoV-2 pandemic, and martial law imposed on February 24, 2022, in response to the full-scale aggression of the Russian Federation. As in the first case, the EHRA 2019 country assessment tool was used which focuses on the sustainability of OAT programmes in the context of the transition from donor support to national funding. Progress was measured in comparison with the indicators of 2020.

Independent experts with relevant training and experience conducted this assessment from September 2022 to January 2023, focusing on pandemic and martial law conditions. The assessment drew on data available in literature, numerous documents, key informant interviews, and focus group findings. In addition to qualitative data, quantitative indicators were used where possible. The study primarily considered issues related to the changes that occurred against the backdrop of the war.

The COVID 19 pandemic continues to have a major impact on the health system: incidence rates are declining but still high (14–15,000 per week in October 2022), and vaccination coverage among vulnerable populations remains inadequate (>40% of the adult population [2]). According to the latest estimates by the United Nations Office for the Coordination of Humanitarian Affairs (OCHA) [3], 18 million people in Ukraine have been affected by the war, of whom 6 million need humanitarian and medical assistance. According to some estimates, about 6 million people have been displaced within the country, and up to 9 million have sought temporary shelter abroad. Health care facilities have been significantly damaged.

According to the assessment guide, three main issue areas are considered in evaluating the sustainability of OAT programmes:

1) Policy and governance;

2) Finance and resources; and,

3) Services provided to patients.

Compared to 2020, there has been significant progress in all of the above areas. This is most evident in a significant increase in the number of patients on OAT and an improvement in the quality of medical services provided to them. Progress was most visible toward the end of 2021. After the Russian army launched a full-scale military invasion and martial law was imposed in Ukraine, numerous risks to the OAT programme emerged. However, thanks to the timely response of the domestic health system and the intervention of international donors, the situation quickly stabilised, and the assessment results showed that the sustainability of the OAT programme (according to the methodology used) was at a substantial level.

The political commitments related to the OAT programme have become more concrete and clearer. With the adoption of a new version of the Decree of the Ukrainian Ministry of Health (MoH) regulating the implementation of the OAT programme, some existing obstacles have been removed. Legislation to support the transition from donor financing of the OAT programme to domestic funding is almost complete. The new norms introduced by Decree No. 200 of the Ukrainian MoH have made it possible to legally regulate the activities of private centres offering this type of treatment and to gain access to relevant statistical data. The Decree has also helped to minimise police interference in the operation of OAT sites.

Through the National Health Service of Ukraine (NHSU), an updated **funding system** has been developed and introduced. It provides an holistic economic model for the implementation of OAT not only in specialised medical facilities (MFs) but also in primary health care centres (PHCCs), increasing the number of OAT sites. This circumstance and others (particularly the influx of new clients due to limited access to illicit opioids) played an important role in the planned number of OAT patients exceeding 28,000 by the end of 2022. This marks 112% of the originally planned indicator. The number of pretrial detention facilities (PTDFs) and correctional facilities, where OAT is available for pretrial detainees and convicts, has also increased.

There are positive developments in the **provision of services**. The average drug dose is currently higher than two years ago. The percentage of clients receiving 'take-home' medication has also increased. HIV treatment indicators have improved. The scope of medical services (examination and treatment of concomitant diseases) for clients with opioid dependence has increased.

Under martial law, client numbers were expected to deteriorate significantly. Nevertheless, the public health system managed to mobilise, and the situation became even better than before the war on a number of indicators. During the period of restrictions related to the SARS-CoV-2 pandemic, the procedure for dispensing 'take-home' doses of OAT was changed, which increased interest by clients in this type of treatment. When the situation was most threatening (March–August 2022), the Decree of the Ukrainian Ministry of Health was in force which allowed the provision of the monthly 'take-home' dose of the drug. Later, this Decree was canceled. Currently, the maximum period for providing the 'take-home' dosage is 10 days.

In February–March 2022, when it became impossible to predict the supply of OAT medicines and concerns about supply disruptions arose, donor agencies became more active. It included not only the Global Fund and PEPFAR, but also donors with smaller scopes of activity that had not previously been involved in supporting the Ukrainian health system. International assistance, particularly from the United States and EU countries, contributed significantly, though not decisively, to the government's ability to largely meet its budgetary commitments to the health system, particularly concerning the OAT programme.

The main recommendations relate to the improvement of legislation and the inclusion of OAT in the arsenal of medical interventions that are carried out at the level of primary health care [78]. General practitioners should be given the right to diagnose opioid dependence and prescribe treatment according to WHO recommendations and the national standard of care. Only in this way will it be possible to achieve adequate OAT coverage of people with opioid dependence. It is also necessary to work on improving the OAT procurement process to make it more flexible and adaptable to the changing needs of medical facilities, and to allow the purchase of drugs from different manufacturers. Increased efforts are needed to further combat stigma and discrimination against people who inject drugs. The OAT services in private medical facilities should be monitored regularly. There should also be verification that their services meet all the requirements of the national standard for the treatment of mental and behavioural disorders. However, this provision requires adequate legislative support.

Summary table of progress towards sustainability

Year			2022	2020
Policy & Governance			**Substantial sustainability 76%**	**Moderate sustainability 65%**
A1	Political commitment	↑	Substantial sustainability 77%	Moderate sustainability 61%
A2	Management of transition from donor to domestic funding	↑	Substantial sustainability 75%	Moderate sustainability 68%
Finance & Resources			**Moderate sustainability 63%**	**Moderate sustainability 67%**
B1	Medications	↓	Moderate sustainability 56%	Moderate sustainability 61%
B2	Financial resources	↓	Sustainability at moderate to high risk 49%	Moderate sustainability 65%
B3	Human resources	↓	Moderate sustainability 56%	Moderate sustainability 64%
B4	Evidence and information systems	↑	High sustainability 92%	Substantial sustainability 78%
Services			**Substantial sustainability 71%**	**Moderate sustainability 55%**
C1	Availability and coverage	↑	Moderate sustainability 54%	Sustainability at moderate to high risk 30%
C2	Accessibility	↑	Substantial sustainability 70%	Moderate sustainability 67%
C3	Quality and integration	↑	High sustainability 88%	Moderate sustainability 69%

1. Context

According to the Constitution of Ukraine (Art. 49), "Health care is provided through state funding of relevant socio-economic, medical and sanitary, health and prevention programmes" [4]. In 2022, amendments were made to the Law of Ukraine on "Fundamentals of the Ukrainian Legislation on Health Care." Accordingly, "every citizen has the right to free medical care in state and municipal health care facilities, which includes: emergency medical care, primary medical care, specialised medical care, palliative care, and rehabilitative care" [5]. Primary health care is provided by general practitioners/family physicians in Primary Health Care Centres (PHCCs). Specialised care is provided by multidisciplinary hospitals and infectious disease hospitals, narcological, neuropsychiatric, endocrinological, and tuberculosis dispensaries/outpatient clinics, centres for prevention and control of AIDS, research institutes, specialised clinics and treatment centres of the Academy of Medical Sciences of Ukraine (AMS). Medical facilities, except for those under the jurisdiction of the AMS, are financed from local budgets and salaries of medical staff – from the state budget through the NHSU. At the same time, the procurement of a number of medications, including OAT drugs, is carried out at the expense of the state budget. Methadone and buprenorphine are purchased centrally and distributed to regions by a relevant decree of the MoH. In the previous period for which the analysis was conducted, such an order was updated at least twice per year, and for the current analysis period 2020-2022, such an order is being issued as medications are supplied (once per quarter); within each region, medications are distributed in accordance with an order of the Public Health Department of the State Regional Administration. In 2022, OAT medications were used that had previously been purchased with state budget funds as well as medications purchased urgently with donor funds. At the beginning of the full-scale invasion, ICF Alliance for Public Health and CO 100% Life purchased on an emergency basis all the methadone from the Odessa pharmaceutical company "InterChem"; a logistical process to deliver it to medical facilities throughout the country was organised jointly with government agencies - the state enterprise "Medical Purchases" and the Public Health Centre. Hence, thanks to the close cooperation between governmental organisations, businesses, and non-governmental organisations, it was possible to avoid OAT interruptions in a threatening situation.

At the end of 2017, the Law of Ukraine, "On state financial guarantees for medical care of the population," was adopted, regulating the financial support of the health care system [6]. The core of the new financing model was the establishment of a single procurement entity – the National Health Service of Ukraine (NHSU), which acts as a state insurer within a clearly defined guaranteed package of medical services financed from the general tax system, and for this purpose concludes service contracts with state and private health care providers to ensure medical care for the population. This approach focuses on the population's need for services. It is fundamentally different from the previous rigid budgeting approach, which was based on historical data and focused on funding the fixed assets of the MFs, utility bills, and employee salaries.

Drug policy in Ukraine is gradually changing. Instead of the traditionally repressive drug policy, clear trends are emerging that focus on improving the population's health. The main provisions for the changes in drug policy were formulated in 2021 in the document, “State Strategy of Drug Policy until 2030”, which went through public hearings and is currently under consideration by the Cabinet of Ministers of Ukraine (CMU) [7]. The document describes four strategic goals:

1) Promote healthy lifestyles and reduce demand for psychoactive substances.

2) Combating illicit trafficking of narcotic drugs, psychotropic substances, and precursors.

3) Ensuring the availability of narcotic medicines for people who need them.

4) Provision of timely and high-quality diagnostic, prevention, medical, social, and psychological services to individuals with mental and behavioural disorders due to psychoactive substance use and the availability of comprehensive harm reduction programmes.

The modern drug scene was thoroughly examined and described in the study, 'Assessment of adverse reactions to OAT medication and changes in the use of psychoactive substances in connection with military operations in Ukraine in 2022', commissioned by the Public Health Center of the MOH of Ukraine (PHC) in 2022. The study included 1,700 respondents representing the community of people who inject drugs [10]. It was found that there were no significant changes compared to the results of the last IBBS conducted in 2018 and 2020 [8, 9]. Opioids still account for the majority of all psychoactive substances used illicitly. The most widely used drug is so-called street methadone (65–67% of respondents reported using it) [10]. This drug is produced clandestinely in Ukraine or imported from abroad. 36–37% of respondents mentioned the use of medical methadone. This drug enters the illegal trade through diversion from the medical sector, mainly because some clients sell part of the 'take-home' dose. Approximately the same indicators are typical for antihistamines (Dimedrol/diphenhydramine) and for taking several psychoactive substances (PAS) in one shot. Amphetamine-type stimulants rank fifth on the list of drugs used; the use of amphetamines was reported by 20–21% of respondents, and methamphetamine by 7–12% [10]. Thus, it is possible to say that illicit use of opioids remains the most widespread, despite regular reports of the displacement of opioids by new psychoactive substances, the high prevalence of stimulants, and so-called club drugs in injection practice.

In most cases, a specialised narcology service (drug treatment) provides treatment for mental and behavioural disorders caused by substance use. Ongoing health care reform aims to move as many medical services as possible to the primary health care level and create a system of financial support to pay for medical services for the population. These changes made it possible to organise the OAT provision in PHCCs and to involve primary care physicians in the integrated care of people who inject opioids [6, 11]. Health care reform faces some obstacles, both sociopolitical and psychological. The process is proceeding with some challenges, and the results are difficult to predict at this point. Until recently, some parliamentarians even advocated the abolition of health care reform. The reform had quite encouraging effects on the development of OAT programmes: many PHCCs (at least in 12 regions of Ukraine) started to provide OAT services. However, in 2021

2022, some of them refused to continue this work, arguing that the payment terms for such services were economically unattractive.

Changes brought about by the Russian Federation's military invasion

Initially, the aggression led by the Russian Federation negatively impacted access to OAT programmes. However, within 6–7 months of the beginning of the large-scale invasion, the public health system was able to find the necessary solutions to overcome the difficulties encountered. In 2022, there was not a single region of Ukraine that would not be in the combat zone in one way or another, in contrast to what was observed during the assessment in 2020, when only the Autonomous Republic of Crimea and partially the Lugansk and Donetsk regions were affected by Russian aggression that had begun in 2014. Although most regions were not under occupation and did not directly become the theatre of war, they suffered from air or missile attacks and the destruction of health and energy infrastructure. In addition, large numbers of refugees from frontline areas moved to these regions. According to approximate data, Ukraine's GDP has dropped by at least 25%. The country has been forced to reallocate a significant portion of its remaining resources to maintaining the army's combat capability, which has affected financial support for other areas, including health care. The war has created unique challenges for OAT clients and providers. The following sections discusses these in more detail. One of the problems is that OAT is prohibited by law in the Russian Federation. Therefore, OAT is completely banned in all occupied territories.

By February 1, 2022, 17,210 clients in public hospitals and 3,121 in private hospitals at 224 sites in Ukraine were participating in the OAT programme (totaling 7.3% of the estimated number of people needing treatment) [12].

At present, we do not have sufficient data to assess the extent to which the positive changes brought about by the updated regulatory framework and health care reform have altered the overall situation. This is due to the impact of various negative factors, both economic (occupation of 20% of Ukrainian territory and destruction of infrastructure even in places hundreds of kilometres away from the front line, and decrease in GDP) and psychological (massive stress, high levels of anxiety and depression affecting the health of OAT clients and people who inject drugs). Nevertheless, despite all the losses (humanitarian, territorial, financial, and industrial), the Ukrainian health care system has demonstrated a high level of sustainability. In the first month of the war, many people were in shock and the operation of services was affected. During this period, the number of OAT clients in public health facilities decreased by 858 or 5% of the total number (17,210). At the same time, private health facilities suspended reporting client numbers; therefore, their data were not included in the statistics. However, within a month, the number of registered clients began to increase again due to the addition of new clients, internally displaced persons (IDPs), and clients treated in private facilities before the invasion.

The number of OAT sites that stopped working due to the occupation and destruction of clinics was 16 (6%). It should be taken into account that 4,780 (28%) of OAT clients lived in the regions affected by the invasion (the Kharkiv, Sumy, Chernihiv, Kyiv, Lugansk, Donetsk, Zaporizhzhia and Kherson regions).

As of December 31, 2022, there were 28,523 OAT clients. 19,919 clients received OAT in state/municipal and 8,604 in private medical institutions. 181 state/municipal and 26 private medical facilities offered OAT to their clients [13, 16].

In the first months of the war, there were two critical challenges to the OAT supply system: the threat of disruption in the supply of medicines and the massive exodus of clients from areas affected by occupation or shelling. The Kharkiv pharmaceutical company Zdoroviia Narodu (People's Health), which produces methadone and buprenorphine, ceased operations due to the constant air raids and shelling. Odessa pharmaceutical company InterChem also operated on a limited scale for some time. In the first days of the full-scale invasion, the central warehouse of OAT medications in the suburbs of Kyiv was directly on the front line. Security and logistical problems related to access to warehouses and transportation of medicines in Ukraine led to delays in the delivery of OAT to many regions in the early months of the war. At the same time, there was a significant migration of OAT clients seeking treatment in other cities across the country (Fig. 1).

Figure 1. The number of OAT clients who applied for treatment in other cities [14]

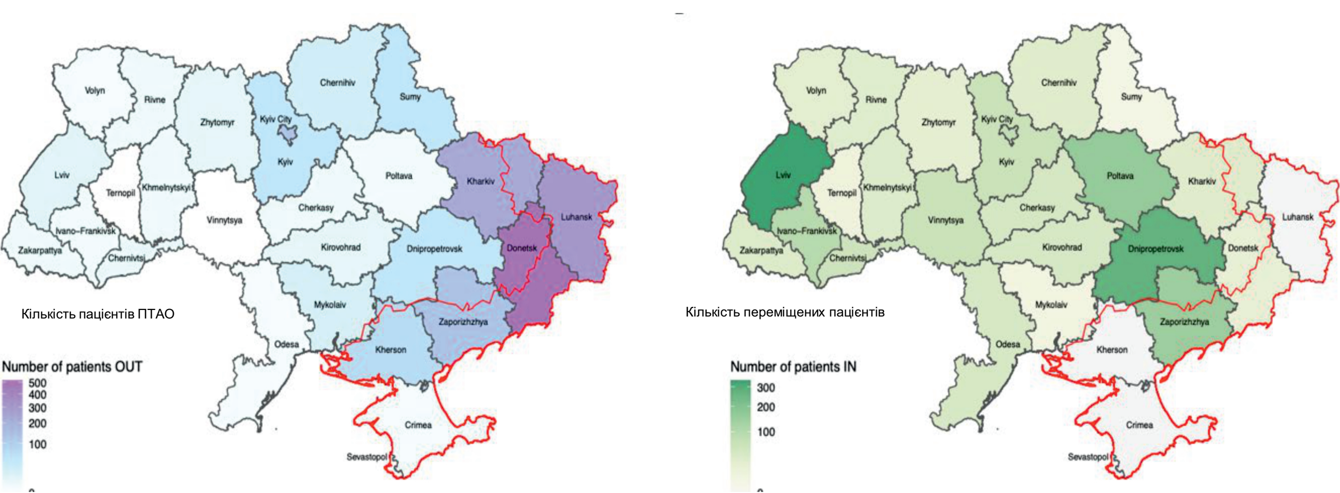


Figure (1a) shows a map of Ukraine with the identification of the regions that were in the most threatening situation (previously removed from Ukraine's control or temporarily occupied in 2022) and the direction in which clients moved to maintain the continuity of their therapy [15].

Figure 1a.

Migration of OAT clients according to the recommendations of the Centre for Public Health during the invasion of the Russian army into Ukraine

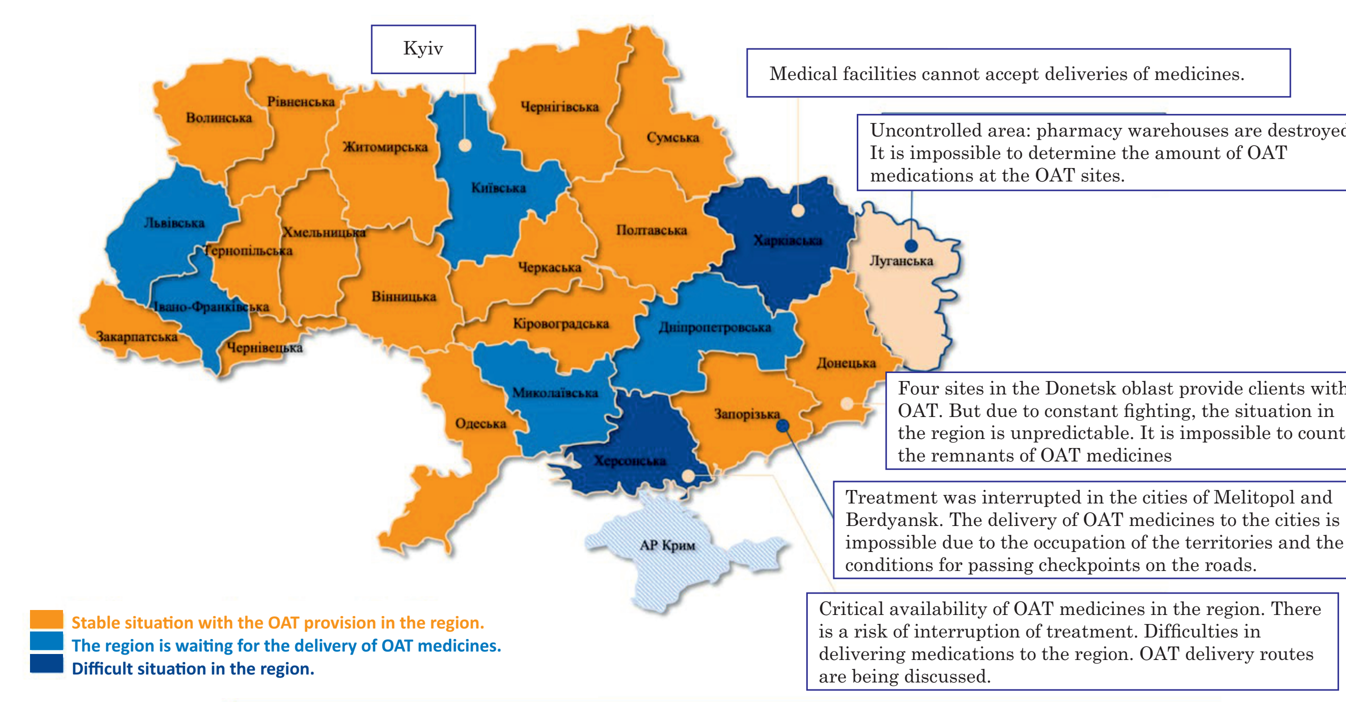
In the early days of the conflict, many carriers refused to deliver medicines to the battlefield areas. In March 2022, the ICF Alliance for Public Health (APH), in close cooperation with the Centre for Public Health, succeeded in organising the delivery of methadone and buprenorphine to cities and towns surrounded by Russian troops, including Sumy and Chernihiv. To avoid confiscation of OAT medicines and pass through the checkpoints controlled by the occupiers, OAT had to be hidden in large batches of other medications, especially ART and antimycobacterial drugs, etc.

From the testimony of the doctors who dispensed OAT medications at the Sumy narcological centre, one can imagine how dramatic events were in the first months of the war. Clients came to receive their dose of medicine carrying guns they had received as members of self-defense units. At the same time, there were no incidents or crimes. This only confirms the well-known clinical fact: stable clients with dependence receiving maintenance therapy do not pose a social threat, contrary to the widespread myths about the 'danger of drug addicts'.

Figures 2a and 2b show the regions where OAT medicines could be delivered unhindered, the areas where the situation was unstable, and the areas which were in a combat zone or temporarily occupied and where OAT could not be provided [13].

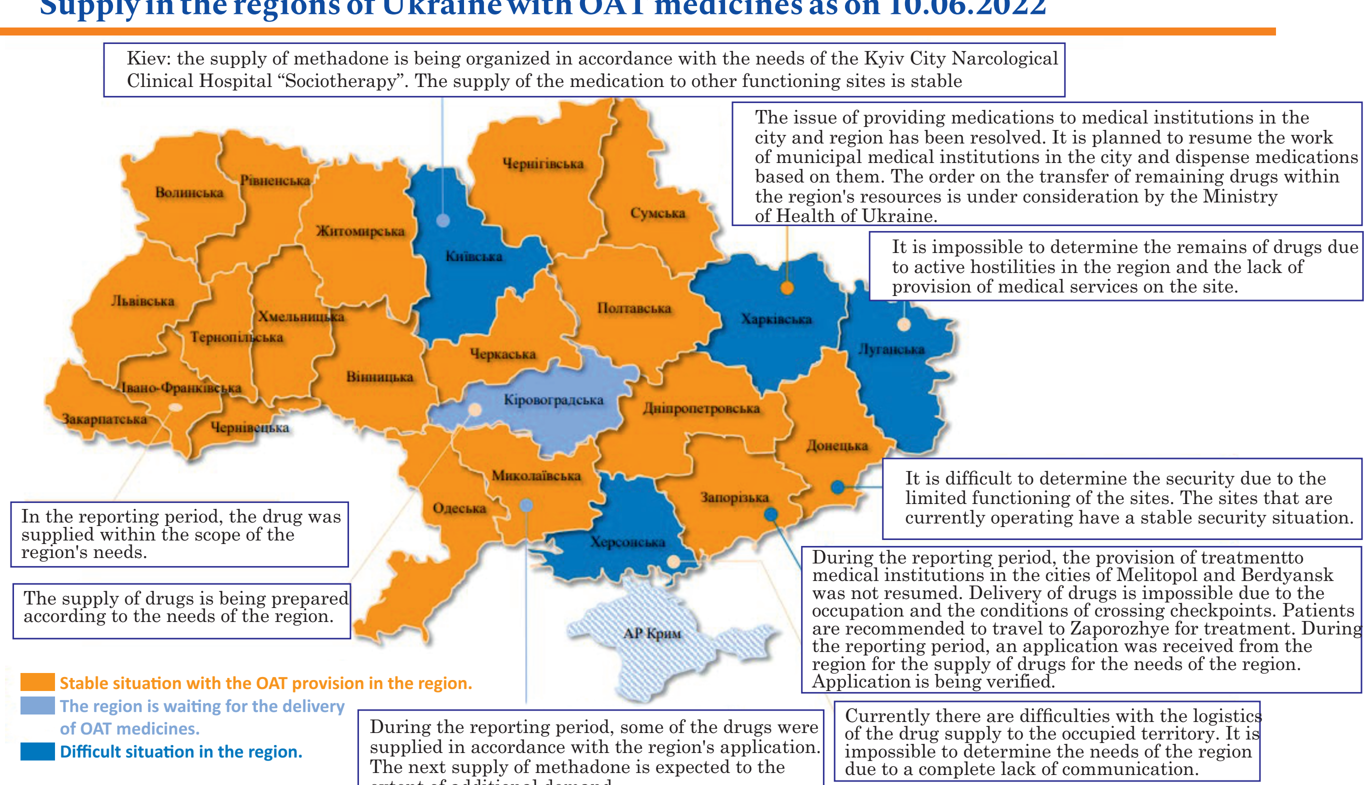
Figures 2a and 2b. Supply in the regions of Ukraine with OAT medicines as on 02.05.2022 and 10.06.2022.

Supply in the regions of Ukraine with OAT medicines as on 02.05.2022



Information status: May 2, 2022

Supply in the regions of Ukraine with OAT medicines as on 10.06.2022



Information status: June 1, 2022

See Figure 3 for a map of areas where OAT has ceased operations or had to close temporarily due to evacuation of medical personnel. Of the 199 OAT sites in operation after the military invasion began, 183 were still operating as of early May 2022, as on 01.12.2022 there were 181 operational sites [13, 16].

Figure 3. Information about medical facilities (MFs) that offer OAT services as on 01.12.2022.

Information status: 01.12.2022

At a time when nearly one-third of the Ukrainian population was forced to relocate, about 20% of the entire country's territory was occupied and martial law was imposed throughout the country, the public health response (including the MoH, the Public Health Center (PHC), and numerous civil society organisations) proved highly successful in achieving the OAT-related indicators.

The effectiveness of the OAT sustainability system in extreme conditions is evident from the monthly reports of the PHC (situation reports on access to the OAT programme in Ukraine) [13, 16]. For example, the report of 09.01.2022 informs that procurement of OAT medicines (5 and 10mg methadone in tablet form, as well as buprenorphine produced abroad) continues with financial support from donors and according to the needs of the country. This ensures access to treatment for 25.9 thousand clients (9.4% of the estimated number of people who inject opioids). Active efforts are underway to organise the supply of buprenorphine in combined and depot (extended release) forms received as humanitarian assistance. Despite the extremely difficult circumstances, activities to ensure continuous OAT supply and data collection are continuing, the range of procured medications is being expanded and preparations are underway for the introduction of depot buprenorphine treatment (Buvidal). At the end of January 2023, the country received the medication Buvidal (long-acting buprenorphine), which was immediately distributed to the regions.

2. Goal and Methodology

Goal: Describe the current situation related to the implementation of the OAT programme in Ukraine, assess progress, identify areas of concern, and develop recommendations for all stakeholders.

The authors used the methodology developed by EHRA and described in the manual, 'Measuring the sustainability of opioid agonist therapy (OAT). A guide for assessment in the context of donor transition' (2019). A group of key informants (listed in the Acknowledgements) was formed, including service providers (narcologists), OAT clients, activists representing the community of people who inject drugs, professionals from state organisations (Ministry of Health, PHC), and public health researchers and scientists. During the preparatory phase, changes to the proposed tool were evaluated to determine whether all topics and indicators in the guide were relevant or needed to be adjusted. Separately, possible options for using the assessment results were explored, taking into account the experience gained over the past two years since the last assessment and corresponding publication in 2020.

Ukraine has been at war with the Russian Federation since February 2022. The assessment methodology developed by EHRA and used in this report did not consider these exceptional circumstances for obvious reasons. Necessary adjustments have therefore been made so that each section highlights and details the changes in policy, funding, and services resulting from martial law.

Following the proposed format, the assessment included a desk review in which almost all available documents regulating the implementation of OAT in Ukraine (laws, and decrees of the government and the MoH, the Ministry of Internal Affairs, and the Ministry of Justice), as well as numerous scientific and journalistic articles, were reviewed and analysed. After this assessment phase, interviews with key informants and focus groups (FGs) with clients were organised and conducted according to the guidelines and the scenario described in the EHRA manual.

The scheme proposed in the guide was used to draw conclusions about sustainability based on a specific indicator.

3. Key Findings: Policy and Governance

Issue area \ Year			2022	2020
Policy and Governance			**Substantial sustainability 76%**	**Moderate sustainability 65%**
A1	Polical commitment	↑	Substantial sustainability 77%	Moderate sustainability 61%
A2	Management of transition from donor to domestic funding	↑	Substantial sustainability 75%	Moderate sustainability 68%

Almost all informants note that there has been significant progress in the last two years in terms of political and legal support for the OAT programme. Public health issues are gradually becoming a priority in drug policy. In any case, they are not becoming less important than public safety issues. Community, charitable, and patient organisations significantly influence government decision-making. There is a clear tendency to abandon previous borrowings from the Russian Federation on drug strategy issues. This is reflected in the new document, "State Strategy of Drug Policy until 2030", submitted to the Cabinet of Ministers for approval [7]. Due to PHC's active role in the OAT programme, coverage of people who inject drugs has improved significantly, from less than 5% at the beginning of 2020 to 9.8% at the end of 2022. Lifting certain restrictions has increased retention in the OAT programme and made it, in general, more attractive to clients.

At the same time, there are some problems with legislation that does not allow the use of all available resources to increase the number of clients, although the importance of these resources is not as great as it used to be since there has been a shift in law enforcement practice towards evidence-based approaches to drug dependence treatment. Phenomena such as stigma and discrimination against people who inject drugs have not been eliminated. The fact that OAT is still considered in the context of HIV infection plays a certain negative role in the development and implementation of OAT. For example, donors fund OAT programmes on the basis that they serve to prevent HIV and improve HIV treatment adherence. This limits the role of OAT as a therapeutic intervention for opioid dependence. In recent years, as NHSU took over funding of the OAT programme in place of international donor agencies, some MFs that previously offered OAT and were funded by donors began turning away such clients, arguing that the funding they receive from NHSU does not cover all costs. This is especially true for MFs where OAT is not the core service, such as PHCCs. There are many complaints about NHSU procedures and delayed responses to requests from health authorities and MFs.

Currently, the Centre for Public Health together with MoH of Ukraine are seeking working contact with NHSU to resolve emerging issues as quickly as possible. The challenge is to find a way to balance the interests of the providers of OAT, who act primarily in the interest of clients and medical staff, with the capacity of NHSU, which is limited by the allocated budget, so that this agency is forced to find a balance between the interests and needs of the representatives of the health care system.

Changes brought about by the military invasion of the Russian Federation

OAT is subject to quite strict rules and regulations outlined in laws and bylaws. However, these documents do not contain provisions on measures to be taken if the OAT site location is occupied by an enemy army or subjected to massive shelling and air attacks. At the very beginning of the war, the Public Health Center (PHC) and many medical institutions had to act without clear instructions because the situation required non-standard solutions. The PHC organised monthly briefings and weekly monitoring sessions for OAT providers in which they outlined different ways to address emerging problems and to quickly redistribute OAT medicines between regions.

With the joint efforts of the staff of the medical institutions, NGOs, and PHC, the situation in one of the cities on the front line was resolved when the OAT site could not function normally due to the lack of administrative staff in a state medical institution. The stocks of methadone and buprenorphine were transferred from a state medical institution to a private facility to provide clients with the necessary therapy by redistributing medications from a budgetary organisation to a commercial entity.

The OAT sites in the regions far from the front lines had to care for many clients who had been evacuated from war zones. This circumstance caused significant difficulties in the provision of medicines and medical services. However, in the first 2-to-3 months after the outbreak of war, the situation stabilised and clients could receive the help they needed.

3.1. Political commitment

There were no changes to the framework laws regulating the implementation of OAT in Ukraine, namely: the Law of Ukraine, “On Measures to Combat Illicit Trafficking in Narcotic Drugs, Psychotropic Substances and Precursors and Their Abuse” [17], and the Law of Ukraine, “On Psychiatric Care” [18]. However, some Orders of the Cabinet of Ministers [19, 20] led to the revision of subsidiary laws that improved access to treatment. In addition, these documents set national targets for coverage of people by the OAT programme.

The significant role of the amendments to MoH Decree No. 200, which regulates the procedure of OAT provision, is particularly worth mentioning. It came into force on January 29, 2021 [21]. Previously, there was a little-explored legal “gray zone” in prescribing and dispensing methadone and buprenorphine in private clinics and by physicians with IE (individual entrepreneur) status. It prescribed these medications for long-term treatment of opioid withdrawal syndrome (OWS). OAT was only allowed in state medical facilities, while OWS treatment and opioid agonist prescribing were not legally prohibited in any facility licensed to provide medical care. Clients who consulted a private physician were not recorded in the narcological registration system. They were also not included in the official statistics. Due to the new norms of Decree No. 200, the PHC now receives centralised statistical data on the number of OAT clients in private medical institutions (apart from IEs – they are prohibited from providing OAT). This makes it possible to obtain a complete picture of OAT services at the national level and to plan and manage the care system for people who inject drugs accordingly.

Previously, only narcologists had the right to prescribe OAT; now psychiatrists may do so as well. The timeframe for switching a client to 'take-home' doses has been reduced from six to three months. The requirement to test clients for illicit opioids in their urine was also changed. Previously, this test had to be performed at least once every month, regardless of the length of treatment. Now, this standard has been maintained only for the first year of treatment, and in the second year, the test is performed once every six months and for a period longer than two years – at the discretion of the treating physician. According to the updated procedure, a physician of any specialty who has completed thematic advanced training (TAT) in OAT can treat OAT clients without the involvement of a narcologist or psychiatrist [22].

At the same time, the Law "On Measures to Combat Illicit Trafficking in Narcotic Drugs, Psychotropic Substances and Precursors and Their Abuse" [16] maintains legal norms that hinder the increase in the availability of OAT services. For example, it states that, "...illicit use of narcotic drugs or psychotropic substances is the consumption of narcotic drugs or psychotropic substances without a medical prescription." Thus, any consumption without a proper prescription is illegal. Any experimentation with psychoactive substances or self-medication falls under this definition, leaving ample room for repressive interpretations. One of the norms that adversely affects the involvement of clients in treatment is Article 12 of this law, which defines the "Procedure for the Identification and Registration of Persons Who Use Drugs Illegally." According to this procedure, the Ministry of the Internal Affairs and the Prosecutor General's Office are responsible not only for the identification and registration of persons who use drugs, but also of clients with drug dependence problems. However, the National Police Regulations do not provide for this. The law works with the outdated concept of "narcomania" (drug dependence), which is not included in ICD-10, and also requires that the diagnosis be made by a medical advisory committee in a hospital, which contradicts the law "On Psychiatric Care". To resolve this legal collision, PHC proposes to focus on the letter of the Ministry of Justice dated December 26, 2008, No. 758-0-2-08-19, "On the practice of application of legal norms in the case of a legal collision", namely that, "... In case of contradictions between provisions adopted by the same legislative body, the later adopted legal act shall be applied, even if the earlier legal act is still valid". Since the Law "On Psychiatric Care" was adopted later, the norms provided in this law should be applied [20].

One of the barriers to the sustainability of political commitment is that decision-makers still see the problems associated with drug dependence and its treatment in a traditional political and social context rather than a scientific perspective. Security issues, such as drug trafficking and drug-related crimes (such as drug distribution and use), are still prioritised, while public health issues fall by the wayside. Many of the decrees issued by the MoH on OAT still have to go through a lengthy coordination process with the Ministry of Internal Affairs and the Prosecutor General's Office. However, most informants believe political commitment can be considered substantially sustainable.

The shift from donor to national funding has had a positive impact on political commitment, as many in-country stakeholders previously viewed OAT as a tribute to international organisations that demanded a larger OAT programme and made HIV funding contingent on them. In particular, the condition for receiving a Global Fund grant was mandatory implementation of the OAT

programme at a certain scale in the country. When OAT was funded from the state budget, providers and structures responsible for drug control began to perceive this type of therapy as an integral part of the care system for people who inject drugs. In particular, in 2021–2022, there was significantly less resistance to the implementation of OAT by law enforcement agencies. There is no statistical data on this because no records were kept, and the conclusion was based on verbal testimony from physicians and clients in the OAT programme.

In 2020–2021, there was significant progress in providing OAT for people with opioid dependence who were sentenced to prison. Previously, they were denied access to this treatment. For example, in 2019, only one pilot project was implemented in one correctional facility (CF), with several individuals receiving OAT. Now, clients can continue treatment immediately after arrest or during pretrial detention, as well as while serving their sentence in a CF. There have been no legal barriers to OAT implementation in CFs to-date. However, there has been strong opposition from CF personnel: various pretexts and reasons have been used to sabotage the government's decisions to provide OAT to convicted individuals with opioid dependence. After numerous efforts by donors and civil society to advocate for this treatment method, and as a result of changes in Decree No. 200 which provides for the possibility of prescribing OAT in CFs, the situation has changed dramatically. The Centre for Public Health of the State Criminal Executive Service of the Ministry of Justice of Ukraine (SCES) has introduced the position of a responsible physician for OAT. In 2022, the OAT programme was implemented in seven correctional institutions; at the end of the year, 140 clients had received OAT. As a result of active cooperation between the PHC of SCES and some non-governmental organisations (NGOs), work is underway to expand the possibilities of implementing the OAT programme in prisons. Another outcome of this partnership is the assessment of barriers to treatment in prisons and exploring how OAT can help clients continue treatment for their opioid dependence after release, reduce the risk of overdose, prevent reoffending, and improve their quality of life.

It continues to be a problem that, in practice, incarcerated individuals in pre-trial detention facilities (PTDFs) can only receive OAT for a short period, in most cases no longer than 12–15 days. Thus, they are repeatedly "advised" to refuse this type of therapy because its organisation in pretrial detention centres is associated with an excessive burden on the penitentiary system (the need to provide transportation, security, etc., to bring the client to a medical facility). Hence, the limited availability of OAT in pretrial detention centres can be explained by the difficulties in the practical implementation of Decree No. 200. The penitentiary system is responsible for providing uninterrupted medical care for opioid-dependent persons. However, medical care is not a priority for this institution. Of course, it would be much easier to deliver methadone or buprenorphine to a pretrial detention facility than to transport inmates to MFs every day. Nevertheless, the Decree provides for such a procedure, which considerably diminishes its positive value.

With donor community support, civil society - represented by the associations of OAT clients and people who use drugs [24] and specialised NGOs that carry out service and research projects - is involved in various activities to support the implementation of OAT. It engages in advocacy, shapes public opinion, participates in the training of medical staff and personnel providing social

and psychological services, and can influence policy and state strategy on OAT, up to representing people who inject drugs in the highest bodies, especially the Coordinating Council for Combating Tuberculosis and HIV/AIDS of the Cabinet of Ministers [25].

When Ukraine's political commitment is assessed, some dissonance can be seen between the activities of different government structures. In health care, the distrust of OAT, which was typical when the method was just introduced, has almost completely disappeared. Ukrainian clinical guidelines regulating the implementation of OAT are fully in line with the recommendations of WHO, NIDA and other similar organisations [26, 27]. At the same time, the legacy of repressive policies against drugs and people who use drugs is still present to some extent at the legislative level, which is also reflected in the behaviour of police officers. These challenges are being actively addressed by civil society organisations, including those that bring together people who use drugs. Positively established is the experience of large non-profit organiaations such as ICF Alliance for Public Health and CO 100% of Life, which for many years have been bringing together the initiatives of grassroots organisations with the relevant ministries and donors (Global Fund, PEPFAR, CDC), as well as the experience of organisations of the community of people who use drugs, CO VOLNA, and women who use drugs, VONA, which actively advocate for the interests of the community of people who use drugs, including OAT clients. With organisational help and support from interested NGOs, educational workshops and webinars are held to familiarise law enforcement representatives (Ministry of Internal Affairs, SCES) with evidence-based approaches to drug dependence treatment.

Overcoming barriers to the political dimension of sustainability is possible by bringing together representatives of civil society and medical organisations to lobby for legislative changes to eliminate outdated norms that negatively impact the expansion of the OAT programme and perpetuate stigma and discrimination against people who use drugs. Some steps in this direction are foreseen in the 2023 IWG plan prepared for the MoH. At the same time, in the current situation, it is difficult to assess how realistic it is to pass a new law in Parliament to regulate activities related to drug trafficking. A positive step would be the adoption by the Cabinet of Ministers of the Decree, "On Approval of the State Strategy of Drug Policy until 2030". This document has already received all the necessary approvals.

3.2. Management of transition from donor to domestic funding

Since 2007, Ukraine has had a multilateral national governing body responsible for combating HIV infection, tuberculosis, and other socially dangerous diseases – the National Council on Tuberculosis and HIV/AIDS [25]. OAT also falls under the jurisdiction of this body as it is considered an integral part of the national response to the HIV epidemic. The National Council primarily performs policy and strategic functions, determines key directions of development in the field, and is responsible for implementing Global Fund grants.

The Public Health Center (PHC) plays the chief role in OAT programme implementation. A department for managing and combating viral hepatitis and opioid dependence has been created within its structure to ensure comprehensive monitoring and control of OAT. The PHC regularly prepares decrees based on which OAT medications are procured and distributed and submits them to the MoH for approval. It collects information on the number of clients receiving treatment, initiates and participates in the preparation of decrees and regulations on OAT methodology and recommendations for this therapy. The PHC also develops new regulatory documents, organises work to improve the qualifications of medical personnel, and generally provides strategic guidance for the implementation of OAT in Ukraine.

The Inter-Agency Working Group (IWG) on Harm Reduction and OST, established under the MoH, is chaired by the Deputy Minister. The IWG consists of representatives of all interested parties: the state, civil society, and international organisations (CDC, WHO, UNODC). The IWG prepares plans for scaling up OAT and recommendations for improving the quality of care, which are reviewed by the MoH and the PHC and taken into account in the decisions of the MoH.

In 2020–2022, there was significant progress in providing financial support for OAT programmes from state and local budgets as part of the transition from donor to domestic funding that began in 2017. By early 2022, the transition process was complete. After the war broke out, Ukraine had to return to donor support. However, the whole mechanism of funding from the state budget that had been developed was maintained. Hence, it has every chance to recover after the end of hostilities (see the section, 'Funding and Other Resources', for details on funding). This has allowed donor funds (Global Fund, PEPFAR) to be used for projects to improve OAT efficiency. Overall, this has led to a significant increase in OAT coverage and quality improvement.

In addition to the practical implementation of OAT, various studies have been and are being conducted that address this intervention. These studies address the following issues: effectiveness of treatment in Ukraine [28]; barriers preventing access and affecting the success of OAT [29–31]; different models of service delivery [32]; treatment adherence and how OAT influences the course of concomitant diseases (HIV infection, tuberculosis [33]) and mental disorders [34]. Mathematical models have been used to assess the long-term consequences and the possibility of scaling up OAT in terms of impact on the HIV epidemic [35].

Another notable advance was that technologically modern forms of psychological care for OAT clients have begun to function. As part of the project on Improved Quality and Sustainability of Medication Assisted Treatment in Ukraine, implemented by the ICF Alliance for Public Health with funding from CDC under the United States President's Emergency Plan for AIDS Relief (PEPFAR), an automated telephone service for psychological support of OAT clients was put into operation. Clients receive via their cell phones (without paying for internet traffic covered by the project) the necessary information on all issues related to OAT, psychological and social problems, possible complications of therapy, and the possibility of treating comorbidities, etc.

To educate health care professionals, a mobile version of the clinical guideline has been distributed that can be downloaded to a smartphone without restrictions, for example, via the AppStore or Play Market by entering the abbreviation SMT. The app., updated in 2021, includes an option for clients.

Changes due to the military invasion by the Russian Federation

While the transition to domestic funding has generally occurred, the ongoing war is affecting the capacity of the financial system. The events of 2022 in Ukraine fall into the category of force majeure. Funding for OAT was cut in 2022 and this situation is likely to continue in subsequent years as the war continues. Therefore, to maintain effective implementation of the OAT programme, Ukraine needs stable financial support from donors.

4. Finance and other resources

Issue area \ Year			2022	2020
Finance and resources			**Moderate sustainability 63%**	**Moderate sustainability 67%**
B1	Medications	↓	Moderate sustainability 56%	Moderate sustainability 61%
B2	Financial resources	↓	At moderate to high risk 49%	Moderate sustainability 65%
B3	Human resources	↓	Moderate sustainability 56%	Moderate sustainability 64%
B4	Evidence and information systems	↑	High sustainability 92%	Substantial sustainability 78%

From 2020 to early 2022, funding for the development of the OAT programme – particularly for the provision of medical services and the purchase of domestic OAT medicines – was provided primarily by the state; there were also private payments. Significant progress was made in the development of the OAT programme through the implementation of the 20–50–80 Transition Plan from donor to public funding. In 2020–2022, the National Strategy to combat HIV/AIDS, tuberculosis, and viral hepatitis for the period up to 2030 remains unchanged. The strategy assumes the following coverage of substitution maintenance therapy: 2020: 5.5%; 2025: 15%; and 2030: 40% of the estimated number of people with opioid dependence syndrome.

From 2020 to 2022, NHSU continued to fund the provision of OAT services by medical facilities. Fees for services under the NHSU package are set by decisions of the Cabinet of Ministers.

Areas not budgeted for – social support and humanitarian assistance to OAT clients – were funded by donors. A results-based funding model for OAT services was introduced, as well as funding for recruitment and retention of clients for 3–6 months. These collaborative efforts accelerated the process of achieving national targets for the recruitment of new OAT clients [45, 46].

The Russian Federation's full-scale invasion of Ukraine has negatively impacted OAT funding as allocated funds have had to be redistributed to meet the needs of the army. In particular, funds allocated in the state budget for the procurement of OAT medicines were replaced by a Global Fund grant. This has allowed the state budget to be reallocated for defense needs.

4.1. Medications

Under the OAT programme in Ukraine, clients receive methadone (tablets or syrup), buprenorphine (tablets) and, from the beginning of 2023, buprenorphine in the form of extended-release injections are available in some MFs. Procurement of OAT medications under the

treatment programme is centralised: the Centre for Public Health receives requests from the regions, calculates the country's needs, and prepares a decree of the MoH. OAT medications are purchased according to this decree and then delivered to the regional OAT sites. The fairly efficient centralised logistics system also has weaknesses. Some regions (oblasts) and MFs were repeatedly undersupplied with OAT medications, while in others there was an oversupply of methadone or buprenorphine. This is because requests for OAT medications are submitted long before they are actually delivered to sites. During that time, the needs may change for a variety of reasons. Simultaneously, the mechanism for transferring OAT medications from one oblast to another – although it exists – is too time-consuming and requires too much administrative work. Another problem associated with centralised procurement is the lack of competition among manufacturers because, in the process of public procurement through a tender system, the drug with the lowest price from the manufacturer wins and is purchased. Under such a system, imported and often higher-quality drugs do not make it into MFs. At the same time, numerous clients have complained about the poor quality of methadone or buprenorphine that are not appropriately formalised and forwarded to the State Expert Centre (SEC). As a result, the necessary actions have not been taken [41].

According to key informants, there were significant cost savings in 2020 due to more efficient procurement algorithms [70]. These savings were allocated to future procurements based on the IWG's decision under the MoH [15]. Price control for OAT medicines is considered optimal because procurement is transparent and done through a state-owned enterprise under community control.

During the studied period (2020–2022), medicines from domestic production continued to cause complaints from clients [41]. Complaints about the poor quality of medications produced by the Kharkiv pharmaceutical factory Health of the People are particularly numerous. In 2019, clients independently organised a quality control of OAT medicines by the State Expert Centre. It was found that the tested batch of buprenorphine produced by Health of the People had a deficit of 25% of the active substance. Although retesting showed that these conclusions were wrong, the tested batch of the medication was withdrawn and replaced with another one of the same medicine manufactured in Ukraine. In 2020, there were no complaints about the quality of methadone or buprenorphine at the SEC. However, in 2021, there was one registered complaint about the poor quality of the medication but, subsequently, it was not confirmed.

In 2021, an alternative quality check for buprenorphine (2.8 mg) and methadone (5, 10, 25 mg) was financed by the Global Fund and conducted with the participation of the community and the Public Health Center. The result of this check indicated that the selected drugs met the requirements of quality control methods and, accordingly, were of a high quality. At the same time, during data collection, it was revealed that there was a lack of awareness among doctors and clients regarding the algorithm of actions for the official registration of complaints about drugs, as well as insufficient attention to the treatment of suspected adverse reactions and concomitant diseases.

Thus, it is recommended that clients be more widely informed about the prevalence of expected adverse reactions, the interaction of OAT medicines with other drugs and narcotic substances, and

about the possibilities of treating concomitant diseases not related to the use of OAT but affecting their overall wellbeing. Meanwhile, the community insists on the presence of a large number of complaints about the quality of the OAT drug, which were voiced at every meeting with the Public Health Center of the Ministry of Health of Ukraine, but were not recorded in the appeals to the SEC.

At the same time, clinicians and independent experts believe that psychosocial mechanisms rather than the pharmacological properties of a particular drug may play a role in such complaints, so it is impossible to say with certainty how much less effective domestic drugs are compared to foreign analogs. It can only be stated that there are still some clients who are disatisfied with the quality of the OAT drugs and actively express their opinion about this; while those who are satisfied with the quality of the drugs are not particularly active in informing about this.

When providing treatment, it may be worthwhile to be more attentive to the adverse reactions reported by clients, to diagnose concomitant diseases and recommend possible treatment and, if necessary, to contact the SEC in writing.

Changes due to the military invasion by the Russian Federation

A few months before the full-scale invasion, representatives of the client community initiated a process to plan and create an OAT drug buffer in case of war. A meeting was scheduled shortly before the invasion to discuss the details. However, it was not possible to implement the plan and make an additional purchase of the medications because the military invasion had already begun by then.

Due to the extensive hostilities that began in 2022, the availability of medicines in the MFs was questionable. A factory in Kharkiv was damaged by shelling and ceased production of drugs containing the active ingredient methadone and buprenorphine. The remnants of medicines previously produced in the factory were purchased with the participation of key stakeholders and financial support from international donors. Available medicines produced in the Odessa pharmaceutical factory were also procured.

There was a significant migration of OAT clients both within Ukraine and abroad. In some regions, this migration led to a significant increase in the number of clients, forcing MFs to use up their OAT supplies more quickly. At the same time, they could not wait for the next delivery (which used to be every three months). For this reason, a different procurement approach was developed and MFs were able to arrange delivery of a batch of OAT medications within two weeks to a month before their supplies were depleted. These changes allowed the avoidance of the situation with an oversupply of the drug in some facilities and its shortage in others, so treatment interruptions did not occur. There was a different situation in occupied cities, where warehouses were looted and medical facilities destroyed. Clients found themselves in a desperate situation, unable to travel to Ukrainian-controlled territory due to constant shelling and limited evacuation options. Clients were forced to buy OAT medicines in pharmacies as long as they were available or to look for a way

to purchase OAT medications from private sellers while they had money [41]. For this reason, there were frequent treatment interruptions in the temporarily occupied cities.

The escalation of the war led not only to the migration of clients but also of medical personnel, as well as to the closure of private clinics that wrote methadone or buprenorphine prescriptions for clients who then obtained the medications from pharmacies. Even the approximate number of these clinics and the number of clients who needed OAT was unknown. These private clinics closed on the very first day of the large-scale invasion. Hence, it was impossible to get prescribed OAT medications from pharmacies. All this led to a wave of client encounters with state medical institutions that provided OAT and continued to operate despite the extremely difficult conditions. The calculation of the drug for purchase included the increase planned for 2022. However, it did not consider the number of clients in private clinics. Doctors in the state clinics were forced to reduce the dosage of clients to prevent interruption of treatment of clients who came to the OAT programme from private clinics. Before the stabilisation of the medication supply, clients were taking OAT at reduced dosages and, according to the community, it was a problem to return dosages to previous levels as physicians refused to do so.

The full-scale invasion led to a significant deficit in the national budget and, at the same time, to the need to reallocate funds and spend them on defense. The support of NGOs, communities of activists, and international donors proved to be very important and timely.

In March 2022, the Global Fund approved the allocation of funds to meet the needs of OAT medicines for Ukraine, in line with the previously planned expansion of this programme. Meanwhile, the delivery of the drugs purchased in April 2022 was realised in early 2023. Also, in 2022, Buvidal, a long-acting form of buprenorphine, was supplied to Ukraine for the first time as a humanitarian aid for pilot use in state-run Mfs.

Thus, as the experience of 2022 demonstrated, there was an opportunity to redistribute OAT medicines between regions relatively quickly. It requires effective communication, the development of an exact algorithm, and the provision of information to administrative staff in the field. It is necessary to continue to optimise mechanisms for assessing the need for OAT medicines, procuring and distributing them, and collaborating across agencies and sectors.

In addition, due to the current military and economic instability in the country, it is necessary to consider alternative funding options for OAT, including through international donors (CDC, Global Fund).

4.2. Financial resources

The transition from donor support to funding the OAT programme from state and local budgets began in 2017 [36, 37]. Since 2020, the state budget has covered 100% of the need for OAT medicines. In 2020 and 2021, significant progress was made in domestic funding for OAT, consistent with the plan to scale up this programme. For example, the plan of transition from donor to domestic funding ("20–50–80") was implemented by early 2022.

In addition to procuring medications, the work of medical staff who provide OAT to clients must also be paid for. NHSU continues to fund additional payments of medical staff for the provision of OAT services [39, 40]. Payments for the provision of services per client increased from year to year and amounted to UAH181.72 in 2020 (9 months, starting in March); in 2021, UAH340.00; and in 2022, UAH572.83 per client per month. However, some providers still assess the current level of funding for the OAT programme as insufficient, although no alternative payment calculation has been provided that, in the opinion of these providers, would ensure sufficient funding for OAT services. This may also be the reason why some unspecialised medical facilities (such as tuberculosis centres/dispensaries, PHCC) no longer provide OAT services. After the health care reform, they are independent subjects of management and decide which services are financially profitable for them, which in turn depends on the number of OAT clients and medical staff needed to provide care. From their perspective, NHSU funding does not cover all costs. Financing under the NHSU medical guarantee programme contains only payment for the medical services provided, but payment for administrative personnel, utilities and other expenses must come from other sources, such as from the city budget.

Funds received from NHSU are for payment of medical staff for the service. Utility costs and other payments necessary for the medical facility, including procurement, must come from local budgets. Donor funds may cover additional needs.

During the period under review (2020–2022), there were payments from NHSU to support the OAT programme. However, they were by no means always paid on time and in an amount that corresponded to the actual scope of the services provided. According to providers, the main reasons for underpayment were technical difficulties in maintaining an electronic health record system (EHRS), coding of the services, and complex communications with NHSU. Technical problems in entering information into databases were also noted by experienced staff [44].

In the 2021 budget, UAH14,121.50 thousand was allocated for the procurement of OAT medicines. In fact, UAH14,098.60 thousand was spent, so the savings amounted to UAH22.90 thousand. In the previous period (procurement at the expense of the 2020 budget), the balance of medicines in monetary terms amounted to UAH44,992.90 thousand [47].

Within the framework of realisation of the budget programme, "Implementation of the Programme of State Guarantees for Medical Care of the Population", executedby the NHSU, the planned amount of expenditures for OAT in 2021 was **UAH92,452.60** thousand. The amount was calculated based on the planned expansion of the OAT programme. The actual amount paid was **UAH52,685.70** thousand [48]. Due to the slower dynamics in the expansion of the OAT programme, and probably due to the difficulties in concluding contracts between the medical institutions and NHSU, as well as further difficulties in entering data into the EHRS, there was an underpayment of **UAH5,650.80** thousand. **UAH58.336.50** thousand should have been paid to medical institutions to fully cover the services provided under the OAT programme. This amount was calculated based on the actual number of clients at the OAT sites.

Social support for OAT clients is provided mainly with financial assistance from international donors. In rare cases, it can also be provided at the expense of the clinic itself if the management deems it necessary and finds resources to pay for the services of a social worker.

During the period under review, training was also provided to medical personnel on OAT topics, mainly at the expense of funding from various organisations and donors.

Under the health care reform and existing models of OAT provision, there is ample opportunity to optimise the health care guarantee programme so that funding is sufficient to motivate family physicians and general practitioners to provide OAT, as well as to implement a flexible system for monitoring quality and need for services with community involvement. In addition, with sufficient funding, developments based on HIV programmes supported by the Global Fund can be used to train medical and psychosocial professionals to provide OAT services.

Changes due to the military invasion by the Russian Federation

In 2022, the situation in the provision of funds from the state budget for the OAT programme, HIV and TB treatment programmes, and the procurement of the necessary test systems, reagents, and consumables for diagnosis had changed dramatically due to the full-scale invasion of Ukraine by the Russian Federation. The procurement of medicines from the state budget planned for 2022 was canceled, and the funds were reallocated for defense purposes [38]. Due to these circumstances, payments for the services of physicians providing OAT will not increase in 2023 but will remain at the level of 2022.

Support from international donors, NGOs, and communities of activists proved to be very important and timely. Within the first month of the full-scale invasion, the Global Fund agreed to provide funding to procure OAT medicines in line with needs and the 2023 scaling-up plan. NGOs and activist communities participated in funding the purchase of several batches of OAT medicines in the first months of the war. They also helped deliver OAT drugs to MFs in the active war zones and evacuate clients. Due to the joint work of the PHC, international funds, and communities, the number of treatment interruption cases was reduced.

In the short term, however, the transition to government funding of the OAT programme appears extremely difficult because of the problems caused by the military invasion.

4.3. Human resources

In 2019, OAT was provided in 25 regions of the country based in 214 public MFs; in 2020, this had risen to 220 MFs; in 2021 it has reduced to 210 MFs; and in December 2022 it was down to 183 MFs. These figures refer only to public health facilities and do not take into account private MFs, the exact number of which is unknown, as well as the number of clients who used their services during the assessed period. Each facility providing OAT services should employ at least one physician and a nurse. The physician's responsibilities include assessing the condition and needs of the client; establishing a treatment plan; evaluating adherence to treatment; monitoring the treatment process; performing necessary examinations; and issuing referrals. The duties of the nurse include dispensing medications; completing various forms and documents; preparing reports; and calculating medications and balances.

State medical institutions implementing the OAT programme receive regular methodological, organisational, and technical support to improve the quality of service delivery and to ensure their sustainability and effective use of medicines, and to introduce new financing models [49]. Since the full-scale invasion of Ukraine in 2022, the PHC has been holding regular meetings with physicians and the drug user community to discuss the current situation with OAT and to help solve emerging problems [50].

The OAT development plan for 2019–2023 includes the training of primary care physicians with the issuance of certificates of completion of thematic advanced training (TAT); the development of a full-time module of the course; the coordination of theoretical and practical advances with the Department of Postgraduate Education; and the updating of the online OAT course [51]. The plan also includes conducting workshops/training for medical staff, social workers, and community activists representing people who inject drugs to improve the quality of OAT treatment and respect for the rights of people with drug dependence, including OAT clients.

To legally provide OAT (narcological services), it is necessary to complete relevant training and obtain a TAT certificate. Only academic institutions can issue such certificates, which limits opportunities for the timely training of specialists [39]. The training requires a group of at least 6 participants who join together and to pay for the training. Each participant should look for financial support for their training as regular OAT training of specialists is not provided at government expense.

In the standard training of medical students at universities and the routine training of narcologists, relatively little attention is paid to OAT methodology. It is still generally accepted that opioid agonist maintenance therapy is an involuntary measure that should be used only when withdrawal-oriented methods are ineffective. Although understanding and treatment approaches are gradually changing and are not limited to outright rejection of substance use, this has not yet been sufficiently reflected at the level of medical education [52].

Due to the unsatisfactory pace and quality of medical staff training, the OAT programme is currently the least sustainable in terms of human resources (such as physicians and social workers). In particular, there is a shortage of trained narcologists, which affects the expansion of the OAT programme as a part of the country's existing narcological service. For example, in 2017, there were 4,723 registered narcologists in Ukraine, of which only 6% provided OAT [1, 53]. In 2021, according to state statistics, there were 972.75 available full-time posts of narcologists and 659 narcologists in 759 positions [53, 54]. At the time of writing, information for 2022 was not available. A systemic barrier is the lack of initiative (leadership) in workforce policy at the local level.

Therefore, Ukraine needs resources to provide the necessary level of medical staff training to make the programme more accessible and to expand coverage of OAT services through PHCCs and other health care facilities, including private clinics.

4.4. Evidence and information systems

There is an extensive evidence base for the effectiveness of OAT in a variety of settings, including different health systems, but retention in the programme is one of the main criteria for the quality of OAT. Client retention of 12 months or more among those who started in 2020 is estimated to have been 67.8% in 2021 [55]. At the same time, there are no national statistics on the length of stay by clients in the OAT programme.

There are open data sources on the achievement of the goals of the implementation of OAT in the country [56]. The development plan for the substitution maintenance therapy programme in 2019-2023 includes the introduction of medical information systems for the registration of clients in the OAT programme as part of the national monitoring system, as well as the corresponding training of professionals in the regions [51]. In addition, it is planned to develop a monitoring system for the implementation of the OAT programme, an annual plan and procedures for monitoring visits, and forms for evaluating the quality of services. The following activities are underway: studies to expand access to OAT using the NiATx approach which assesses the psycho-emotional state of OAT clients using the Behaviour and Symptom Identification Scale (BASIS-24) questionnaire [57]; OAT implementation at the primary health care level [58]; and studies on depression and hepatitis C treatment of OAT clients [59].

The introduction of information systems is a catalyst for reform of the health sector in general and of the OAT programme. Barriers to the computerisation of OAT services have been reduced because the availability of at least one computer to record client visits to a medical facility is a mandatory requirement for NHSU to contract with a MF and to pay for visits according to information entered about the services rendered. At the same time, this does not mean that material and technical support (including computers) of OAT sites is sufficient [40]. Medical institutions still use outdated computer equipment and software because they are financially or organisationally unable to acquire and maintain technical resources at the required level. Even though tariffs for the provision of high-speed internet in Ukraine are among the lowest in the world [60, 61], access to the internet in MFs is often available only where the computer is located. Therefore, doctors and nurses often have limited access to information.

The second group of barriers includes low computer literacy among staff whose training requires additional resources and time, which often runs counter to the growing demands of the realm of health care in general and the expansion of the OAT programme in particular. Physicians report that they have a large amount of non-medical work to do, such as entering information into the NHSU electronic health record system, completing other electronic medical databases and reports, and maintaining paper files and documents (according to physicians who provide OAT) [41].

The third problem is the low motivation of staff of the medical institutions regarding the computerisation of the OAT sites. As a result, MFs are not ready for the transition to electronic document management.

Despite the above challenges, there are favourable conditions for a full transition to electronic document management with the ability to monitor and evaluate the effectiveness of the OAT programme. The internet is a widely available service in Ukraine, making it possible to organise access to the World Wide Web almost anywhere and at a relatively low cost. In addition, many organisations have extensive experience using electronic databases to manage OAT clients. For its part, the PHC is actively working to introduce electronic tools into the routine practice of MFs. Additional information, training, and financial incentives for potential and existing OAT service providers in the regions as part of the activities of the PHC or another national leader could significantly increase the chances of successful adoption and regular use of digital tools for recording, monitoring, and evaluation and save health professionals from having to work hands-on with paper records and health cards. In addition, large NGOs (ICF Alliance for Public Health and CO 100% Life) offer opportunities to provide technical assistance to MFs as part of their programme activities which could trigger positive change.

5. Key findings: Services

5.1. Overview of the situation of sustainability

Issue area \ Year			2022	2020
Services			**Substantial sustainability 71%**	**Moderate sustainability 55%**
C1	Availability and coverage	↑	Moderate sustainability 54%	At moderate to high risk 30%
C2	Accessibility	↑	Substantial sustainability 70%	Moderate sustainability 67%
C3	Quality and integration	↑	High sustainability 88%	Moderate sustainability 69%

When assessing the sustainability of OAT based on the service delivery indicators, it is important to keep in mind that the OAT programme in Ukraine operates in different administrative and social contexts. These include:

1) public health care, represented by state/municipal institutions and private treatment centres and clinics;

2) correctional health care, where medical care is provided to prisoners in colonies and persons under investigation in pretrial detention centres; and,

3) health care in temporary detention facilities operated by the Ministry of Internal Affairs and pretrial detention facilities (PTDFs) operated by the Ministry of Justice.

Considerable progress has been made in all of these areas. In 2022, more than 27,000 individuals received OAT, including in state and private treatment phacilities. In particular, OAT became available in seven penitentiary colonies where 140 people were treated at the end of 2022. There have been positive developments in the treatment of people injecting opioids in pretrial detention centres as evidenced by the absence of complaints from pretrial detainees about forced interruptions in treatment.

OAT is no longer a service offered exclusively in specialised narcological institutions. Today, PHCCs also provide this type of assistance in every city in the country. In addition, multidisciplinary hospitals, AIDS prevention and control centres, TB dispensaries/centres – almost all specialised health facilities that treat people who inject opioids - can offer OAT. Also of note is that in the last two years, following the change in the legislative framework (MoH Decree No. 200) [62], there has been a significant increase in the number of private clinics and individual physicians prescribing opioid agonists to clients, including for prescription dispensing. Since providers were required to submit regular reports on the number of clients, the indicator of the number of clients with opioid dependence receiving OAT has increased by more than 7,000.

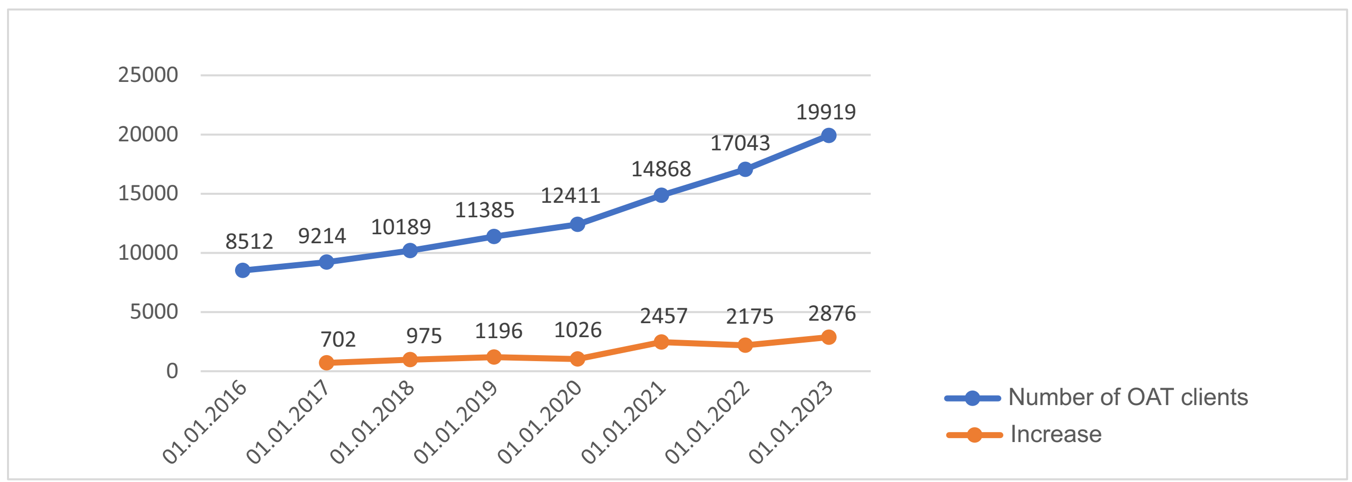
With the expansion of the programme to non-specialised MFs and the involvement of many general practitioners, OAT has become a routine medical procedure. It no longer elicits negative reactions from the medical community. At the same time, the increasing number of OAT clients also brings certain problems, both in terms of the quality of the services provided and the diversion of a certain amount of drug-containing medicines to the black market. Read more about this issue below.

5.2. Availability and coverage

Since the first year of the introduction of OAT (2004), Ukraine has seen a steady increase in the number of clients with drug dependence receiving this type of care. As of December 31, 2022, the total number of clients receiving OAT in state and communal MFs was **19,919** (see Table 1), and a further **7,513** in private clinics and treatment centres, for a total of **27,432** clients – the highest number among countries of Eastern Europe and Central Asia (EECA).

Table 1. Number of clients who received OAT in the last seven years (only clients of state and communal hospitals).

Indicators for the number of OAT clients from 2016 to 2022

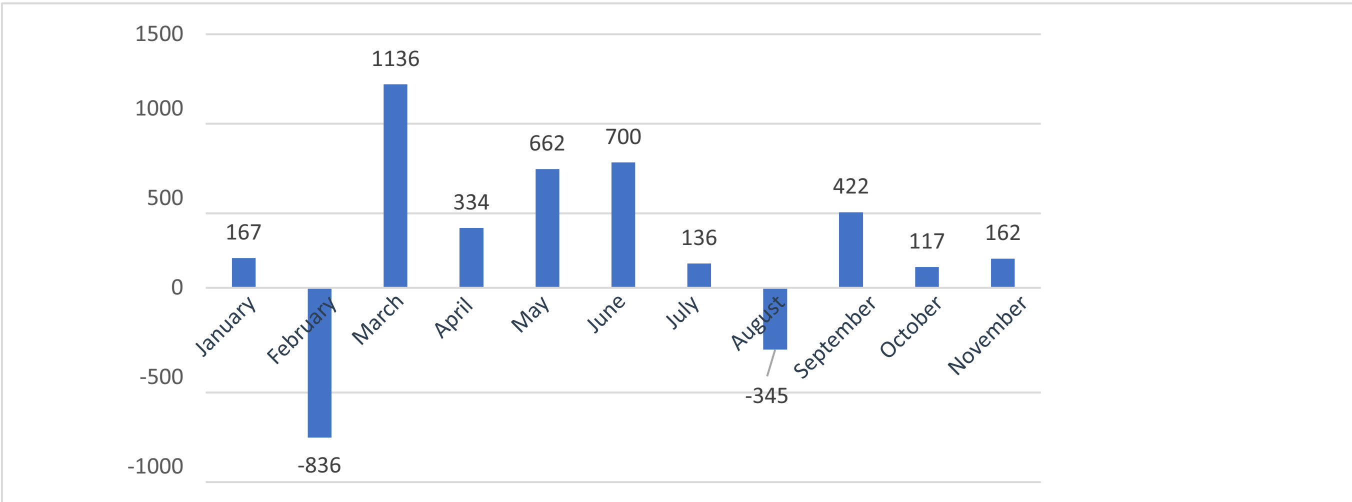


Year	Number of OAT clients	Increase	%
01.01.2016	8512		
01.01.2017	9214	702	8.2
01.01.2018	10189	975	10.6
01.01.2019	11385	1196	11.7
01.01.2020	12411	1026	9.0
01.01.2021	14868	2457	19.8
01.01.2022	17043	2175	14.6
01.01.2023	19919	2876	16.9

As of February 2022, OAT services were provided by 224 medical facilities (including 22 private medical facilities). Since April 2022, the number of OAT clients has increased again after a temporary decline (see Context section).

Graph 1 shows how this type of assistance has resumed and coverage rates have increased.

Graph 1. Monthly increase in OAT clients in 2022



The largest proportion of clients were still receiving OAT in narcological outpatient clinics/dispensaries (36%). However, this number has decreased compared to 2020, when the proportion of clients in narcological facilities was over 43%. In second place (29%) are multidisciplinary clinics, mostly located in small towns – regional centres where people living far from large cities receive health services. A quarter of all clients receive OAT in neuropsychiatric outpatient dispensaries. Other MFs provide OAT to a lesser extent (see Table 2).

Table 2. Distribution of clients according to the type of medical facility

Type of medical facility	Number of MFs	Number of OAT clients	% of clients who receive services in this type of facility	Average workload (number of clients per institution of this type)
Narcological dispensaries	21	7143	36%	340
Neuropsychiatric dispensaries	15	5025	25,5%	335
AIDS prevention and control centres	5	986	5%	197
TB dispensaries	14	335	1,8%	24
Infectious diseases hospitals	2	13	0,08%	6,5
Multidisciplinary city and district hospitals	125	5632	28,6%	45
Multidisciplinary city and district hospitals	14	591	3%	42
Total	**196**	**19698**	**100%**	**100,5**

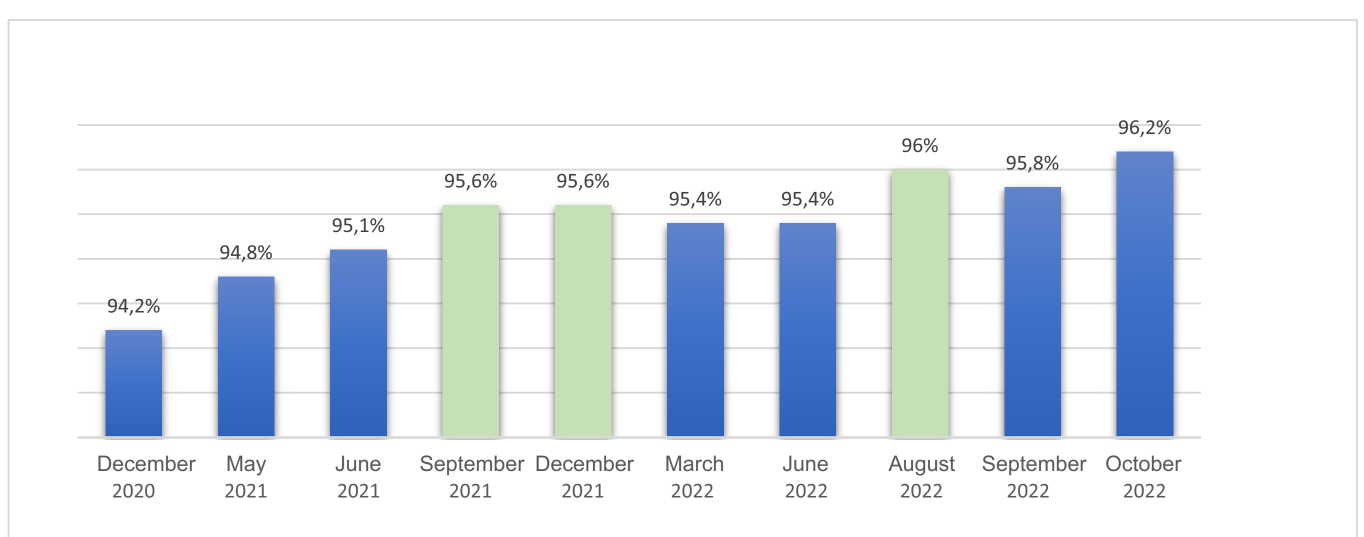
After the MoH regulation on the provision of OAT was amended, many of the previously existing barriers were removed, particularly the requirements for previous treatment attempts and detoxification; the requirement to provide OAT only in specialised clinics; and strict limitations on the dispensing of 'take-home' doses. Thus, the only indications for starting OAT were client consent and a diagnosis of "Mental and behavioural disorders due to the use of opioids. Dependence syndrome" (code F11.2 according to ICD-10) [63]. The removal of barriers has made this type of therapy more attractive to individuals and increased their influx into the programme.

Based on information received from narcologists and activists, it can be said that the main reason why many clients prefer paid programmes is that private centres offer clients better confidentiality. Hence, they are less likely to be discriminated against. Of course, a purely psychological factor also plays a role – the belief that clients who pay for service have more rights to demand a better quality of service.

The proportion of clients living with with HIV in the OAT programme is about 40.7%; tuberculosis affects 16.3% of the total number of clients receiving OAT. Since tuberculosis is an acute disease that is cured in most cases, this indicator is not constant, but long-term observations show that it is in the range of 15–20% [64]. At the same time, the coverage of OAT remains insufficient and is ~10% of the total number of people who use only opioids or opioids in combination with other PAS (278,000) [65]. According to WHO criteria, this means that coverage in Ukraine remains low [66]. The same WHO recommendations include indicators of the percentage of regions (oblasts) that should have OAT sites so that residents of these regions have access to therapy. A value <60% is considered low coverage, 60–80% average, and >80% high coverage. According to this indicator, Ukraine corresponds to the 'high coverage' level as OAT has been implemented in all regions of the country without exception.

It is important to note that the first steps to introduce OAT were taken in response to the spread of HIV among people who inject drugs. To-date, there is no conclusive evidence that this goal has been achieved as the number of new HIV cases continues to rise despite the slowing of the epidemic. And because of the low coverage (less than 10% of the estimated size of the target population), the decline in the number of people living with HIV cannot be attributed to the results of the introduction of OAT. However, there is strong evidence that the HIV service cascade works better for OAT clients than for people who inject opioids and do not receive treatment. The former have significantly better indicators on criteria such as knowledge of their HIV status, access to ART, and achieving an undetectable viral load [67].

Graph 2. Number (%) of OAT clients receiving ART



As of November 1, 2022, the percentage of OAT clients living with HIV and receiving ART was 96.2% compared with 95.6% at the beginning of the war.

In 2019–2022, there was significant progress in developing the OAT programme related to increasing the availability of 'take-home' doses of opioid agonist medications. While no more than 30% of clients had such an option in 2019, by the end of 2022 approximately 90% of OAT clients were receiving 'take-home' doses for a period of 7-to-15 days (Graph 3 and Figure 4).

Graph 3. Dynamics of the number of clients receiving 'take-home' doses of OAT medications

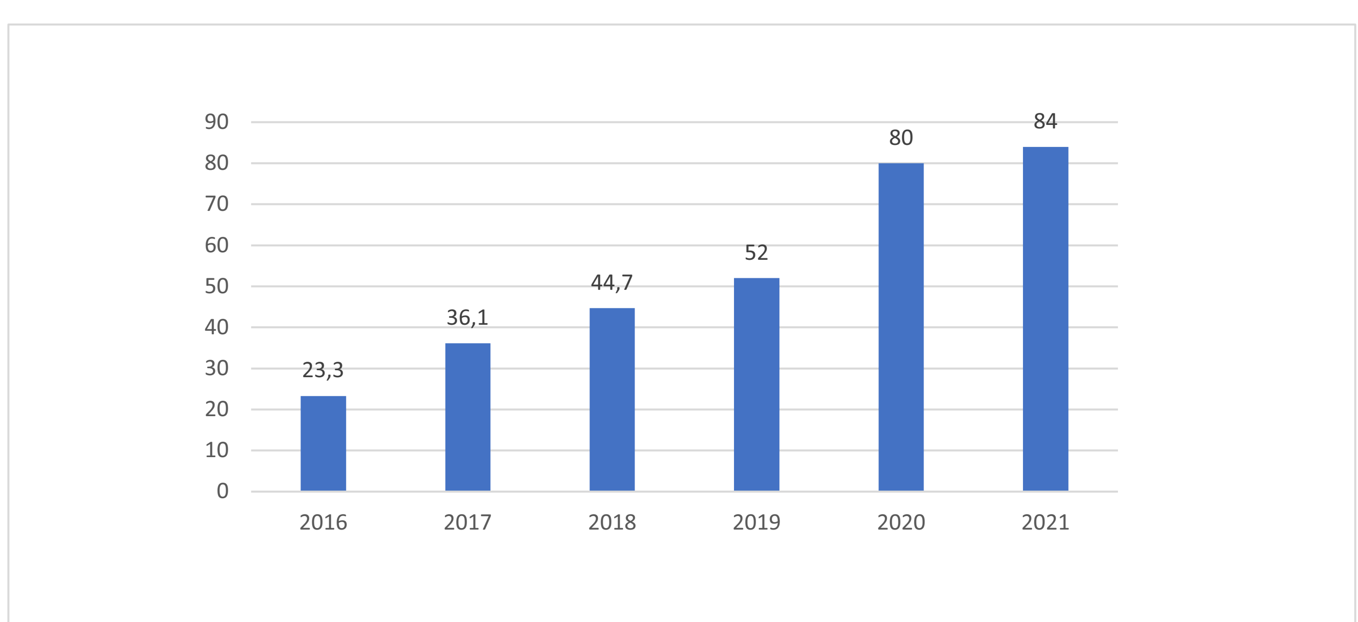
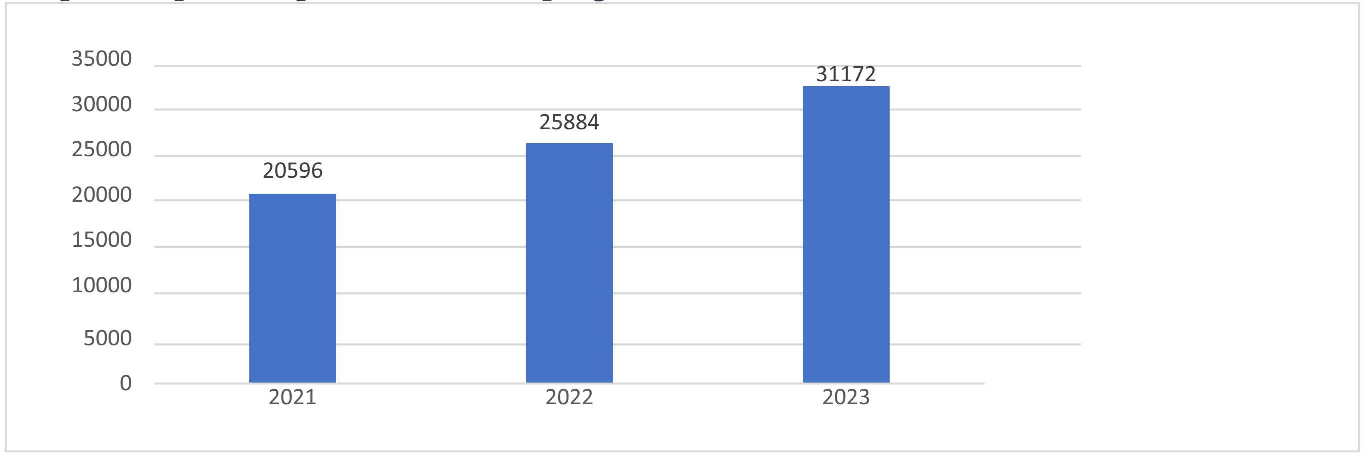


Figure 4. Number of cients (%) receiving 'take-home' doses of OAT medications as of 01.12.2022

It is noteworthy that in the period after the introduction of martial law when permission to dispense the drug for up to 30 days was in force, the number of overdoses among clients did not increase (in any case, there was no information about this from the field). At the same time, according to a 2021–2022 study, the length of stay in the OAT programme increased among clients who had the option to take the dose home. From the results of the study, 90% of clients who have the opportunity to take the dose home were more likely to stay in the OAT programme for 12 months, while those who were denied this option are only 69% likely to remain in the programme for 12 months [68].

The PHC regularly provides planning to expand the OAT programme based on opportunities to increase the number of clients. Planning is guided by the strategic indicators set out in the Cabinet of Ministers Decree (National Strategy to combat HIV/AIDS, Tuberculosis, and viral Hepatitis for the period up to 2030).

Graph 4. Expansion plan for the OAT programme in Ukraine (PHC) from 21.07.2021



By the end of 2022, these targets had been exceeded. Table 3, below, shows the current data.

Table 3. Number of OAT clients (as of 31.01.2022) and plan to expand the number of OAT clients

Ukraine	Estimated number of people who inject opioids	Number of OAT clients as of December 31, 2022 (10% of estimated number)	2022 (plan)	15% of the estimated number /2025	40% of estimated number / 2030
TOTAL	270800	27 211	24 650/+112%	40 620 / 67%	108 320 /300%

The OAT programme development plan (PHC is the responsible institution) aims to reach 15% of the estimated number of people with opioid dependence syndrome by 2025.

Furthermore, there is every reason to believe that OAT will become a fully-fledged medical intervention in the penitentiary system in the next 1–2 years, overcoming one of the barriers associated with stigma and discrimination against people who inject opioids.

5.3. Accessibility

Despite the extensive network of health facilities offering OAT, not all those in need can be treated. At the same time, there are no specific recommendations for registering people seeking help. Some MFs maintain a so-called waiting list, but since this is not mandatory, most facilities do not keep records of those who wish to start OAT. Until recently, the number of clients who should be provided with OAT was calculated only based on projections prepared by regional public health departments and submitted to the Public Health Center. At the same time, these projections were based less on data about the number of people who inject drugs in the region and more on subjective perceptions about the potential of the facility providing services and the interests of its staff. Today, the situation is starting to change. The PHC has begun to use the estimated number of people who inject drugs as the basis for its planning, but it is still difficult to assess the extent to which these changes have affected the number of clients in the regions.

Access to the OAT programme varies widely from region to region and generally falls short of national targets. For example, in Ukraine as a whole, the percentage of individuals covered by OAT averages 24.5% of those under dispensary observation for opioid dependence, but at the same time varies significantly by region.

The highest treatment rates were achieved in the following regions: Sumy (48.8%); Lugansk (excluding the temporarily occupied territories, 48.3%); Vinnytsia (46.7%); and Mykolaiv (46.4%). Odessa (10.9%), Donetsk (11.4%), and Zaporizhzhia (12.3%) oblasts have the lowest coverage rates. These latter oblasts require special attention in expanding the OAT programme to approach the recommended OAT coverage rates of people who need treatment.

An analysis of the sociodemographic characteristics of OAT clients shows that 82.2% of programme participants are men and the average age is 40 years, with the average experience with drug use being 15 years. Consequently, most programme clients are individuals with a long history of drug use and numerous unsuccessful attempts at treatment.

Data from the quantitative component of the study to identify key barriers to access the OAT programme in Ukraine conducted in 2021 by the European Institute for Public Health Policy showed 83% satisfaction with the OAT programme among clients and a willingness to recommend it to friends; 81% satisfaction with the opportunity to receive the drug for self-administration; and 72% satisfaction with the attitude of medical staff [73].

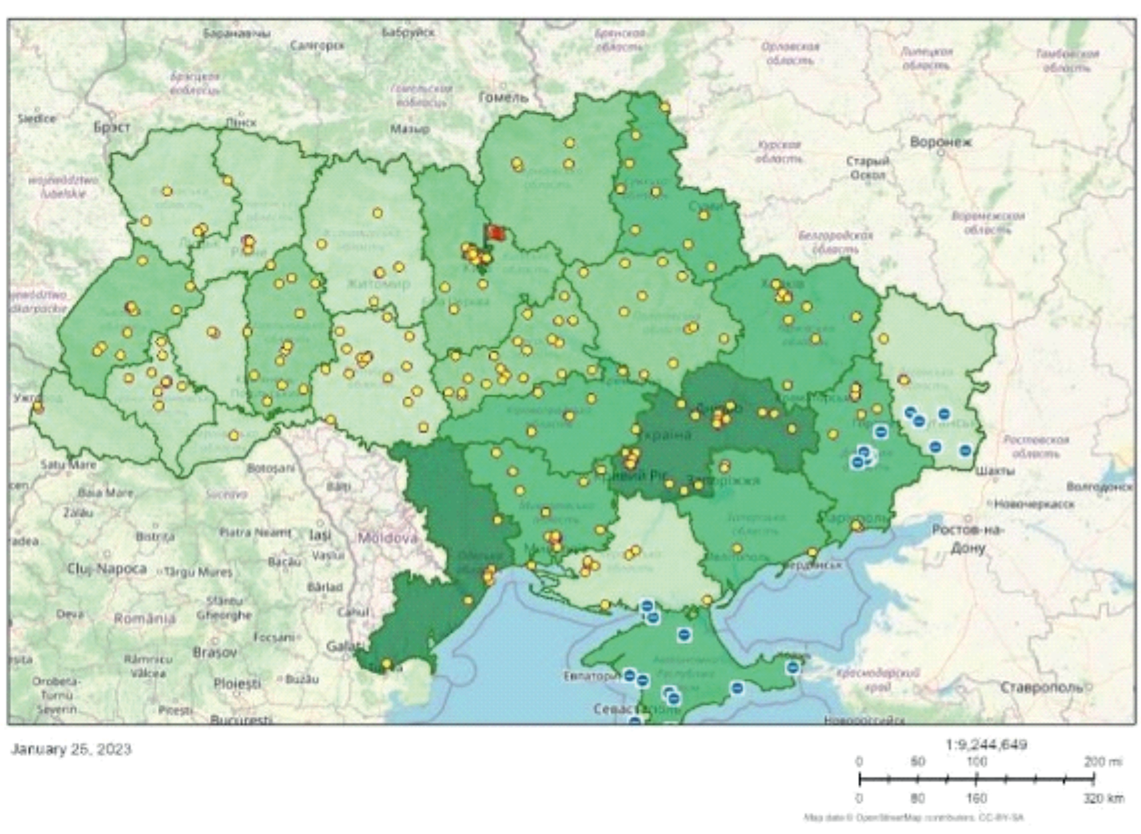
According to some clients and activists who participated in the surveys, access to OAT is affected by factors such as the low level of competence of some doctors in providing services to people with drug dependence; corruption (according to some clients, sometimes they have to pay directly to the doctor to get into the programme); physicians ignoring the requirements of the clinical protocol and MoH decrees and being guided in treatment by their ideas about OAT (this happens especially often in remote sites); a clearly inadequate provision of psychosocial support; low quality of domestic drugs (methadone and buprenorphine) compared to foreign analogs; and the lack of integration with other medical services.

To assess the level of knowledge among physicians prescribing OAT, a survey was conducted in 2022 on the issues of OAT, HIV infection, tuberculosis, viral hepatitis, mental disorders and alcohol dependence. The survey was conducted as part of the study, 'Assessment of changes during the war, the level of knowledge and professional burnout among OAT doctors', the results of which showed a low level of knowledge among doctors who took part in the survey on OAT related issues, 62% among narcologists/psychiatrists and 53.3% among doctors of other specialties; for HIV infection, 48.4% and 52.2%, respectively; and mental disorders, 40.7% and 36.7%, respectively [79].

In Ukraine, there are OAT sites in all regions and major cities. Before the beginning of the full-scale invasion of Ukraine by the Russian Federation, the number of OAT sites was 217. After the occupation of some territories, this number decreased by 16, and by the end of 2022, 181 sites were in operation.

Figure 5. Map of OAT sites in Ukraine [69]

Map of OAT sites as of July 2021



The heads of the narcological services of some regions (such as Khmelnytsky, Zaporizhzhia, etc.) argued that the possibilities of increasing the number of OAT clients had already been exhausted since, in their opinion, everyone who wanted it was already being treated. However, a special study on the willingness of people who inject opioids to start OAT shows that this willingness is only 36% of the estimated number. However, many potential clients are hindered by existing barriers [70]. Thus, there are objective reasons to believe there are still opportunities for a significant increase in OAT coverage which can be reached by lowering the threshold for accessing the programme and making it more attractive to clients.

5.4. Quality and integration

According to national guidelines and NHSU requirements for the provision of OAT, the list of MFs includes the following services [26,71,72]:

1) Prescribing and dispensing of medications – opioid agonists;

2) Establishing a plan for the examination, treatment, and psychosocial support of clients;

3) Monitoring the condition of clients and adjusting the dose of prescribed medications;

4) Screening for mental disorders, especially psychotic and depressive disorders; referral for further diagnosis in the case of a positive screening result;

5) Screening for tuberculosis and screening or referral for screening for HIV and viral Hepatitis; if needed, referral for confirmation of diagnosis and treatment;

6) Counseling and information on the prevention of HIV infection, hepatitis C virus (HCV), sexually transmitted infections (STIs), overdose, and risks associated with psychoactive substance use;

7) Referral to other MFs or organisations to obtain other recommended services; and,

8) Informing clients about the possibility of receiving socio-psychological services.

In practice, only the first service from this list is provided. There is no regular OAT quality control, with this carried out from time-to-time by representatives of donor organisations, but they cannot influence the work of medical staff and MFs. According to the European Institute of Public Health Policy (EIPHP) 2021–2022 study which examined access to OAT [73], 53% of OAT clients reported the availability of additional services at OAT sites: 86.6% of participants mentioned the possibility of HIV testing; 57.1% of hepatitis C testing; 34% the opportunity of treatment and monitoring of HIV; and 22% had access to treatment for HCV.

Due to the amendments to MoH Decree No. 200, the package of OAT services was extended to include 'take-home' medications and the issuance of prescriptions for obtaining medications in pharmacies [62]. Many drug treatment centres (narcological centres) have introduced a screening of OAT clients for depressive disorders and, if indicated, prescribe antidepressant therapy without involving a psychiatric service.

The main indicators of the quality of OAT provision are the retention rate of clients in the programme and the average level of dosages (80–120mg for methadone and 8–16mg for buprenorphine [72]). Regarding the first indicator, most sites show good results. The average retention rate at the national level was estimated to be 70–80% in 2022 (data from ICF Alliance for Public Health [74]), although, the retention rate varies from region to region due to forced migration in the country.

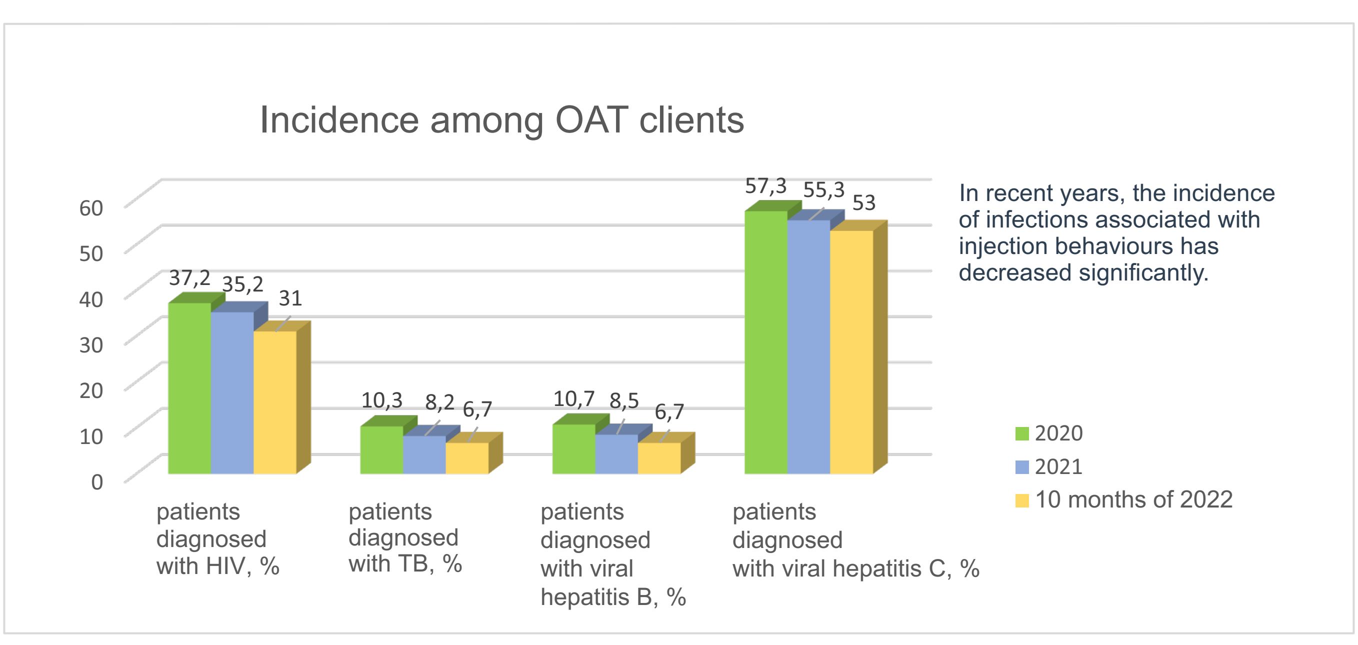
The dosage indicator is not at the recommended level in all medical facilities. For example, the average methadone dose in some MFs offering OAT is below 80mg (13% of MFs). However, according to OAT statistics from the PHC [12], this dose is above the minimum recommended dose of 80mg/day in 87% of MFs nationwide. At the same time, the average buprenorphine dose equivalent to the minimum recommended dose (8 mg/day or more) is provided in 93% of MFs. At the same time, a recent study conducted by specialists of the Ukrainian Institute on Public Health Policy (UIPHP), together with colleagues from the Yale University School of Medicine, which used 2004–2016 data, found that only 25% of clients in Ukraine receive an optimal dose of opioid agonists.

It was also found that there is a positive correlation between the dosage of OAT medication and retention in the programme [74]. A study conducted in 2022 by a team of researchers from EIPHP and UIPHP identified factors associated with better adherence to OAT. It found that the following factors were associated with a lower likelihood of discontinuing a medication: a high dosage; client satisfaction with the dosage; and availability of 'take-home' doses for more than 15 days. Lower probability of using additional doses of PAS were associated with a treatment duration of more than 12 months; invariability of OAT dosage after the onset of war; and client satisfaction with a dosage [10].

At the same time, there is insufficient information about how carefully physicians in private clinics follow the national clinical protocol, what doses of medications are prescribed to clients, whether they can receive integrated care, and how private clinics provide psychosocial services. Some experts believe that the state should actively develop this area and, on the one hand, encourage the establishment of private centres for OAT provision and, on the other hand, provide stricter control and monitoring to ensure compliance with the conditions and requirements of the national clinical standard of OAT provision.

In the last five years, the concept of integrated care has been consistently introduced in Ukraine [11]. OAT clients get better access to treatment of concomitant diseases – primarily HIV, viral hepatitis, and tuberculosis. Due to this approach, the incidence of these diseases in OAT clients has gradually decreased. Graph 5 shows the dynamics over the last three years. The decrease in the percentage of people living with HIV is because this disease is not as common among the new OAT clients as it used to be. As for viral hepatitis, this indicator has been strongly influenced by the high availability of HCV therapy.

Graph 5. Comorbidity rates among OAT clients, 2020–2022



In 2022, a study was conducted comparing the quality of services in public and private MFs. 400 OAT clients were surveyed in Kyiv, half of whom were treated in public MFs and the same number in private MFs. It turned out that the differences, measured by indicators such as overall satisfaction with the programme, staff attitude, dose of prescribed medication, and quality of life (assessed by the standard WHO questionnaire, WHOQOL), were not very significant [76].

Furthermore, OAT does not adequately address opioid overdose prevention despite the risk of opioid overdose by OAT clients, particularly those who are new to the programme or re-entering after discontinuation. By default, OAT clients should not use drugs, including the injecting of drugs. There is no training and instructions/publications for clients on what to do in case of an opioid overdose. There is a lack of information on access to naloxone (how to get it from a NGO or buy it from a pharmacy). There are ampoules of naloxone in a narcologist's first aid kit, but the likelihood of a client in the OAT programme using it in the event of an overdose is virtually nil. NGOs come to the rescue by obtaining naloxone from the Alliance for Public Health or other projects and distributing it to clients of their organisation. However, OAT clients do not use the services of NGOs regularly, if at all, and may not have access to naloxone and overdose prevention information.

The study revealed a lack of systematic knowledge among people who inject drugs about the effects of naloxone, its use, and recommended actions in case of overdose (even among those who have already used naloxone). At the same time, OAT clients were grateful for the opportunity to receive naloxone and wanted ongoing access to naloxone.

Since 2021, regional NGOs have been dispensing naloxone and providing information and counseling to clients under agreements with the Alliance for Public Health as part of the Global Fund-supported project Gain momentum in reducing TB / HIV burden in Ukraine [77].

6. Conclusions

Based on the results of this assessment, the following conclusions were drawn:

1. The OAT programme is currently facing dramatic challenges due to two factors: the Russian military intervention and the ongoing SARS-CoV-2 (COVID 19) epidemic. In recent years, Ukraine has consistently shifted from the Global Fund and other foreign donors to funding from domestic sources (state and local budgets). Currently, funding for the OAT programme can be considered substantially sustainable. At the same time, the ongoing war with an unpredictable outcome poses the risk of a significant deterioration of the situation. In territories occupied by Russian troops, clients are deprived of the opportunity to continue their therapy, while some of the medical facilities (MFs) in areas controlled by Ukraine face significant difficulties due to the evacuation of medical personnel to safer regions. Ukrainian pharmaceutical factories producing methadone and buprenorphine are located in cities that are regularly shelled, threatening to disrupt the supply of OAT medications. It can be concluded that OAT is in a high-risk situation in some regions.

2. OAT is legally supported at the level of decrees of the Ministry of Health, coordinated with the Ministry of Internal Affairs, the Office of the Prosecutor General, the National Police, and the Office of the Commissioner for Human Rights, and approved by the Ministry of Justice. Since 2017, OAT medicines have been procured centrally. Civil society representatives (specialised NGOs, associations of people who use drugs, and OAT clients) continue to advocate for OAT programmes, participate in the discussion of problems at the central and local levels, and influence decision-making in this area.

3. There has been significant progress in providing 'take-home' medications to OAT clients so they do not have to visit the MFs daily. This procedure was gradually applied everywhere in the context of the SARS-CoV-2 pandemic and later with martial law.

4. OAT can be provided at the primary care level on the same financial terms as in specialised MFs. However, many MFs believe the cost/resource ratio is not economically attractive. This is especially true in non-specialised medical facilities where the number of clients receiving OAT does not exceed 30.

5. The risk to the sustainability of the programme as a whole refers to its individual components which are measured by indicators such as coverage and quality. According to statistics, OAT coverage has increased significantly and is now about 10% of the estimated number of people who need treatment. There are, however, still individual barriers to accessing the OAT programme.

6. Although the registration of people with drug dependence in narcological institutions has been abolished by law, there is still the registration of OAT clients which can negatively affect their rights, especially if they have to undergo a psychiatric examination which is necessary to obtain a driver's license or a job.

7. During the transition, it became clear that MFs were not sufficiently motivated to provide OAT services. This was due to the discrepancy between the funding provided by the National Health Service of Ukraine (NHSU) and the time medical staff had to spend providing these services. The additional compensation that medical staff received for managing OAT clients with Global Fund support was higher, whereas NHSU rates did not consider the quality of services provided.

8. In 2020–2022, there has been significant progress in setting the average dose of OAT medications. Most physicians adhere to the recommendations of the national standard, which fully meets the criteria of WHO.

9. An integrated approach to the treatment of clients with comorbidities (HIV infection, TB, hepatitis C, mental disorders) continues to be implemented everywhere. In 2020–2022, client health monitoring was improved at OAT sites.

10. The situation in the penitentiary system has improved significantly. The administration of the service no longer poses obstacles to the provision of OAT to people serving their sentences in correctional facilities. In 2022, therapy was provided in 7 penitentiary institutions in Ukraine. At the same time, problems remain with OAT provision in pretrial detention centres.

11. Too little attention is being paid to overdose prevention. At some OAT sites, clients can obtain 'take-home' naloxone. There are also education sessions for clients organised at times and the distribution of leaflets with instructions on overdose management. In some state pharmacies, clients and/or their relatives can purchase naloxone as it is not a controlled drug in Ukraine and is available at low cost. However, this activity is not systematic, being organised sporadically and supported only by donors.

7. Recommendations

General recommendations:

1. The IWG on OAT under the Ministry of Health needs to develop a step-by-step plan (specifying responsible persons and deadlines) for drafting a new law, "On Measures to Combat Illicit Trafficking in Narcotic Drugs, Psychotropic Substances and Precursors, and Their Abuse", and bylaws on prevention and treatment of drug dependence, to eliminate the existing one-sided focus on security issues by prioritising public health issues and a scientific approach to drug policy.

2. Consider a set of measures to introduce an integrated approach to the treatment practice of clients with opioid dependence. Physicians of non-specialised medical facilities should be given the right to diagnose 'dependence syndrome' and to prescribe OAT independently. Conditions should be created to allow OAT clients to receive ART, antimycobacterial drugs, and psychotropic medications in the same MF. The regulations and decrees of the Ministry of Health on dispensing medicines at the expense of the state budget in non-specialised medical institutions should be revised to implement these measures.

3. Consider the possibility of dispensing 'take-home' doses to socially adjusted OAT clients at the end of the induction period and use a flexible approach to 'take-home' dose provision dependent upon the condition of the client: from doses for the weekend to doses for 30 days.

4. Build collaboration with the NHSU to improve the system for funding the OAT programme. The differentiated approach should be applied, taking into account the specifics of each type of MF. This will create the right motivation to implement OAT services for non-specialised facilities. It is also worth considering the possibility of financing not only state and municipal, but also private health centres.

5. The financial support of OAT by the state should not be limited to the cost of procuring medicines and paying medical staff. Following the transition from donor to domestic funding, there is a lack of funds for training doctors and professionals who provide psychosocial support (a non-medical service that is an integral part of OAT). Funding for research and advocacy of this method of assistance also comes primarily from donors (GF, CDC).

Recommendations for the Ministry of Health (MoH) and the Public Health Center (PHC) of the Ministry of Health:

6. In revising the OAT provision regulations (Decree No. 200 of the Ministry of Health), assume the need to increase OAT coverage to at least 40% of the estimated number of people with opioid dependence syndrome by 2030. Eliminate outdated MoH decree regulations on psychiatric screening so that participation in the OAT programme is not a reason for discrimination against OAT clients in obtaining a driver's license. This negatively impacts OAT coverage. Point out the

need to maintain the existing standard of OAT service delivery, including such issues as OAT dosages, and expand opportunities to use an integrated approach in non-specialised clinics.

7. Consider the possibility of modifying the manufacturer's instructions or issuing an appropriate official clarification allowing the daily dose of methadone to be increased above 120mg's for clinical indications; develop a protocol to increase the dose more rapidly during induction in clients with high opioid tolerance.

8. Make the necessary changes to the training programme for physicians in the specialty 'General medicine' (general practitioners) and familiarise them with the principles of OAT. Describe substance use and interventions on substance use disorder treatment from a public health and evidence-based perspective.

9. Introduce a nationwide database of OAT clients supported by the Ministry of Health, with database administration funded by the state budget.

10. Require all MFs providing OAT services, regardless of ownership, to report to the PHC, adhere to established standards, and register their clients receiving methadone or buprenorphine in a common database to prevent them from receiving OAT medications in multiple locations simultaneously.

11. Lobby the National Health Service of Ukraine (NHSU) to increase the financial security of the OAT programme and include the cost of staff training in the state budget, as well as spending on OAT advocacy and research to improve the quality of this type of care.

12. Develop methodological recommendations and a client pathway based on a differentiated approach to the choice of MF and the OAT format, depending on the duration of the disorder, comorbidity, and motivation for seeking help in clients with opioid dependence.

13. Recommend that all MFs providing OAT services screen for the most common mental disorders (depressive and anxiety disorders, post-traumatic stress disorder (PTSD)) to enable diagnosis and prompt treatment, including at the MF where the diagnosis is made without contacting specialised mental health services.

14. Together with the Ministry of Social Policy (SME of Ukraine), develop a protocol for the provision of psychosocial support for OAT clients with the involvement of employees of the local socio-psychological service.

15. Work with the Ministry of the Internal Affairs to develop or adapt the existing programme and schedule of events (trainings, seminars, webinars) to educate police officers about the nature of drug dependence and evidence-based approaches to treating drug dependence, particularly the OAT method.

16. Continue to develop the OAT programme in the penitentiary system in close cooperation with the Ministry of Justice.

Recommendations to OAT service providers and health care professionals, including professional associations and the academic community:

17. Revise the existing regulations for the admission of clients to the OAT programme, taking into account the need to create effective mechanisms for the immediate provision of assistance to people who have been forced to leave their places of residence due to hostilities. To provide these clients with a rapid increase in the dose of medication to the dosage they were previously receiving and to provide them with as much psychological and social support as possible.

18. Increase requirements for staff providing psychosocial support to people with dependence problems; improve their skills and ensure that OAT standards are met. Enable wider use of remote client counseling (telehealth). Require OAT staff to keep regular records (logs) of psychological counseling. Ensure that these staff members have time in their work schedule to attend educational events (seminars, webinars, trainings).

19. Inform clients of the ability to obtain needed medical, psychological, and legal information through an automated telephone counseling system.

20. Actively work with NGOs, charitable organisations, the State Employment Fund, and educational institutions to promote client socialisation. Pay special attention to unemployed clients.

21. Organise educational activities for OAT clients based on MFs providing OAT to prevent complications of opioid overdose. Provide clients with informational materials and facilitate their access to naloxone. Inform them of the possibility of purchasing naloxone at pharmacies without a prescription.

Recommendations to civil society representatives, including groups and activists of the community of people who use drugs, activists and coalitions in the field of drug policy, HIV, TB, and hepatitis C:

22. Establish cooperation with the police in every possible way and participate in educational activities that physicians conduct for police officers and employees of the penitentiary system. Submit reports to regional police departments at least twice a year on the situation of client rights in the region, report cases of rights violations, etc.

23. Collect and document complaints from clients about violations of their legal rights and help them enforce the protection and restoration of their rights in the manner prescribed by law.

Annex 1. Methodology: approach and list of respondents

The assessment was performed according to the following algorithm:

After the desk review, a list of key informants was compiled and relevant interviews were conducted.

Seven interviews with informants included:

1. Leonid Vlasenko, Independent Consultant, Expert.

2. Oleg Dymaretsky, Expert, Activist, Head of the VOLNA NGO (an association of people living with drug addiction).

3. Konstantin Dumchev, Researcher of the Charitable Organization Ukrainian Institute on Public Health Policy.

4. Tatyana Kiryazova, Researcher of the Charitable Organization Ukrainian Institute on Public Health Policy.

5. Velta Parkhomenko, Expert, Activist, Coordinator of VOLNA NGO, Head of a NGO working with people who use psychoactive substances – Club 'Eney' NGO.

6. Vyacheslav Solonsky, Expert, Head of the Psychoneurologic Dispensary, Krivoy Rog.

7. Pavlo Skala, Lawyer, Expert, Associate Director: Policy & Partnership, ICF Alliance for Public Health.

8. Iryna Kharandiuk, Researcher, Director of the European Institute of Public Health Policy.

Focus group and individual interviews were also conducted with OAT clients and providers to clarify information and to gain a comprehensive understanding of the difficulties that they face in accessing/providing OAT services.

Annex 2. Funding and resources

Table A. Volumes of OAT medication procurement and progress toward transition to national funding [12, 38, 41, 47, 48]

	2015	2016	2017	2018	2019	2020	2021	2022
Number of OAT sites	170	174	179	210	211	206	205	183
The actual number of OAT treatment courses procured	8451	9154	10053	11207	12122	12548	9603	0
Planned number of clients in the OAT programme (% of need)					12669 4.4%	15210 5.3%	17679 6.1%	20519 7%
The percentage of OAT medication procured at the expense of the state budget (% of the total amount of procured medication)			86 0.8%	8605 76%	10179 84%	10539 84%	100%	0
The percentage of OAT medication purchased at the expense of local budgets		81 0.8%	11 0.1%	195 1.7%	237 1.9%	624 4.9%	-	-
The percentage of OAT medication procured at the expense of private domestic funds and out-of-pocket payments		213 2.3%	624 6.2%	882 7.8%	844 6.9%	772 6.1%	-	-
The percentage of OAT medication procured with Global Fund support	100%	8566 93.5%	8611 85.6%	1072 9.5%	521 4.2%	423 3.3%	0	100%
The volume and percentage of other external/donor funding (PEPFAR)		294 3.2%	721 7%	454 4%	341 2.8%	190 1.5%	0	0

Table B. Dynamics of state funding (million UAH) [38, 47, 48]

	2015	2016	2017	2018	2019	2020	2021	2022
Budget for OAT in national strategies and plans		13	≈ 18	≈ 18	≈ 25	≈ 33.9	≈ 41.8	≈ 47.7
Actual allocated budget for the OAT programme		13	18.04	3	25.3	25.3	25.3	0 - canceled in May 2022

Table C. Human resources

	No. of people	Source(s)	Comments
Human resources for the implementation of the OAT programme			
Number of health professionals providing OAT services	420	Estimated number based on the number of facilities in operation at the end of 2022	Minimum number per facility: 1 physician + 1 nurse
Number of health professionals trained in OAT	40	Trainings were conducted in Shupyk NMAPE under the project *Improving the OAT Quality* (UIPHP/APH, with funding from the CDC). Participants received certificates of thematic advanced training (TAT).	2020–2022
	446	Online course '*Opioid Dependence Treatment*,' available at the Centre for Public Health website (developed as part of the UIPHP project *Improving the OAT Quality*, participants received electronic certificate of completion).	2020–2021
	7	The trainings were conducted within the project *Integrating Addiction Treatment and HIV Services into Primary Care Clinics in Ukraine* (EIPHP, funded by NIH) based on Shupyk NMAPE and Pirogov VNMU. Participants received TAT certificates.	2021
	256	Trainings conducted as part of the implementation of the *Investing for impact against TB and HIV* programme at A. Bogomolets National Medical University (funded by GF). Participants received TAT certificates.	2020–2022
	61	Training in the OAT appointment within the courses of specialisation *'Narcology'* based on the Shupik NMAPE.	2020–2022
Number of OAT clients per physician	-		
Number of physicians providing OAT services who are not specialists in drug dependence treatment	177	Estimated number according to the statistics of the medical institutions providing OAT	for 2021 number of doctors of primary health care centres, infectious disease hospitals, TB dispensaries/centres
OAT and narcology (drug dependence treatment)			
Number of physicians in the narcological service	3,506	Medical personnel and a network of public health facilities of the system of the Ministry of Health for 2020–2021. State institution *Centre for Medical Statistics of the Ministry of Health of Ukraine*.	2021 (including those in training institutions)

Annex 3. Summary table of scores for all indicators and benchmarks in the assessment framework

	Score in 2020	*Score in 2022*	*Data Source(s)*
Policy and governance	*65% Moderate sustainability*	*76% Substantial sustainability*	
Political commitment	*61% Moderate sustainability*	*77% Substantial sustainability*	
Benchmark A1.1: OAT is included in national strategies and action plans for drug control, HIV, and/or hepatitis, with a commitment to achieve the WHO recommended targets	75% Substantial sustainability	100% High sustainability	- Strategy to ensure a sustainable response to epidemics of tuberculosis, including drug-resistant tuberculosis, and HIV infection/AIDS for the period up to 2020 and approval of an action plan for its implementation; - National strategy to combat HIV/AIDS, tuberculosis, and viral hepatitis for the period up to 2030.
Benchmark A1.2: Legislation explicitly supports the provision of OAT services	50% Moderate sustainability	50% Moderate sustainability	- National strategy to combat HIV/AIDS, tuberculosis, and viral hepatitis for the period up to 2030; - State strategy of drug policy until 2030 (draft); - Law of Ukraine "On Psychiatric Care" of February 22, 2000.
Benchmark A1.3: OAT is an integral part of national policy for the treatment of opioid dependence	75% Substantial sustainability	100% High sustainability	- Decree of the Ministry of Health No. 200, dated 27.03.2012, "On Approval of the Procedures of the Provision of Substitution Maintenance Therapy in Patients with Mental and Behavioural Disorders due to the Use of Opioids"; - Standard of care, "Mental and Behavioural Disorders due to Opioid Use," 2020.
Benchmark A1.4: Law enforcement and justice systems support OAT implementation and expansion, as needed	13% At high risk	63% Moderate sustainability	- The procedure for interaction between health care institutions, internal affairs agencies, pretrial detention centres and correctional facilities to ensure continuity of treatment with substitution maintenance therapy medications, dated 22.10.2012; - Decree of the Ministry of Health No. 200, dated 27.03.2012, "On Approval of the Procedures of the Provision of Substitution Maintenance Therapy in Patients with Mental and Behavioural Disorders due to the Use of Opioids".
Benchmark A1.5: The country ensures effective governance and necessary coordination of the OAT programme	100% High sustainability	50% Moderate sustainability	- Key informants.
Benchmark A1.6: NGO representatives are consulted through the National Coordination Committee (NCC) working groups on issues related to the coordination of OAT programmes at the country level	100% High sustainability	100% High sustainability	- Minutes of the meetings of the Programme Committee of the National Council on TB and HIV/AIDS; - Key informants.

Management of transition from donor to domestic systems	*68% Moderate sustainability*	*75% Substantial sustainability*	
Benchmark A2.1: Country has adopted a plan which defines the transition of OAT from donor to domestic funding including a timeline	88% High sustainability	63% Moderate sustainability	- 20–50–80 Transition Plan; - Minutes of the meeting of the Programme Committee of the National Council on TB and HIV/AIDS, dated 21.07.2020; - National strategy to combat HIV/AIDS, tuberculosis, and viral hepatitis for the period up to 2030.
Benchmark A2.2: There is a multi-year financial plan for the OAT transition to domestic sources, with unit costs developed, co-financing level, the (future) domestic funding sources for OAT identified and agreed among country representatives	67% Moderate sustainability	100% High sustainability	- National strategy to combat HIV/AIDS, tuberculosis, and viral hepatitis for the period up to 2030; - Decrees of the Cabinet of Ministers for the years in question on the implementation of the programme of state guarantees for medical care of the population; - Webinars on the transition of OAT services to the programme of state guarantees for medical care.
Benchmark A2.3: As part of the oversight of the transion process in the country, the integration of OAT into national systems is effecvely supported	38% At moderate to high risk	88% High sustainability	- Minutes of the meetings of the Programme Committee of the National Council on TB and HIV/AIDS; - Key informants.
Benchmark A2.4: Significant progress has been made in implemenng the OAT sustainability component in the transion plan	83% Substantial sustainability	50% Moderate sustainability	- Minutes of the meetings of the Programme Committee of the National Council on TB and HIV/AIDS; - Key informants.
Finance and resources	*67% Moderate sustainability*	*63% Moderate sustainability*	
Medications	*61% Moderate sustainability*	*56% Moderate sustainability*	
Benchmark B1.1: OAT medicine procurement is integrated into domestic PSM system and benefits from good capacity without interruptions	63% Moderate sustainability	30% At moderate to high risk	- Passports of the budget programmes; - Reports on implementation of budget programmes; - Reports of the State-Owned Enterprise, “Medical Procurement of Ukraine”; - Key informants.
Benchmark B1.2: Both methadone and buprenorphine are registered and their quality assurance system is operational	33% At moderate to high risk	63% Moderate sustainability	- State Register of Medicinal Products of Ukraine; - Reports of the State-Owned Enterprise, “Medical Procurement of Ukraine”.

Benchmark B1.3: Methadone and buprenorphine are secured at affordable prices	100% High sustainability	75% Substantial sustainability	- Key informants.
Financial resources	***65% Moderate sustainability***	***49% At moderate to high risk***	
Benchmark B2.1: Methadone and buprenorphine are included in the lists of state-reimbursed drugs and are financed from public funds	100% High sustainability	0% At high risk	- Decree of the Ministry of Health No. 799 of May 12, 2022, "On Approval of Amendments to the Summary Indicators of 100% Requirement for Medicines, Medical Devices and Auxiliaries for the Same Purchased by the State-Owned Enterprise "Medical Procurement of Ukraine" in the Areas of Use of Budgetary Funds in 2022 Under the Budgetary Programme 2301400 "Provision of Individual Medical Programmes and Complex Programmatic Measures""; - Decrees of the Cabinet of Ministers for the years in question on the implementation of the programme of state guarantees for medical care of the population; - Passports of the budget programmes.
Benchmark B2.2: OAT services are included in the universal health care programme or in the government-guaranteed health care package, which is also available to people without health insurance	100% High sustainability	100% High sustainability	- Law of Ukraine, "On State Financial Guarantees for Medical Care of the Population", of October 19, 2017; - Decrees of the Cabinet of Ministers for the years in question on the implementation of the programme of state guarantees for medical care of the population.
Benchmark B2.3: OAT service costs are covered by sustainable public funding sources that ensure adequate resources for a comprehensive package of services	25% At moderate to high risk	13% At high risk	- Decree of the Ministry of Health No. 799 of May 12, 2022, "On Approval of Amendments to the Summary Indicators of 100% Requirement for Medicines, Medical Devices and Auxiliaries for the Same Purchased by the State-Owned Enterprise "Medical Procurement of Ukraine" in the Areas of Use of Budgetary Funds in 2022 Under the Budgetary Programme 2301400 "Provision of Individual Medical Programmes and Complex Programmatic Measures""; - Law of Ukraine, "On State Financial Guarantees for Medical Care of the Population", of October 19, 2017; - Decrees of the Cabinet of Ministers for the years in question on the implementation of the programme of state guarantees for medical care of the population; - Passports of the budget programmes.
Benchmark B2.4: In the countries with active HIV grants, OAT services are co-financed by the Government in accordance with the Global Fund Sustainability, Transition and Co-Financing Policy	83% Substantial sustainability	83% Substantial sustainability	- Law of Ukraine, "On State Financial Guarantees for Medical Care of the Population", of October 19, 2017; - Decrees of the Cabinet of Ministers for the years in question on the implementation of the programme of state guarantees for medical care of the population; - Passports of the budget programmes.

Human resources	*64% Moderate sustainability*	*56% Moderate sustainability*	
Benchmark B3.1: The provision of OAT services is one of the primary responsibilities of the State Narcological Service and part of the job description of the core medical staff of this institution who are authorised to prescribe and dispense OAT in t he required dosage/quantity	67% Moderate sustainability	50% Moderate sustainability	- Law of Ukraine, "On Psychiatric Care", of February 22, 2000; - Law of Ukraine, "On Measures to Counter the Illicit Trafficking in Narcotic Drugs, Psychotropic Substances and Precursors and Their Abuse", of February 15, 1995; - Decree of the Ministry of Health No. 200, dated 27.03.2012, "On Approval of the Procedures of the Provision of Substitution Maintenance Therapy in Patients with Mental and Behavioral Disorders due to the Use of Opioids"; - Standard of care, "Mental and Behavioural Disorders due to Opioid Use", 2020.
Benchmark B3.2: The employee training system ensures the sustainable implementation of the OAT programme	63% Moderate sustainability	63% Moderate sustainability	- Key experts; - Information on the number of medical personnel trained in OAT approach based on the Academy of Medical Sciences of Ukraine and national medical universities.
Evidence and information systems	*78% Substantial sustainability*	*92% High sustainability*	
Benchmark B4.1: OAT monitoring system is in place and is used for managing the OAT programme including determining programme needs, ensuring coverage and quality control	100% High sustainability	75 % Substantial sustainability	- Monthly statistical data of the Centre for Public Health; - Electronic information and analytical system of the Ministry of Health and State-Owned Enterprise, "Medical Procurement of Ukraine"; - SYREX Database, Alliance for Public Health.
Benchmark B4.2: Evidence-base for OAT effectiveness and efficiency are regularly generated and inform policy and programme planning	67% Moderate sustainability	100% High sustainability	- Conducting assessments, desk research of international guidelines and recommendations. The information is available on the website of the Centre for Public Health in the section, "Analytics and International Recommendations" (in Ukrainian and English): https://www.phc.org.ua/kontrol-zakhvoryuvan/zalezhnist-vid-psikhoaktivnikh-rechovin/analitika-i-mizhnarodni-rekomendacii - Conducting research in Ukraine and analysing their results.
Benchmark B4.3: OAT client data is stored in a database; it is confidential, protected and will not be shared outside the health system without the client's consent	50% Moderate sustainability	100% High sustainability	- Key informants, interviews with OAT service providers; - Law of Ukraine, "On Measures to Counter the Illicit Trafficking in Narcotic Drugs, Psychotropic Substances and Precursors and Their Abuse", of February 15, 1995; - Law of Ukraine, "On Psychiatric Care", of February 22, 2000; - Law of Ukraine, "On Counteracting the Spread of Diseases Caused by the Human Immunodeficiency Virus (HIV) and Legal and Social Protection of People Living with HIV", of December 12, 1991; - Law of Ukraine, "Fundamentals of the Ukrainian Legislation on Health Care", of November 19, 1992; - Law of Ukraine, "On Personal Data Protection", of February 23, 2012.

Services	*55% Moderate sustainability*	*71% Substantial sustainability*	
Availability and coverage	*30% At moderate to high risk*	*54% Moderate sustainability*	
Benchmark C1.1: OAT is available in hospitals and primary care facilities; 'take-home' doses are allowed	100% High sustainability	83% Substantial sustainability	- Monthly statistical data of the Centre for Public Health; - Key informants, interviews with OAT service providers, focus groups with clients.
Benchmark C1.2: Coverage of the estimated number of opioid-dependent people with OAT is high	0% At high risk	0% At high risk	- Monthly statistical data of the Centre for Public Health; - Minutes of the meeting of the Programme Committee of the National Council on TB and HIV/AIDS, dated 21.07.2020 (estimated number of people who use opioids recorded).
Benchmark C1.3: OAT is available in penitenary settings (including for entry into the OAT programme), during pretrial detention, and for women	0% At high risk	50% Moderate sustainability	- Report of the Centre for Public Health on the results of the implementation of OAT in 2020; - Key informants; - Information of the State Penitentiary Service of Ukraine: https://coz.kvs.gov.ua/?s=%D0%B7%D0%BF%D1%82 - Implementation of the project, "Prison Interventions and HIV Prevention Collaboration", UIPHP.
Benchmark C1.4: OAT is possible and available in the private and/or NGO sector in addition to the government sector	0% At high risk	83% Substantial sustainability	- Monthly statistical data of the Centre for Public Health; - Key informants, interviews with OAT service providers, focus groups with clients.
Accessibility	*67% Moderate sustainability*	*70% Substantial sustainability*	
Benchmark C2.1: There are no waiting lists for participation in the OAT programme	50% Moderate sustainability	0% At high risk	- Key informants; - Interviews with OAT service providers, focus groups with clients.
Benchmark C2.2: OAT sites opening hours and days meet the needs of most clients	75% Substantial sustainability	75% Substantial sustainability	- Key informants; - Interviews with OAT service providers, focus groups with clients.
Benchmark C2.3: Geographic coverage is adequate	100% High sustainability	100% High sustainability	- Monthly statistical data of the Centre for Public Health; - Key informants; - Interviews with OAT service providers, focus groups with clients.

Benchmark C2.4: There are no fees for using OAT services and no barriers for people with low incomes or without health insurance	50% Moderate sustainability	88% High sustainability	- Key informants; - Interviews with OAT service providers, focus groups with clients.
Benchmark C2.5: OAT is available and generally accessible to populations with special needs (pregnant and other women, sex workers, minors who use drugs, representaves of ethnic groups, etc.)	75% Substantial sustainability	63% Moderate sustainability	- Key informants; - Interviews with OAT service providers; - Standard of care, “Mental and behavioural disorders due to opioid use,” 2020.
Benchmark C2.6: Illicit drug consumption is tolerated (after dose induction phase)	63% Moderate sustainability	88% High sustainability	- Key informants; - Interviews with OAT service providers; - Standard of care, “Mental and Behavioural Disorders due to Opioid Use,” 2020.
Benchmark C2.7: Individual plans for participation in the OAT programme are developed with the involvement of clients and offered to them	67% Moderate sustainability	83% Substantial sustainability	- Standard of care, “Mental and Behavioural Disorders due to Opioid Use,” 2020; - Key informants; - Interviews with OAT service providers.
Benchmark C2.8: Inclusion criteria for OAT support special needs groups and are not restrictive, i.e. confirmation of failure in other treatment programmes is not required before entering the OAT programme	67% Moderate sustainability	67% Moderate sustainability	- Decree of the Ministry of Health No. 200, dated 27.03.2012, “On Approval of the Procedures of the Provision of Substitution Maintenance Therapy in Patients with Mental and Behavioral Disorders due to the Use of Opioids”; - Standard of care, “Mental and Behavioural Disorders due to Opioid Use,” 2020; - Key informants; - Interviews with OAT service providers.
Quality and integration	***69% Moderate sustainability***	***88% High sustainability***	
Benchmark C3.1: Methadone/buprenorphine dosages specified in national standards/guidelines, as well as dosages prescribed in practice, are derived from and consistent with recommendations of WHO	67% Moderate sustainability	83% Substantial sustainability	- Standard of care, “Mental and Behavioural Disorders due to Opioid Use,” 2020; - Monthly statistical data of the Centre for Public Health; - Key informants; - Interviews with OAT service providers, focus groups with clients.
Benchmark C3.2: OAT programmes are based on the maintenance approach and have a high retention of clients	83% Substantial sustainability	67% Moderate sustainability	- Standard of care, “Mental and Behavioural Disorders due to Opioid Use,” 2020; - Monthly statistical data of the Centre for Public Health; - Key informants; - Interviews with OAT service providers, focus groups with clients.

Benchmark C3.3: A high proportion of OAT maintenance sites are integrated and/or cooperate with other services and support continuity of care for HIV, TB and drug dependence (in line with WHO guidance: 80% or more of sites)	50% Moderate sustainability	100% High sustainability	- Standard of care, "Mental and Behavioural Disorders due to Opioid Use," 2020; - Key informants; - Interviews with OAT service providers.
Benchmark C3.4: A high proportion of OAT clients receive psychological and social support	50% Moderate sustainability	100% High sustainability	- Key informants; - Interviews with OAT service providers.

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