

# Situation assessment of rehabilitation in Ukraine





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# Abstract

This publication summarizes the rehabilitation situation in Ukraine as at September 2020. It outlines key achievements, needs and opportunities for intervention in the field of rehabilitation in Ukraine. The situational analysis was conducted under the leadership of the Ministry of Health of Ukraine and its Quality of Life Directorate, with technical support from the WHO Regional Office for Europe and the WHO Country Office, Ukraine. It was undertaken in collaboration with different Government ministries and State agencies, development partners, United Nations agencies, professional associations, disabled people's organizations and rehabilitation users. It adopted an evidence-based approach, responsive to the unique social, cultural, economic and political circumstances in the country. The content of this document is a snapshot in time – not an in-depth analysis of the entire rehabilitation sector. The analysis focuses on rehabilitation policy and governance, service provision, financing, information management and human resources, with the aim of improving access to high-quality rehabilitation services in Ukraine.

#### **Keywords**

1. Rehabilitation. 2. Rehabilitation policy. 3. Rehabilitation Services. 4. Rehabilitation – Human Resources. 5. Rehabilitation 2030. 6. Person with disabilities – rehabilitation and assistive products. 7. Universal health coverage. I. World Health Organization.

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# Preface

The health and well-being of the people of Ukraine are a top priority for the Ukrainian Government. The Ministry of Health is fully engaged in health system reform and recognizes that rehabilitation is part of the continuum of health care; it is committed to strengthening rehabilitation within the health system in Ukraine.

The Ministry of Health holds a close relationship with the World Health Organization and appreciates WHO's broad technical support in the rehabilitation sector. The information provided in the WHO-supported Situation assessment of rehabilitation in Ukraine summarizes the rehabilitation situation as at September 2020 and complements the information and recommendations made available through the 2015 WHO-supported technical consultancy to support the development of the national disability, health and rehabilitation plan in Ukraine. Both documents provide foundational information from which to further develop a national strategy and action plan specific to rehabilitation.

Since 2015, there have been many achievements related to rehabilitation in Ukraine. These advances include the creation of the Quality of Life Directorate (which houses an expert group on medical rehabilitation), recognition and training of the rehabilitation workforce, rehabilitation financing, service standards and extensive legal frameworks that encompass rehabilitation. While this report captures progress as at September 2020, the sector continues to advance rapidly.

Of paramount importance is the Law "On rehabilitation in health care" (No. 1053-IX), which was signed by the President of Ukraine on 28 December 2020. In line with WHO's contemporary vision, this Law frames rehabilitation as part of the health system and opens doors to new possibilities in providing rehabilitation to anyone who needs it. Multiple working groups and technical experts are currently developing regulatory documents that will accompany the Law.

The priority tasks of the Government are the development of a modern rehabilitation system through:

- introduction of an effective rehabilitation system based on evidence-based medicine and uniform standards and rules, taking into account the International Classification of Functioning, Disability and Health, provided from the first days of injury or illness and regardless of the presence or absence of disability status;
- improvements in the system of providing citizens with assistive products from the first days of injury or illness and regardless of the presence or absence of disability status; and introduction of unified rules and standards of providing citizens with technical means of rehabilitation.

The Ministry of Health reinforces its commitment to further support for the development of the rehabilitation sector, guided by WHO's Rehabilitation 2030 principles. We recognize that this assessment is one step in a process towards developing a strategy to address gaps in the existing rehabilitation context. We look forward to our continued collaboration in the rehabilitation sector to ensure that all people of Ukraine enjoy healthy and fulfilling lives.

Iryna Mykychak, Deputy Minister, Ministry of Health of Ukraine.

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# **Abbreviations**

ACHI	Australian Classification of Health Interventions
AT	assistive technology
CMS	Center for Medical Statistics
COVID-19	coronavirus disease 2019
CPD	continuing professional development
El	early intervention
ICF	International Classification of Functioning, Disability and Health
IPR	individual programme of rehabilitation
ISPO	International Society for Prosthetics and Orthotics
ISPRM	International Society of Physical and Rehabilitation Medicine
KHNURE	Kharkiv National University of Radio Electronics
LDSC	Latter-day Saint Charities
MAC	medical advisory commission
MIS	Medical information System
MSEC	medical and social expert commission
ΝΑΤΟ	North Atlantic Treaty Organization
NDHRP	National Disability, Health and Rehabilitation Plan
NHSU	National Health Service of Ukraine
NSPA	NATO Support and Procurement Agency
РТ	physical therapy
RMM	WHO Rehabilitation Maturity Model
SDG	Sustainable Development Goal
STARS	systematic assessment of rehabilitation situation
SWOT	strengths, weaknesses, opportunities and threats
TMR	technical means of rehabilitation (assistive products)
UAH	Ukrainian hryvnia (currency)
UNCRPD	United Nations Convention on the Rights of Persons with Disabilities
UNICEF	United Nations Children's Fund
URIP	Ukrainian Research Institute for Prosthetics and Rehabilitation
US SLT	Ukrainian Society for Speech and Language Therapy
USAID	United States Agency for International Development
USET	Ukrainian Society of Ergotherapists
WCPT	World Confederation for Physical Therapy (also: World Physiotherapy)
WFOT	World Federation of Occupational Therapists
WHO	World Health Organization

# Glossary

Disability	Disability results from the interaction between individuals with a health condition such as cerebral palsy, Down syndrome or depression as well as personal and environmental factors including negative attitudes, inaccessible transportation and public buildings, and limited social support (1).
Environment	Environment encompasses the physical, social and attitudinal environment in which people live and conduct their lives (2).
Health	Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity (3).
Health condition	An umbrella term covering acute and chronic disease, disorders, injury or trauma. Health conditions may also include other circumstances such as pregnancy, ageing, stress, congenital anomaly or genetic predisposition (4).
Impairment	Problems in body function or structure such as a significant deviation or loss (5).
Prosthetist/ orthotist	A health care professional who uses evidence-based practice to provide clinical assessment, prescription, technical design and fabrication of prosthetic and/or orthotic devices. Prosthetists/orthotists work independently or as part of the health professional team. They set goals and establish rehabilitation plans that include prosthetic/ orthotic services and clinical outcome measures. The profession aims to enable service recipients so they have equal opportunities to fully participate in society (6).
Quality of care	The extent to which health care services provided for individuals and patient populations improve desired health outcomes. In order to achieve this, health care must be safe, effective, timely, efficient, equitable and people-centred (7).
Rehabilitation	A set of interventions designed to optimize functioning and reduce disability in individuals with health conditions in interaction with their environment (4).
Rehabilitation outcomes	Changes in the functioning of an individual over time that are attributable to rehabilitation interventions. They may include fewer hospital admissions, greater independence, reduced burden of care, return to roles and occupations that are relevant to their age, gender and context (e.g. home care, school, work) and better quality of life (4).
Rehabilitation worker	A person delivering or supporting the delivery of rehabilitation, whether interacting directly or indirectly with a person, their family or service-user groups (2). Typically, the professions include audiologists, occupational therapists, physiotherapists, prosthetists and orthotists, speech and language therapists and physical and rehabilitation medicine doctors, as well as specialized nurses, but there are many other professions that also help to deliver rehabilitation services. Regardless of their profession or specialization, all aim to help an individual function to the greatest extent possible, whether by modifying their environment to accommodate their needs, using assistive products or working with the person to address their physical, psychological, cognitive or sensory impairment (8).
Rehabilitation workforce	A wide range of professions that deliver care across the different levels of the health system and in settings such as hospitals, schools, workplaces and people's homes.

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# **Executive summary**

The rehabilitation<sup>1</sup> sector in Ukraine is rapidly evolving and many examples of good practice are emerging.

In mid-2019, WHO described rehabilitation as "a set of interventions needed when a person is experiencing or is likely to experience limitations in everyday functioning due to ageing or a health condition, including chronic diseases or disorders, injuries or traumas".<sup>2</sup> This definition is aimed at capturing the essence of rehabilitation and is a simplified description of rehabilitation to support a communications perspective. For an overview of rehabilitation, see Annex 1. A technical definition of rehabilitation is further explored in Section 2 below.

Ukraine's commitment to strengthening rehabilitation is evidenced by requests for technical assistance from the World Health Organization Regional Office for Europe. The Ministry of Health requested support for assessing the **rehabilitation situation**, while the Ministry of Social Policy requested technical support to assess the situation on **assistive technology.**<sup>3</sup>

The rehabilitation situation assessment utilizes standard tools developed by WHO and is structured around the building blocks for health system strengthening (leadership and governance, financing, health workforce, service delivery, medicines and technology and health information systems).

The in-country data collection for the rehabilitation situation assessment in Ukraine was conducted between 31 August and 11 September 2020. Over 85 people participated in the process, which comprised semistructured interviews, focus group discussions and site visits to health facilities and training institutions. Followup meetings and data requests continued in a virtual format until mid-October.

The assessment was conducted during the global pandemic of coronavirus disease (COVID-19). All relevant personal protection strategies and social distancing practices were employed, and opportunities for virtual participation were provided for all group meetings and discussions. The pandemic placed limitations on the assessment, but also highlighted opportunities to promote the relevance and need for rehabilitation as people recover from COVID-19 symptoms.

Although rehabilitation includes psychology and mental health, this assessment does not provide detailed information on mental health as a rapid assessment on Ukraine's mental health system was conducted by WHO from January to March 2020 (1).

# Key findings – strengths

Rehabilitation is not new to Ukraine. That said, in recent years there have been many positive advances in the rehabilitation sector. These changes create a forward-looking foundation from which to advance rehabilitation further in Ukraine.

**Rehabilitation governance:** the restructuring of the Ministry of Health in 2020 resulted in the creation of the Quality of Life Directorate. This Directorate has four expert groups, one of which is specific to rehabilitation and sanatorium/resort treatment. The Expert Group on Rehabilitation provides a significant and timely opportunity

<sup>1</sup> For the purposes of this report, rehabilitation and medical rehabilitation are used synonymously.

<sup>2</sup> This definition taken from https://www.who.int/news-room/fact-sheets/detail/rehabilitation on 2 September 2020. Since 26 October 2020, the site has reverted to the technical definition of rehabilitation that reads: "a set of interventions designed to optimize functioning and reduce disability in individuals with health conditions in interaction with their environment".

<sup>3</sup> Although some information on assistive technology is included in the rehabilitation assessment, a separate and more detailed report on findings from the assistive technology assessment will be developed.

to act as a nucleus for coordination and communication on rehabilitation within the Ministry of Health and between other ministries and stakeholders active in rehabilitation.

**Rehabilitation financing:** in 2020, the National Health Service of Ukraine (NHSU) launched the Programme of Medical Guarantees at the secondary level of care. This programme provides funding for 27 packages<sup>4</sup> of medical care; many packages include rehabilitation, and three are specific to rehabilitation. Integration of rehabilitation within this programme is transformative. It recognizes rehabilitation as part of the health care system and provides a sustainable service provision mechanism from which further elements can evolve.

**Rehabilitation human resources and infrastructure:** three professions have been recognized in Ukraine (physical rehabilitation medicine doctor, physical therapist and occupational therapist<sup>5</sup>) and have received authorization to work in health facilities. Separate master's-level training programmes (specializations) in physical therapy and occupational therapy were launched in 2019. Since 1994, an estimated 80 000 people have been trained in rehabilitation-related fields. Efforts are under way to recognize this workforce and provide upskilling training. As a prerequisite for funding, NHSU requires minimum standards related to the rehabilitation workforce and multidisciplinary teams, equipment and accessible infrastructure.

**Rehabilitation information:** the Center for Medical Statistics (CMS) has existed since 1992. In 2018, Ukraine adopted an electronic health care system (eHealth). The eHealth system is mandated by all facilities supported by NHSU. This system has the capacity to provide detailed data on the rehabilitation workforce and services provided at each facility countrywide.

**Rehabilitation service accessibility and quality:** NHSU's inclusion of rehabilitation in the packages of medical guarantees increases accessibility to rehabilitation services. NHSU sets minimum requirements for providers for the organization of rehabilitation service provision, specializations and number of specialists, list of equipment and other requirements to enhance quality services provision. The quality of rehabilitation services has been improved by Ukraine's partnership with international organizations and donors.

# Key findings – challenges

The systems and practices that form the legacy of Soviet times create barriers for the rehabilitation sector; examples are seen in rehabilitation-related terminology, data collection and reporting processes and the unchallenged linkage of disability and rehabilitation (e.g. the 2005 Law "On rehabilitation of persons with invalidity in Ukraine"<sup>6</sup>). This historical context, together with present-day findings from this assessment, form the background for the key challenges and potential implications presented in this section.

#### Governance

**1.** *Rehabilitation focal points exist, but collaboration is ad hoc and not systematic:* the Ministry of Health and Ministry of Social Policy each have dedicated expert groups on rehabilitation. Other ministries also have a role in rehabilitation, but there is no established structure within which rehabilitation topics are shared and discussed. Lack of systematic coordination may hamper a streamlined approach in developing the rehabilitation sector.

<sup>4</sup> Note that four additional packages specific to COVID-19 care were added in 2020.

<sup>5</sup> In this report, the English term occupational therapist is used synonymously and interchangeably with ergotherapist.

<sup>6</sup> Although Ukraine terminology references "invalidity" in many official documents and laws, this report will use "disability" as the preferred term; it will be used synonymously and interchangeably with invalidity.

**2.** The 2005 Law of Ukraine "On rehabilitation of persons with invalidity in Ukraine" precludes rehabilitation serving anyone with a health condition who experiences limitations in functioning: until rehabilitation is recognized as a fundamental part of the health care continuum, it will continue to be viewed primarily as a disability service. The draft law "On rehabilitation of people with disabilities" is led by members of the physical and rehabilitation medicine community. At the time of the assessment and the writing of this report, multiple shortcomings in the draft law were identified and further edits needed.<sup>7</sup>

**3.** There is no national strategy on rehabilitation: rehabilitation activities will be fragmented unless they are guided by one overarching document that includes all relevant departments, ministries and stakeholders.

**4.** Rehabilitation is poorly understood and rehabilitation terminology in legal documents uses both antiquated and contemporary terms in the same document: to avoid duplication or misunderstanding, terminology must be harmonized and aligned with contemporary norms. Some examples of deprecated usage are the use of "invalidity" instead of "disability" and the mixing-up of medical care with health care. Without further information and sensitization about rehabilitation, it is difficult for stakeholders to understand the concept of rehabilitation and the disparity between terms, and why this confusion makes a difference.

#### Financing

**5.** *Financing for rehabilitation is fragmented and has not been fully compiled or recorded:* rehabilitation financing is supported through NHSU, subnational budgets, insurance, charities and other sources. There is no consolidated information on rehabilitation spending within or across ministries. Without consolidated baseline information, it is difficult to measure or target growth.

**6.** NHSU packages on rehabilitation merit review to identify subcategories of care: rehabilitation dosage is not diagnosis-dependent. It is determined by the patient's functional limitations and personal characteristics and by whether treatment is inpatient or outpatient. The current standard tariff does not account for these differences; it may be beneficial to create a number of subcategories of care to capture these different needs so that capitation rates reflect these variations.

**7.** Funding for assistive products is not included in NHSU rehabilitation packages: although NHSU funds assistive products for inpatient training and use, there is no provision for assistive products at time of discharge. People will wait months before they are assessed through a parallel Ministry of Health system of medical and social expert commissions (MSECs) and referred to the Ministry of Social Policy for potential support. This inhibits the continuum of care and negatively affects the overall health and function of the individual.

#### **Human resources**

**8.** Speech and language therapy does not exist as a profession in Ukraine: the existing profession "logopedy" (special education) is for children, focuses on the development of speech and articulation, and is delivered largely within the education system. "Logopeds" are not recognized by the Ministry of Health and there is no recognized training that prepares logopeds to work in the health system. Until Ukraine addresses this gap, both adults and children with issues other than speech and articulation disorders (e.g. swallowing disorders following a stroke, communication deficits and cognitive limitations) will not receive the care they need to reduce life risks and restore function.

<sup>7</sup> The President of Ukraine signed the Law of Ukraine "On rehabilitation in health care", No. 1053-IX, and it entered into force on 31 December 2020.

**9.** There is inadequate regulation among the rehabilitation workforce: the lack of licensing, continuing education requirements or postgraduate standards for physical therapy and occupational therapy fosters an inconsistent work environment (varying capacities and skill levels), which may undermine the integrity of these rehabilitation professions. In addition, the fact that speech and language therapist is not a recognized profession in Ukraine, and prosthetists and orthotists are not recognized by the Ministry of Health, further reduces the opportunities to create an effective multidisciplinary team to provide rehabilitation.

**10.** The current project-based education programme<sup>8</sup> for prosthetists and orthotists<sup>9</sup> is not sustainable: although the current training programme results in internationally recognized certification, it is entirely dependent on donor support. Until an internationally recognized prosthetics and orthotics training programme is integrated into Ukraine's education system,<sup>10, 11</sup> the continuation of the prosthetics and orthotics training programme is at risk.

#### Information

**11.** No data are collected on population functioning in Ukraine: without standardized data on population functioning, Ukraine must utilize programmatic data from MSECs and beneficiaries of social programmes to estimate rehabilitation needs. These data are useful but do not capture the whole picture; they include only those with certified disability, not a wider population who have trouble functioning.

**12. There is a lack of consistent and consolidated information related to rehabilitation:** the lack of uniform and centralized information on rehabilitation workforce, services and utilization limits Ukraine's ability to establish a clear baseline from which stakeholders can develop strategic plans. Similarly, the lack of data collected on the outcomes of rehabilitation prevents a clear understanding of the effectiveness and utility of rehabilitation in restoring or maintaining function.

#### **Rehabilitation service**

**13. Rehabilitation at primary and community levels is negligible:** neglecting this segment of the population reduces follow-up support for rehabilitation provided in inpatient settings and limits the opportunity to treat mild functional limitations outside the secondary and tertiary levels of health care. The absence of rehabilitation at primary and community levels creates a gap in the continuum of care and can result in setbacks from initial rehabilitation gains.

**14. No engagement of rehabilitation workforce in provision of assistive products:** appropriate prescription, fitting and training are all vital steps to ensure the effective use of assistive products for maximum functional gain. If any of these steps are missing or poorly performed, the outcome of care is greatly reduced. The rehabilitation workforce plays a vital role as it has the requisite knowledge and skills to undertake this work. Providing assistive products without the rehabilitation workforce can result in poor outcomes.

<sup>8</sup> The project, funded by the North Atlantic Treaty Organization (NATO), with the Ukrainian Institute for Prosthetics and Rehabilitation, Kharkiv National University of Radio Electronics (KHNURE) and the registered association Human Study eV is described in more detail in section 7.4.5 of this report.

<sup>9</sup> It is important to note that prosthetist and orthotist are not recognized professions in Ukraine. Related terms such as "technician prosthetist" or "engineer-prosthetist" are used in Ukraine, but do not necessarily represent equivalent qualifications. For the purposes of this report, "prosthetics and orthotics specialist" is used as a generic term and largely represents the understanding of "technician-prosthetist" or "engineer-prosthetist".

<sup>10</sup> In Ukraine, there is a training curriculum under biomedical engineering that is not recognized by the International Society for Prosthetics and Orthotics (ISPO).

<sup>11</sup> Ukrainian Research Institute for Prosthetics and Rehabilitation (URIP) feedback on the systematic assessment of rehabilitation situation (STARS) report notes: "the training base at KHNURE [Kharkiv National University of Radio Electronics] is accredited by the Ministry of Education and Science and can be implemented in other universities". This could not be confirmed at the time of preparation of the final draft of the STARS report in June 2021.

**15. Vast number and type of mobility-related assistive products**<sup>12</sup>**:** the Ministry of Social Policy has created an excellent catalogue of assistive products that are available in Ukraine. In fact, the number and type of assistive products is so vast, it creates a challenge for an individual to select the right product for their needs. From a cost perspective, retaining such a diverse inventory of individual products is less desirable than stocking higher volumes of a few standard products, which could increase manufacturing efficiency and reduce costs.

## Key recommendations

To address some of the challenges that Ukraine faces related to rehabilitation, the following recommendations are submitted for consideration.

#### Governance

#### 1. Consolidate rehabilitation leadership and coordination

- It is recommended that the Government of Ukraine:
  - 1.1 establish an intraministerial and interministerial committee to develop and implement a national rehabilitation strategy and serve as a channel for ongoing communication in the sector; and
  - 1.2 develop a national strategy on rehabilitation that involves and includes all relevant ministries, departments and stakeholders.

#### 2. Address gaps in the Law of Ukraine "On rehabilitation in health care" No. 1053-IX<sup>13</sup>

- It is recommended that the Government of Ukraine:
  - 2.1 support multisectoral working groups to create regulatory documents to support the Law; and
  - 2.2 develop by-laws and other necessary documents pertinent to this Law.

#### 3. Clarify information on rehabilitation and rehabilitation-related terminology

- It is recommended that Ministry of Health, Ministry of Social Policy and relevant stakeholders:
  - 3.1 review and amend rehabilitation-related terminology to reflect contemporary and international standards (e.g. health vs. medical; invalidity vs. disability; antiquated terms such as physiotherapist physician, etc.); and
  - 3.2 conduct awareness campaigns to inform the public about modern-day rehabilitation.

#### 4. Strengthen frameworks related to procurement and provision of assistive products

- It is recommended that the Government of Ukraine:
  - 4.1 continue to engage with WHO to assess the assistive technology situation and include assistive technology as part of a national rehabilitation strategy and/or create a substrategy on assistive technology; and
  - 4.2 develop a unified intersectoral system for provision of assistive products starting from the acute rehabilitation phase.

<sup>12</sup> Although there are many mobility-related products, there are no products in Ukraine to optimize communication.

<sup>13</sup> Note: The President of Ukraine signed this Law on 28 December 2020. Details of the Law are not included in this report as this event occurred after the September 2020 assessment. That said, it is relevant to note that some additional actions and support will likely be needed in the implementation of this Law.

#### Financing

#### 5. Identify equitable and efficient financing approaches to scale up rehabilitation services

- It is recommended that Government of Ukraine:
  - 5.1 review existing sources of financing for rehabilitation and compile baseline information on budgeting and expenditures related to rehabilitation in Ukraine; and
  - 5.2 develop financing targets and practices to address rehabilitation needs within and across ministries.

#### 6. Adjust NHSU rehabilitation packages to address limitations encountered during initial launch

- It is recommended that NHSU, the Ministry of Health and relevant stakeholders:
  - 6.1 analyse data and lessons learned from experiences with the NHSU rehabilitation packages;
  - 6.2 incorporate treatment outcome measures within package requirements; and
  - 6.3 consider the type of rehabilitation setting (inpatient or outpatient) and a person's level of functioning when determining funding for rehabilitation services.

#### Human resources

#### 7. Resolve identified challenges related to the rehabilitation workforce

- It is recommended that the Ministry of Health, together with the Ministry of Education and Science and other relevant stakeholders:
  - 7.1 establish the profession of speech and language therapist in Ukraine;
  - 7.2 fully separate the physical therapist and occupational therapist professions at the educational level, with separate master's-level programmes in the two specializations;
  - 7.3 separate physical therapist and occupational therapist in the workforce, with the updated Ministry of Health qualification requirements for both professions;
  - 7.4 clarify details of the prosthetist and orthotist profession in Ukraine and set up an internationally accredited prosthetics and orthotics training programme within Ukraine's education system;
  - 7.5 upskill the estimated 80 000 people trained in physical-therapy-related courses between 1994 and 2018; and
  - 7.6 address existing gaps related to competencies, regulations, licensing and continuing education requirements for existing physical therapy, occupational therapy and prosthetics and orthotics professions, and future speech and language therapist professions.

#### Information

#### 8. Collect national, standardized data on population functioning

It is recommended that the State Statistics Service of Ukraine:
 8.1 incorporate questions on population functioning into the next national census.

#### 9. Expand the eHealth platform to include essential rehabilitation-related information

- It is recommended that the Ministry of Health, State Enterprise "Electronic Health (eHealth)" and NHSU, together with relevant stakeholders:
  - 9.1 develop an essential register for all rehabilitation professionals (not just physicians) or integrate the register of rehabilitation professionals into the existing register system; and
  - 9.2 identify information platforms on rehabilitation that are weak or missing and determine how these gaps may be addressed.

#### **Rehabilitation service**

#### 10. Promote timely rehabilitation interventions across the continuum of health care

- It is recommended that Ministry of Health and NHSU, together with relevant stakeholders:
  - 10.1 encourage expansion of rehabilitation services at primary and community levels;
  - 10.2 incorporate the provision of assistive products within health care, utilizing the rehabilitation workforce in this process; and
  - 10.3 identify or develop an appropriate and standardized outcome measurement tool to capture the results of rehabilitation interventions.

# References

1. WHO and Global Mental Health, University of Washington. Ukraine: WHO Special Initiative for Mental Health situational assessment. Geneva: World Health Organization; 2020 (https://www.who.int/publications/m/item/ukraine---who-special-initiative-for-mental-health, accessed 14 August 2021).

# 1. Background and methodology

# 1.1 International, regional and national developments in rehabilitation

In February 2017, WHO launched the Rehabilitation 2030 initiative and raised a Call for Action (1); this identifies 10 areas for united and concerted action to reduce unmet needs for rehabilitation and strengthen the role of rehabilitation in health. WHO also released the Rehabilitation in health systems guidelines (2), which provide foundational recommendations for strengthening rehabilitation in the health sector and better integrating it across health programmes. This body of work further supported the development of the Rehabilitation in health systems guide for action, released in 2019 (3). Central to WHO guidance is that rehabilitation is a health service for all the population. It should be made available at all levels of the health system, and ministries of health should provide strong leadership to strengthen the health system to deliver rehabilitation and develop rehabilitation strategic plans. Information on the Guide for action and rehabilitation applied to the health system building blocks is provided in Annex 2.

The WHO Regional Office for Europe has a four-year programme (2018–2022) to strengthen access to rehabilitation services and assistive products in the Region, and has identified eastern Europe, central Asia and the Caucasus as a geopolitical priority – regions which include Ukraine.

In Ukraine, attention to rehabilitation has historically been linked with disability:

- Law of Ukraine No. 2961-IV (6 October 2005) "On rehabilitation of persons with invalidity in Ukraine";
- ratification by Ukraine in 2009 of the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD); Article 26 of the Convention references habilitation and rehabilitation;
- technical consultancy<sup>1</sup> to support the development of the National Disability, Health and Rehabilitation
   Plan (NDHRP) in Ukraine (7–11 December 2015).

In recent years (2015-present), there has been an increasing recognition that rehabilitation is for all people, as part of the continuum of health care and within health systems. Evidence of this in Ukraine:

- the names of professions "physical and rehabilitation medicine physician", "physical therapist", "ergotherapist", "assistant of physical therapist", "assistant of ergotherapist" are included in the National Classification of Professions (August 2016 and October 2017);
- the educational profession classification code "physical therapy/ergotherapy"<sup>2</sup> is recognized as "code 227" within the classification of educational health care field "code 22" (February 2017);
- some cadres of the rehabilitation workforce<sup>3</sup> are authorized for employment in hospitals and health care facilities (March 2019);
- The NHSU launches the Programme of Medical Guarantees, which incorporates rehabilitation across many packages and includes three packages of care specific to rehabilitation (April 2020); and
- creation of the Quality of Life Directorate within Ministry of Health that houses an expert group on rehabilitation and sanatorium-resort treatment (operational in August 2020).

The United Nations Sustainable Development Goals (SDGs) are relevant within Ukraine, across the WHO European Region and around the world. Rehabilitation optimizes functioning and plays a fundamental role in achieving SDG 3, "Ensure healthy lives and promote well-being for all at all ages".

<sup>1</sup> Supported by WHO and performed by representatives of the International Society of Physical and Rehabilitation Medicine (ISPRM).

<sup>2</sup> Although occupational therapy is represented by the term "ergotherapy" in Ukraine, the two are used synonymously throughout this report.

<sup>3</sup> Physician for physical and rehabilitation medicine, physical therapist, occupational therapist, physical therapy assistant and occupational therapy assistant.

# 1.2 Methodology

This assessment utilizes a newly developed method and reporting template, launched in 2018 by WHO, called STARS. STARS is not an academic evaluation of rehabilitation, nor is it intended as a detailed analysis. It is a snapshot in time to review rehabilitation status, identify strengths and gaps and create a foundation for creating a national rehabilitation strategic plan.

Discussions between WHO and the Ministry of Health about the STARS process in Ukraine began in 2019. A preliminary step in the STARS process is the host country's completion of the WHO Template for Rehabilitation Information Collection. This questionnaire has eight sections<sup>4</sup> with over 100 questions.

The in-country data collection occurred between 31 August and 11 September 2020. The assessment team comprised Anastasiya Bugnon (WHO Country Office in Ukraine), Andrea Pupulin (WHO consultant specializing in assistive technology) and Susan Eitel (WHO consultant specializing in rehabilitation).

During the first week, data were collected on rehabilitation using the health system building blocks framework (Annex 2). The team conducted focus group discussions, key informant interviews and site visits to health and rehabilitation service sites and training facilities in the Kyiv area (see Annex 3 for a map of Ukraine, Annex 4 for the visit schedule and Annex 5 for participant information). The strengths, weaknesses, opportunities and threats (SWOT) related to rehabilitation in Ukraine were identified (Annex 6).

The Rehabilitation Maturity Model (RMM) is another standard tool used during the STARS process. There are 50 components across seven domains in the RMM. Each component has illustrative descriptors that indicate levels of maturity of rehabilitation in the health system. The RMM provides an overview on the performance of different rehabilitation components. Information collected during the in-country visit phase determined the maturity level for the 50 components. A detailed breakdown of individual components of the RMM is provided in Section 11. Pie charts from the RMM provided a visual aid to supplement preliminary findings in a slide presentation.

Initial assessment findings were discussed with the Ministry of Health on 11 September 2020 and presented to the Ministry in a slide presentation via Zoom on 18 September (details in Annex 7). A second slide presentation via Zoom was shared with over 20 stakeholders on 9 October.

# **1.3 Limitations**

One key limitation of the assessment is that there were no visits outside the capital, Kyiv, visits to primary health facilities or communities, or visits to rehabilitation facilities supported by the Ministry of Social Policy. Travel was kept to a minimum because of the COVID-19 pandemic. Virtual connectivity mitigated this limitation, as it enabled input from stakeholders across Ukraine.

The second limitation is that the template was not completed prior to the in-country assessment. This is likely linked with the high turnover of leadership in the Ministry of Health since mid-2019 (four different ministers between 2019 and September 2020). The rehabilitation expert group within the Ministry of Health began work less than one week before the in-country data collection. Though information from the template is helpful in providing key foundational information for the assessment, most information was gathered through key informant interviews, group discussions and extensive Internet searches and follow-up emails.

<sup>4</sup> These include six sections focused on the health systems strengthening building blocks, plus additional sections on infrastructure and emergency preparedness.

# 2. Introduction to rehabilitation

In July 2019, WHO refined the definition of rehabilitaton based on feedback and experience from rehabilitation professionals worldwide. The 2019 definition recognizes rehabilitation as a highly integrated form of health care for anyone with a health condition<sup>5</sup> that limits functioning. It describes rehabilitation as: "a set of interventions needed when a person is experiencing or is likely to experience limitations in everyday functioning due to ageing or a health condition, including chronic diseases or disorders, injuries or traumas" (4). The 2019 definition captures the essence of rehabilitation and simplifies the definition for communication purposes.

The technical and most widely recognized definition of rehabilitation from WHO is "a set of interventions designed to optimize functioning and reduce disability in individuals with health conditions in interaction with their environment" (4).

Examples of limitations in functioning include difficulties in thinking, seeing, hearing, communicating, moving, maintaining relationships or keeping a job.

Rehabilitation interventions are targeted actions to build muscle strength and improve balance, cognitive ability or communication skills. This skill-building can assist people to perform basic daily activities, such as moving around, self-care, eating and socializing.

Rehabilitation also removes or reduces barriers in society by modifying people's personal home, school or work environments so that they can move around safely and efficiently. In many countries, rehabilitation is closely associated with disability, and sometimes considered a disability service. However, rehabilitation is a health strategy for the entire population, including people with a disability.

Rehabilitation is for all people, forming part of the continuum of health care within health systems. Rehabilitation is important at all levels of the health system (tertiary, secondary, primary and community). For additional information on rehabilitation, see Annex 1.

<sup>5</sup> The term "health condition" refers to a disease (acute or chronic), disorder, injury or trauma. A health condition may also include other circumstances such as pregnancy, ageing, stress or congenital anomaly.

# 3. Country profile, health trends and disability in Ukraine

# 3.1 Ukraine country profile

Including the Crimean peninsula, Ukraine has an area of 603 500 km<sup>2</sup> (233 013 square miles) (5), making it the second-largest country by area in Europe after the Russian Federation and the 46th largest country in the world.

Ukraine is subdivided into 24 oblasts (regions) and one autonomous republic, the Autonomous Republic of Crimea (see Table 1 and map in Annex 3). There are two cities with special status: Kyiv and Sevastopol'. In addition, two areas in eastern Ukraine (Luhans'k and Donets'k) are plagued by an ongoing humanitarian situation that began in 2014.

#### Table 1. Administrative divisions in Ukraine

Administrative division	Number				
Region (oblast)	24				
District (rayon)	490				
Township	882				
Village	28 400				
Source: (6).					

The last census in Ukraine, the All-Ukrainian Population Census, was taken in 2001. It reveals more than 130 nationalities and ethnic groups living in Ukraine; the two largest groups are Ukrainian (77.8%) and Russian (17.3%). Ukraine is a developing country and ranks 88th on the Human Development Index (7).

Ukraine's population is decreasing. In 2001, the total population of Ukraine was 48.5 million (8). According to the State Statistics Service of Ukraine, *Ukraine in Figures 2019*, the total population is 41.9 million.<sup>6</sup> The natural decrease in population in 2019 is 272 300. This figure, coupled with a net increase in migration of 21 500 coming to Ukraine, results in a net decrease in population of 250 800 during 2019.

# 3.2 Health trends and contextual factors

The health context or trends can serve as proxy indicators of demand for rehabilitation services. In Ukraine, health trends or contextual factors include the rise of noncommunicable diseases, an ageing population, the ongoing war in the east, the Chernobyl disaster and the impact of COVID-19.

## 3.2.1 The rise of noncommunicable diseases in Ukraine

The main types of noncommunicable diseases are cardiovascular diseases (e.g. heart attack and stroke), cancers, chronic respiratory diseases and diabetes (9). In Ukraine, noncommunicable diseases are estimated to account for 91% of all deaths (see Fig. 1) (10).

<sup>6</sup> Excluding the temporary occupied territory of the Autonomous Republic of Crimea and the city of Sevastopol.

#### Fig. 1. Mortality estimates in Ukraine



Rehabilitation can help minimize or slow down the disabling effects of chronic health conditions, such as cardiovascular disease, cancer and diabetes, by equipping people with self-management strategies and the assistive products they require, or by addressing pain or other complications (4).

Exercises and/or therapy can help an individual regain the ability to swallow, and upper-limb retraining can help him/her to regain coordination, dexterity and movement of an affected limb following a stroke (4).

#### 3.2.2 Ukraine's ageing population

The world's population is ageing: virtually every country in the world is experiencing growth in the number and proportion of older persons in its population. Ukraine is no exception. Globally, Ukraine ranks 19th among the countries with the largest number of older adults (aged over 65 years) (see Fig. 2) (11). As of 1 January 2019, 23.4% of the population (9 827 110) was aged 60 years and over (12).

Rehabilitation for older adults can help reduce discomfort from conditions like arthritis or osteoporosis. As people age, the potential for neurodegenerative diseases increases. Older people are at risk for falls. Improving balance or modifying a home setting can improve safety and independence and reduce the risk of falls for an older person. Assistive products may be vital to help with seeing, hearing and moving around safely.



#### Fig. 2. Population pyramid in Ukraine 2019

Source: (13).

## 3.2.3 Military operations

According to the Ministry for Veterans Affairs in Ukraine, there are approximately 1 million war veterans, of whom 450 000 come from the current humanitarian situation in Donbas (the Donets'k and Luhans'k regions of eastern Ukraine). In April 2014, an increasingly severe humanitarian situation began in the Donbas area. Since 2014, more than 10 000 people have been killed and 24 000 injured (*14*). Unofficial Government figures<sup>7</sup> for individuals needing rehabilitation and some information on the types of injuries are listed below:

- people needing rehabilitation equipment 1700
  - amputation 345
  - spinal cord injury 368
  - other injuries 987
- people with head injury 1300
- people with psychological trauma needing care 18 000.

In April 2018, the name of the undeclared war in the east of the country, Anti-Terrorist Operation (ATO), was changed to Joint Forces Operation according to the law on de-occupation of Donbas (15).

<sup>7</sup> The Ministry for Veterans Affairs indicated that specific figures would be available with the start of their registry in February 2021.

## 3.2.4 Chernobyl disaster

In April 1986, an explosion at the Chernobyl nuclear power plant (100 km north of Kyiv city) sent vast amounts of radioactive material over large areas of Belarus, Ukraine, the Russian Federation and countries north and west of Ukraine. In Ukraine, 3.2 million people registered as being exposed to radiation; of this number, 1.3 million have died in the last 33 years (*16*). According to the Ministry of Social Policy, there are currently 1 769 442 Chernobyl victims (*17*). The Government of Ukraine allocates US\$ 70 million annually for victims' needs (*16*).

# 3.2.5 COVID-19

The first case of COVID-19 in Ukraine was in early March 2020. As of the end of September 2020, there were over 200 000 cases, with over 4000 deaths (*18*). COVID-19 has affected the health of Ukraine's population, transformed human interactions and impacted every aspect of Ukraine's health system, including rehabilitation. Details are provided in Sections 5 through 9 of this report.

# 3.3 Certified disability

Rehabilitation intersects with the disability sector, as persons with certified disability ("persons with invalidity" in Ukrainian) are a key group who may benefit from rehabilitation. Ukraine has not conducted a disability survey and the most recent census (2001) has no questions on functioning or disability.

Figures on the number of **persons with certified disabilities** in Ukraine are derived from Ministry of Health and Ministry of Social Policy data:

- The Ministry of Health manages the MSECs and the medical advisory commissions (LCCs). Among other roles, these commissions provide a disability ("invalidity") determination; MSECs focus on adults, while LCCs focus on children.<sup>8</sup>
- The Ministry of Social Policy provides social services, assistive products and houses the Pension Fund of Ukraine.

According to consolidated data from the Ministry of Health, the Ministry of Social Policy and the Pension Fund of Ukraine, the number of people with certified disability in Ukraine is gradually increasing. That said, the highest figure reported for persons with disabilities in Ukraine was in 2011. The reason for this temporary increase is unknown.

As of January 2011, Ukraine had 2 709 982 persons with disabilities (6% of the population) (19). As of January 2020, Ukraine has 2.7 million persons with disabilities<sup>9</sup> (5.6% of the population).<sup>10</sup>

Further information and analysis of data collection on functioning and disability determination and statistics can be found in Section 8.1 of the present report.

<sup>8</sup> The framework for the MSECs and LCCs is described in Article 7 of the Law of Ukraine "On rehabilitation of persons with invalidity in Ukraine" of October 6, 2005, No. 2961-IV.

<sup>9</sup> Source: Information received from Ministry of Social Policy by email on 18 October 2020.

<sup>10</sup> Percentage calculated using population figure of 48 457 102 for Ukraine.

4. Overview of Ukraine's health system and rehabilitation stakeholders

# 4.1 Ukraine's health system

The Ministry of Health is the main body in the system of central executive bodies, which ensures the formation and implementation of State policy in the field of health care.<sup>11</sup> The Ministry of Health acts as a coordinating and governing body, while regional health authorities are accountable for implementing Ministry of Health policy and providing health services. Most health services are managed at the regional, district or municipal levels (20). Ukraine has experienced extensive changes within the Ministry of Health; it is noteworthy that the Ministry had four different ministers between 2019 and September 2020.

# 4.1.1 Health system reform

In August 2014, the Ministry of Health initiated the development of the National Health Reform Strategy for 2015–2020. The intention is to reignite health care reform through strategic approaches to improving quality and ensuring access to health care, as well as to mitigate financial risks for the population (20).

In the past five years, Ukraine's health system has experienced transformative changes. In April 2018, a new single purchasing agency, the NHSU, was established (*21*). The first phase of the reform focused on primary health care), In July 2018, the NHSU began contracting with primary health care providers. Primary health care is delivered by 1276 primary health care organizations that include 6323 practices/points of contact in rural (4072) and urban (2251) areas. Primary health care staff include 22 020 physicians, of whom 14 516 are family medicine doctors, 4241 paediatricians and 3308 therapists (internal medicine physicians) (*21*).

The second phase, the Programme of Medical Guarantees, encompasses 31 packages of health care, (including four packages adopted as part of the COVID-19 response), targeting secondary and tertiary care facilities. Additional information can be found in Section 6.1.

# 4.1.2 Hospitals/beds

The CMS lists 295 107 hospital beds in Ukraine; see Table 2. In Ukraine, the ratio of hospital beds and hospital staff per 100 000 population is at least 30% higher than in comparator countries (*21*). Previously, hospital funding was based on numbers of beds and staff, but this has changed with the reform. Since 2020, "money follows the patient" – health facilities are paid for the services they provide, not the beds or staff that they have.

The CMS notes there are 1640 hospitals in Ukraine, of which 1377 come under the Ministry of Health; see Table 3. Ukraine has an oversized hospital sector, with almost twice as many hospitals as other countries in the region (e.g. 4.2 hospitals per 100 000 population in Ukraine, 2.3 in Estonia, 2.8 in Poland and 2.9 in the United Kingdom) (*21*).

<sup>14</sup> 

<sup>11</sup> See Ministry of Health website: https://moz.gov.ua.

Table 2. Number of hospitals an	nd beds in Ukraine
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Number of hospitals	Number of beds	Number of beds for rehabilitation
1377	270 727	2518
116	21 068	218
147	3312	42
1640	295 107	2778
	1377 116 147	1377     270 727       116     21 068       147     3312

Source: Information from Center for Medical Statistics in email dated 25 September 2020.

#### Table 3. Number and type of hospitals under the Ministry of Health in Ukraine

N⁰	Type of hospitals	No. of hospitals
1	Regional hospitals	25
2	Children's regional hospitals	28
3	City hospitals	283
4	Children's city hospitals	49
5	City outpatient hospitals	13
6	Hospitals for the military	30
7	Specialized hospitals	98
8	Central district hospitals	436
9	District hospitals	89
10	Maternity hospitals	71
11	Clinics of research institutes	15
12	Leprosariums	1
13	Psychiatric hospitals	60
14	Narcological hospitals	3
15	Hospice hospitals	11
16	Other hospitals	8
17	Dispensaries with hospitals	157
	TOTAL	1377

Source: Information from Center for Medical Statistics in email dated 25 September 2020.

## 4.1.3 Ministry of Health staffing

There is a growing crisis in human resources for health care in Ukraine (see Table 4). The Ministry of Health identified the main reasons as the natural loss of human resources through ageing and migration (all Ministry of Health staffing information obtained from (22)).

#### Table 4. Health workers in Ukraine per 1000 population, selected years

	1990	1995	2000	2005	2010	2011	2012	2013
Doctors, total	4.3	4.4	4.6	4.8	4.9	4.9	4.8	-
Public health specialists (Sanepid)	0.2	0.2	0.2	0.2	0.2	0.2	0.04	-
Doctors practising clinical medicine, of which:		3.0	3.0	3.0	3.5	3.5	3.5	_
<ul> <li>Primary care physicians</li> </ul>			0.5	0.5	0.5	0.5	0.5	0.5
- Medical scientists		0.3	0.3	0.3	0.3	0.3	0.3	-
Mid-level health personnel	11.8	11.7	11.0	10.6	10.2	10.1	9.7	_
Nurses (including midwives and <i>feldshers</i> )	8.4	8.4	7.9	7.9	8.5	8.4	8.5	_

Source: adapted from (22).

### 4.1.4 Ministry of Health structure

The Ministry of Health structure comprises one Minister, seven deputy ministers, nine directorates and five departments (see Fig. 3). The Quality of Life Directorate became operational in August 2020. It has four expert groups (23) on the topics of:

- palliative care
- psychiatric service reform
- medical rehabilitation and sanatorium treatment and
- medical and social examination.

Other directorates that intersect with rehabilitation include:

- directorate of medical staff, education and science (human resources, continuing education); and
- directorate for the development of digital transformation in health care (encompasses an expert group on the implementation of the electronic health care system).


### Fig. 3. Organizational chart of Ukraine's Ministry of Health (September 2020)

\*The Cabinet of Ministers appointed Liashko as Deputy Minister – Chief State Sanitary Doctor of Ukraine \*\* Health department of Regional Health administration (RSA) has a double subordination to the RSA and Central executive bodie: \*\*\* Cross-cuting coordination of Health department of RSA splitted between Deputies

CPD: continuing professional development; EMC: emergency care; HR: human resources; MOH: Ministry of Health; PHC; primary health care. Source: Deloitte Consulting LLP PowerPoint presentation; September 2020, "Ministry of Health of Ukraine structure and subordinate". Presentation was developed under USAID Health Reform Support Project, Ukraine.

## 4.2 Key ministries involved in rehabilitation

The Ministry of Health and Ministry of Social Policy are the two ministries that provide the bulk of oversight and direct engagement in rehabilitation-related work.

Within the Ministry of Health structure, the Quality of Life Directorate coordinates issues related to rehabilitation. The Ministry of Health regulation (as amended by the Cabinet of Ministers Resolution No. 90, dated 24 January 2020) provides information on the structure; reportedly, the Ministry of Health has issued a decree on the Directorate and a decree on the expert group.<sup>12</sup>

According to the Ministry of Health,<sup>12</sup> its role related to rehabilitation includes:

- organizing and providing medical rehabilitation services
- organizing health workforce training
- medical services standardization
- licensing and accreditation for health facilities offering medical rehabilitation services
- coordinating the activities of municipal executive authorities related to rehabilitation activities
- introducing innovation to the services
- awareness-raising.

In addition, the Ministry of Health is responsible for the funding and oversight of the LCCs and MSECs. There are 363 MSECs employing 1400 doctors; data on the total number of MSEC staff were not available.

<sup>12</sup> Source: information provided by the Ministry of Health during the governance group discussion, 31 August 2020.

The Ministry of Social Policy is the central executive body that ensures the formation of State policy in the field of protection of the rights of persons with disabilities (24). The Ministry of Social Policy role in rehabilitation includes, but is not limited to: assistive technology (procurement, product, policy and provision), rehabilitation centres for persons with disabilities (including children); and early identification/early intervention (EI) for children needing rehabilitation or social services.

The Ministry of Social Policy structure (25) has three key directorates involved in rehabilitation-related activities:

- Directorate for the Development of Social Services and Protection of Children's Rights
  - Expert Group on Early Intervention<sup>13</sup>
- Directorate for Social Protection of the Rights of Persons with Disabilities
  - Expert Group on Rehabilitation
  - Expert Group on Social Guarantees for Persons with Disabilities
- Directorate of Targeted Social Support of the Population and Development of Social Inspection
  - Expert Group on Social Assistance.

## 4.3 Other stakeholders in rehabilitation

In addition to the Ministry of Health and Ministry of Social Policy, other ministries that play a role in rehabilitation are the Ministry of Defence and Ministry of Education and Science, Directorate of Higher and Adult Education; see Section 7.2.

The Ministry of Internal Affairs, the Ministry of Transport and Communications and the Ministry of Defence provide health services directly for the employees of these departments and their families. There were no meetings with, or data collected from, these ministries during the STARS process.

Besides private service providers, international organizations and nongovernmental organizations also form part of the rehabilitation landscape. Some key intervention areas include workforce capacity-building (short courses outside Ukraine, in-country training programmes, and curriculum development), provision of assistive products, facilitation of dialogue and other actions.

The donor landscape for rehabilitation in Ukraine is varied. The following donors were identified during the assessment.

**USAID**: Since 2015, USAID has invested over US\$ 4.4 million in the mental health sector in Ukraine to improve the mental health of veterans and members of their families, and about US\$ 4.5 million in the rehabilitation of individuals with stroke, brain trauma and spinal cord injury; US\$ 500 000 was allocated by USAID/Ukraine. USAID is planning to invest US\$ 5 million in the rehabilitation sector over the period of five next years, subject to availability of funds.<sup>14</sup>

The **NATO Support and Procurement Agency (NSPA)/NATO Trust Fund** covers support for patients and a systems strengthening programme. The programme runs from March 2016 to March 2021, with a budget of 2.25 million euros (US\$ 2.65 million).<sup>15</sup> The systems strengthening includes provision of medical rehabilitation equipment for five hospitals, a modular swimming pool for URIP, and enhancement of the competencies of professional staff involved in physical and psychological rehabilitation – including prosthetics and orthotics.

<sup>13</sup> Source: Ministry of Social Policy meeting, Kyiv, 10 September 2020.

<sup>14</sup> Source: email from USAID/Ukraine, 18 September 2020.

<sup>15</sup> Source: Dr Frederic Peugeot, Partnership for Peace Section Chief, Medical Rehabilitation Trust Fund, NSPA.

# 5. Rehabilitation governance

### Overview of key components and their status

Key components	Status
Rehabilitation legislation and policies	Ukraine ratified the UNCRPD in 2009. There is a Law "On rehabilitation of persons with invalidity in Ukraine" (2005) and efforts to pass a draft law on rehabilitation. There are extensive rehabilitation-related policies.
Rehabilitation strategic plan	An official rehabilitation strategic plan has not yet been developed, although the NDHRP is referenced in some publications (26).
Leadership and coordination	There is little evidence of interministerial coordination on rehabilitation. The Ministry of Health and Ministry of Social Policy each have a dedicated expert group on rehabilitation in their organizational structure, which creates an opportunity for change.
Rehabilitation reporting and accountability	Although some data are collected on rehabilitation, there is no evidence of information collected about performance or outcomes of rehabilitation.
Regulatory mechanisms	The Ministry of Health and Ministry of Social Policy each have regulatory mechanisms for rehabilitation.
Assistive technology	WHO-supported assistive technology assessment from March to September 2020.

## 5.1 Rehabilitation legislation and policies

Ukraine has an abundance of legislation and policies related to rehabilitation. Illustrative examples of achievements and developments in legislation and policies related to rehabilitation are presented in the following five sections: disability, health reform, workforce, assistive products and mental health.

### 5.1.1 Disability and rehabilitation

Ukraine signed the UNCRPD and its Optional Protocol on 24 September 2008. The Verkhovna Rada of Ukraine ratified these two acts on 16 December 2009, and the UNCRPD entered into force on 6 March 2010. Article 26 of the Convention references habilitation and rehabilitation. The Cabinet of Ministers of Ukraine approved State Programme No. 706 (1 August 2012), "National action plan to implement the Convention on the Rights of Persons with Disabilities until 2020" (27).

The 2005 Law "On rehabilitation of persons with invalidity in Ukraine" (No. 2961-IV), and its subsequent revisions provides extensive guidance on aspects related to disability and rehabilitation. In recent years, drafting of the law "On rehabilitation of people with disabilities" (known as "the draft law" in colloquial terms) has been initiated. Ministry of Health Order No. 2524 (18 December 2019) established an interdepartmental multidisciplinary working group to work on this issue. The draft law was registered in Parliament (16 June 2020) and passed its first reading on 3 July 2020. Feedback on the draft law was provided during consultations in the STARS process (through a meeting with the relevant parliamentarian).<sup>16</sup>

The NDHRP for Ukraine is not an official document. The WHO Country Office in Ukraine, together with representatives of the ISPRM conducted an assessment to support the development of a national disability, health and rehabilitation plan. The report identified actions and projects to improve the health functioning and quality of life for all persons with disabilities in Ukraine – these are commonly referred to as the NDHRP.

<sup>16</sup> As noted previously in this report, there were further developments in the Law that evolved after September 2020. Specifically, the name of the Law was changed to Law "On rehabilitation in health care" (No. 1053-IX); it was signed by the President of Ukraine on 28 December 2020 and entered into force on 31 December 2020.

### 5.1.2 Health reform and rehabilitation

The National Health Reform Strategy for Ukraine (2015–2020) (28) provides broad guidance in four strategic directions: service delivery, health financing, stewardship/governance and essential health system inputs (workforce and information management). Of the four strategic directions, health financing reform has the most direct link with rehabilitation, as the Programme of Medical Guarantees includes three separate packages for rehabilitation (see Sections 6 and 9 for additional detail).

Key legislation in health financing reform is summarized in Table 5.

### Table 5. Key developments in health financing reform

Month/year	Development	
November 2016	Health financing strategy articulated as a concept paper and approved by Cabinet of Ministers (29)	
March 2017	Affordable Medicines Programme (30)	
October 2017	Law of Ukraine "On Government financial guarantees of public medical services" (31)	
December 2017	Establishment of the NHSU (32)	
April 2019	Reimbursement for the Affordable Medicines Programme is managed by NHSU	
April 2020	Programme of Medical Guarantees is fully operational (including rehabilitation packages)	

### 5.1.3 Rehabilitation workforce

Since 2015<sup>17</sup> there has been extensive progress for three professions in the rehabilitation workforce in Ukraine: physical and rehabilitation medicine, physical therapy and occupational therapy/ergotherapy. Table 6 provides a chronology of key developments.

Table 6. Key developments for physical and rehabilitation medicine, physical and occupational therapy (ergotherapy)

Month/year	Development	
April 2015	Physical rehabilitation training shifts from education code (01) to health code (22) (33)	
August 2016	Physical and rehabilitation medicine, physical therapy, occupational therapy are added to classifications of professions (Ministry of Economic Development) ( <i>30</i> )	
October 2016	First version of tasks, responsibilities, qualification requirements are listed for physical and rehabilitation medicine, physical therapy, occupational therapy (34)	
October 2017	Physical therapy assistant and occupational therapy assistant are added to classification of professions (Ministry of Economic Development) (35)	
November 2018	Separation of specialization programmes at master's level for occupational therapy and physical therapy are allowed (32)	

17 Largely linked to the recommendations stemming from the ISPRM technical consultancy supported by WHO.

21

### Table 6. contd.

Month/year	Development	
December 2018	Joint bachelor's degree standard for higher education in "physical therapy/occupational therapy" is approved (36)	
December 2018	Tasks, responsibilities, qualification requirements are listed for physical and rehabilitation medicine specialist, physical therapist, occupational therapist, physical therapy assistant and occupational therapy assistant (37)	
March 2019	Physical and rehabilitation medicine is added to the list of medical specializations (124 in total) (38)	
March 2019	Physical and rehabilitation medicine specialist, physical therapist, occupational therapist, occupational therap therapy assistant can be employed in hospitals and health care facilities ( <i>39</i> )	

### 5.1.4 Assistive products

The Ministry of Social Policy has clear authority and responsibility for the production and provision of assistive products<sup>18</sup> in Ukraine. Although there are multiple policies and regulations in this area, the three main guiding documents are summarized in Table 7.

Table 7. Key policy or regulatory documents related to assistive products in Ukraine

Paraphrased description of content	
Procedure for providing technical and other means of rehabilitation (assistive products) (40)	
Guidance on prescription of assistive products (42)	

### 5.1.5 Mental health

Information on mental health is captured in the Cabinet of Ministers of Ukraine Order No. 1018 (27 December 2017) "Concept for the development of mental health care in Ukraine for the period up to 2030" (43).

## 5.2 Rehabilitation leadership, planning and coordination

The newly established Quality of Life Directorate (within the Ministry of Health) has four expert groups, of which one is specific to rehabilitation. This new structure provides a key opportunity to serve as the hub for rehabilitation information and advocacy work within the Ministry of Health and as a focal point for collaboration across ministries.

<sup>18</sup> The English translation for Ukrainian references to assistive products is "technical and other means of rehabilitation".

Within the Ministry of Social Policy, the Directorate for Social Protection of the Rights of Persons with Disabilities houses the Expert Group on Rehabilitation. Ministry of Social Policy Order No. 97 (7 February 2020) outlines the strategic plan for the period 2020–2022. Two goals relate to rehabilitation for persons with disabilities:

- improving the system of providing technical and other means of rehabilitation and
- improving the system of providing rehabilitation services.

In addition to Ministry of Health and Ministry of Social Policy, other ministries and stakeholders have a role in rehabilitation (described in Section 4.3 of this report). To date, there is very little evidence of interministerial leadership, planning or coordination related to rehabilitation. During group discussions, the team heard explanations of the way that cross-ministerial approval is required for different laws; this is not the same as proactive engagement and planning. As at August 2020, the Ministry of Health and Ministry of Social Policy each have expert groups on rehabilitation as part of their ministerial structures. These focal points provide a strong foundation on which to build constructive dialogue and set the scene for increased coordination in the sector.

## 5.3 Rehabilitation accountability, reporting and transparency

Reporting on rehabilitation service delivery is conducted through the Ministry of Social Policy's list of assistive products that are provided during the year and NHSU's general information on facilities that have contracts to provide the three rehabilitation packages within the Programme of Medical Guarantees. There are no centralized data on the performance of rehabilitation, nor on the outcomes of rehabilitation interventions.

### 5.4 Regulatory mechanisms

Ukraine has an abundance of regulatory mechanisms at facility level. The Ministry of Education and Science regulates education facilities, Ministry of Health regulates health facilities, NHSU regulates providers who receive funding and the Ministry of Social Policy regulates enterprises that manufacture, supply and repair assistive products.

Apart from physical and rehabilitation medicine doctors, the rehabilitation workforce is unregulated (see Table 17 in Section 7.6).

### 5.5 Assistive products

There are extensive resources and guidance documents related to assistive technology. Some of the regulatory documents are presented in Table 7. The Ministry of Social Policy is committed to improving the situation of provision of assistive products and has been actively engaging with the assistive technology consultant of the WHO European Region since March 2020. Initial findings are expected in December 2020, and a detailed report on the assistive technology situation in Ukraine is forthcoming.

## 5.6 Impact of COVID-19

Physical and occupational therapy are very new professions within the health care system, and are not usually included in the various orders or regulation documents of the Ministry of Health. For example, on 3 September 2020, the Ministry of Health submitted Order No. 2021 "On approval of the list of types of health care facilities and the list of positions of medical and other employees for whom salary supplements are set for medical and other health care workers who provide medical care to patients with acute respiratory disease COVID-19 caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), and those who ensure the livelihood of the population, entitled to the establishment of a surcharge on wages from September 1, 2020 to December 31, 2020". The list of medical and other health care workers includes doctors of physical and rehabilitation medicine and nurses of remedial gymnastics and massage. Physical and occupational therapy are not included (*44*).

WHO has published Rehabilitation considerations during the COVID-19 outbreak, which provides guidance at a systems level for ministries of health (45).

#### Summary of rehabilitation governance situation

- Ukraine ratified the UNCRPD, has a Law "On rehabilitation of persons with invalidity in Ukraine" (2005), and has
  drafted another law "On rehabilitation of people with disabilities", which has been reviewed by Parliament.
  Following the mission, a new Law "On rehabilitation in health care" (No. 1053-IX) entered into force on 31
  December 2020.
- The Ministry of Health and Ministry of Social Policy each host an expert group on rehabilitation. These dedicated structures serve as the focal point for rehabilitation within each ministry.
- There is little or no evidence of systematic coordination in rehabilitation between Government ministries. Interaction is ad hoc and limited to reviews mandated in the process of passing new laws.
- There is no national strategic plan for rehabilitation.
- Since 2015, there have been extensive developments in health reform and key advances in health workforce
  recognition and training; both have had an impact on the availability of rehabilitation and improved
  rehabilitation standards.
- In legal documents, rehabilitation-related terminology is varied and evolving. A mix of modern terms (e.g. physical therapy, physical and rehabilitation medicine) are used concurrently with more antiquated terms (e.g. nurses of remedial gymnastics, therapist physician, physiotherapist physician).
- There is no reporting on the performance of rehabilitation in health systems.
- Only medical doctors are licensed and required to undertake continuous professional development. Other rehabilitation professions have no regulatory standards. Logopeds and prosthetists/orthotists are not recognized by the Ministry of Health.
- Ukraine has many guiding frameworks for the procurement and provision of assistive products; most of this
  guidance stems from the Ministry of Social Policy.
- The Ministry of Social Policy, with support from WHO, is currently assessing the situation of assistive technology in Ukraine. Initial findings from the assessment are expected in December 2020.
- Ukraine has an extensive list of available assistive products, but a reduced list of priority assistive products has not yet been developed.

# 6. Rehabilitation financing

### Overview of key components and their status

Key components	Status
Mechanisms for rehabilitation financing	Public financing for rehabilitation is primarily through NHSU, Ministry of Social Policy and Ministry of Health.
Rehabilitation expenditure	Social insurance expenditure on rehabilitation services in 2019 was 405 million Ukrainian hryvnia (UAH).
Rehabilitation expenditure as a proportion of total health expenditure	Could not be determined at the time of writing this report.
Assistive product expenditure	According to Ministry of Social Policy, expenditure is approximately US\$ 70 million.
Out-of-pocket costs for rehabilitation	Could not be determined at the time of writing this report.

## 6.1 Mechanisms for health (and rehabilitation) financing

Rehabilitation financing is varied. The main governmental mechanisms for health and rehabilitation financing are through the NHSU, Ministry of Social Policy and Ministry of Health.<sup>19</sup> International donors and organizations also provide support for rehabilitation. According to the 2020 statement of income and expenses of 34 health care providers, 50.6% of revenues (cash/non-cash) for rehabilitation come from NHSU, 30% from subnational budgets, 6.8% from charity, 6.3% from paid services and insurance payments, and 5.4% from other sources (46).

### 6.1.1 NHSU

In October 2017, the Ukraine Parliament adopted the new health financing Law "On Government financial guarantees of public medical services" (Law 2168-VIII) (*31*) and a package of related by-laws (*21*). The Law stipulates that the benefits package will cover provision of emergency, primary, secondary, tertiary, palliative, rehabilitation, child, pregnancy and childbirth health care and associated medicines.

The NHSU was created in 2018. It began its operations as a single purchaser of health services, with a focus on primary health care. Contracts with primary health care providers began in June 2018; as of May 2019, the NHSU contracted 1276 primary health care providers (*21*). Since April 2019, the NHSU has also administered the Government's Affordable Medicines Programme and has contracted over 1000 pharmacies.

NHSU began implementing the Programme of Medical Guarantees in April 2020. The Programme covers 31 health benefit packages, of which three are specific to rehabilitation: medical rehabilitation for children aged 0–3 years, persons with neurological conditions and persons with musculoskeletal conditions.

The total NHSU budget for 31 packages is UAH 89.5 billion (US\$ 3.3 billion).<sup>20</sup> The budget for the three rehabilitation packages is UAH 1.2 billion (US\$ 42.3 million);<sup>21</sup> about 1.3% of the Programme of Medical Guarantees budget.

<sup>19</sup> Note that this report does not cover health care facilities under Ministry of Defence, Ministry of Internal Affairs, Security Service or Ministry of Transport and Communication – all have their own health care facilities.

<sup>20</sup> Information provided during the focus group on finance during the STARS assessment in 2020.

<sup>21</sup> Other packages make provision for rehabilitation, but these costs are not included in the UAH 1.2 billion.

NHSU provides UAH 6500 (US\$ 230) per patient for all rehabilitation packages.<sup>22</sup> This amount is fixed. It is not dependent on the number of rehabilitation services provided nor the duration of inpatient care. Each facility calculates the number of patients expected in the year and multiplies this by UAH 6500. For each rehabilitation package, the NHSU requires a rehabilitation workforce to be available and requires a statement of the necessity for a multidisciplinary rehabilitation team, basic equipment, goal-setting principles and use of the International Classification of Functioning, Disability and Health (ICF) (*47*).

To facilitate equal access to services, the NHSU contracted facilities from every region in Ukraine; see Table 8 for summary information.

No.	Administrative territories	Total	Number of contracts for the rehabilitation packages			
		suppliers	Neurological	No.	Administrative territories	Total suppliers
1.	Cherkasy region	8	7	7	3	17
2.	Chernihiv region	7	6	4	0	10
3.	Chernivtsi region	6	6	4	1	11
4.	Crimea, Autonomous Republic of	0	0	0	0	0
5.	Dnipropetrovs'k region	24	19	19	5	43
6.	Donets'k region	5	4	5	1	10
7.	Ivano-Frankivs'k region	14	13	11	2	26
8.	Kharkiv region	10	8	8	4	20
9.	Kherson region	5	5	5	1	11
10.	Khmelnytsky region	7	6	7	1	14
11.	Kirovohrad region	9	7	9	2	18
12.	Куіv	26	18	25	8	51
13.	Kyiv region	5	5	3	1	9
14.	L'viv region	16	15	15	6	36
15.	Luhans'k region	5	4	4	2	10
16.	Mykolayiv region	2	1	2	0	3
17.	Odessa region	13	11	11	3	25
18.	Poltava region	9	9	8	2	19
19.	Rivne region	8	6	8	2	16
20.	Sevastopol'	0	0	0	0	0
21.	Sumy region	11	8	10	1	19
22.	Ternopil region	10	10	9	4	23
23.	Vinnytsya region	14	11	13	4	28
24.	Volyn region	9	9	9	3	21

#### Table 8. NHSU medical guarantees programme - packages specific to rehabilitation

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<sup>22</sup> This sum was calculated with support from WHO for a cost-analysis activity in 2015, together with data from international partners for average costs of rehabilitation cases.

### Table 8. contd.

No.	Administrative territories	Total	Number of contracts for the rehabilitation packages			
		suppliers	Neurological	No.	Administrative territories	Total suppliers
25.	Zakarpattya region	13	6	7	2	15
26.	Zaporizhzhya region	14	12	14	3	29
27.	Zhytomyr region	6	6	6	2	14
Total	Ukraine contracts	250	212	223	63	498

Source: graph constructed from NHSU data (48).

The number of rehabilitation suppliers (250) represents about 8% of the total number of suppliers contracted by NHSU (3097). Similarly, the 498 rehabilitation contracts represent about 7% of the total number of contracts signed with NHSU (6801) (48).

### 6.1.2 Ministry of Social Policy

Within the Ministry of Social Policy, the main financing methods for supporting rehabilitation and persons with disabilities are through the pension fund, social insurance and three national programmes related to rehabilitation.

The annual budget for the Ministry of Social Policy pension fund is about UAH 200 billion (over US\$ 7 billion).

Social insurance provides medical and social services for insured persons. Social insurance covers expenses for those who are employed – not for the unemployed nor for retirees.

The 2019 budget for social insurance is UAH 29 billion (US\$ 1.022 billion):

- of which UAH 438 million (US\$ 15.5 million) is for rehabilitation services (for 35 000 people)
- of which UAH 54 million (US\$ 1.9 million) is for assistive products (for 6000 people).

The Ministry of Social Policy budget for three national programmes related to rehabilitation amounts to UAH 1.365 billion (over US\$ 48 million). A breakdown of the budget is provided in Table 9.

Table 9. Ministry of Social Policy 2019 budget for three national programmes related to rehabilitation

No.	Description	UAH	US\$
1+2+3	Total budget for three national programmes related to rehabilitation	1 365 000 000	48 135 546
1	Rehabilitation	1 200 000 000	42 316 980
1.1	Social Protection Fund for Persons with Disabilities	1 000 000 000	35 264 150
1.1a	Assistive products	850 000 000	29 974 257
1.1b	Treatments (approx. 20 sites), eight rehabilitation centres, sanatoriums, producers	150 000 000	5 289 622
1.2	Special fund (penalties from disability quota) for eight rehabilitation centres	200 000 000	7 052 830

### Table 9. contd.

No.	Description	UAH	US\$
2	Social Protection Fund for Children with Disabilities	130 000 000	4 584 339
3	Research – prosthetics, orthotics, innovation in assistive technology paid to URIP (Kharkiv)	35 000 000	1 234 245

Source: Information provided by the Ministry of Social Policy during group discussion on finance – STARS assessment, Kyiv, 1 September 2020.

### 6.1.3 Ministry of Health

Ukraine's consolidated budget spending on health care reached UAH 175.8 billion in 2020 (UAH 124.9 billion central budget expenditure and UAH 50.9 billion local budget expenditure) (49).

Ukraine allocated UAH 114 billion for health care services in 2020 (28). According to WHO Global Health Expenditure Database, Ukraine's out-of-pocket expenditure as a percentage of current health expenditure was 49.23% in 2017 and 49.35% in 2018 (50).

Consolidated data on budgeting or expenditure related to rehabilitation were not available during the assessment. Information on expenditure for medical devices is provided in Section 6.3.

## 6.2 Rehabilitation expenditure

There are no available data from the Ministry of Health on rehabilitation expenditure. Two data sources on rehabilitation expenditure that were provided were social insurance and NHSU:

- social insurance: rehabilitation expenditure in 2019 is UAH 405 million (of UAH 438 million budget);
- in the nine months preceding the team's visit (January–September 2020) NHSU spent 1.5% of its UAH 1.2 billion budget.

## 6.3 Assistive product expenditure

According to the Ministry of Social Policy,<sup>23</sup> the amended budget for assistive products in 2019 is UAH 1997 million (US\$ 70 million). The total amount spent was UAH 1965.645 million (just under US\$ 70 million):

- assistive products themselves UAH 1904.945 million
- services (not disaggregated from product costs)
- repairs UAH 43.6 million
- reimbursement for self-purchased products UAH 17.1 million.

For medical devices, the Ministry of Health collects data annually through form 37 (Ministry of Health Order No. 109 (12/03/13)). This form lists 33 products, of which five are related to rehabilitation. In 2019, the Ministry of Health spent UAH 258 482 924 (US\$ 9.2 million) on these medical products; about 13% of this sum is related to rehabilitation. See Table 10.

<sup>23</sup> Source: email from the Ministry of Social Policy to the WHO European Region assistive technology consultant.

Device description	Total delivered	Total cost in UAH	Total cost in US\$
Cochlear implant	33	18 211 280	646 810
Hearing aid	2849	12 033 415	427 390
Male urinary product	76 230	1 848 386	65 649
Female urinary product	11 915	217 444	7722
Absorbent pads – women	94 548	772 705	27 444
TOTAL	185 575	33 083 230	1 175 015

### Table 10. Medical devices provided by Ministry of Health in 2019 that relate to rehabilitation

Source: Completed form 17 (for 2019) was shared with the WHO European Region assistive technology consultant on 6 November 2020.

## 6.4 Out-of-pocket costs for rehabilitation

The team was unable to determine out-of-pocket costs, as there are no detailed data available or obtained on the out-of-pocket costs for rehabilitation during the time of writing of this report.

## 6.5 Impact of COVID-19

From April 2020, Parliament restricted funding for rehabilitation after surgery or grave disease owing to the pandemic. The NHSU has paid one ninth of the fixed amount of estimated cost of service for each facility contracted, regardless of the number of treatments provided. Rehabilitation services started to open up again in July 2020. Additionally, the NHSU created four new packages specific to COVID-19, raising the total number from 27 packages to 31.

### Summary of rehabilitation financing situation

- Ukraine's State budget related to rehabilitation is over US\$ 100 million each year.
  - Ukraine's National Health Service (NHSU) includes three rehabilitation packages with an annual budget of approximately US\$ 42 million.
  - The Ministry of Social Policy's social insurance fund (2019) budgeted over US\$ 15 million for rehabilitation services, of which nearly US\$ 2 million is specifically allocated to assistive products.
  - The Ministry of Social Policy also has three national programmes related to rehabilitation with an annual budget of approximately US\$ 48 million.
  - The Ministry of Health budget for rehabilitation was not available.
- The NHSU has established a standard tariff for the rehabilitation packages. This rate may be adequate for some pathologies, but may not cover the requisite services for other individuals within the same group. (Example: a person treated for a spinal cord injury versus a person with a peripheral nerve injury.)
- Assistive products are not included in the NHSU packages other than for training purposes within the facility.
- International organizations and donors provide rehabilitation support through various means: equipment donations, capacity-building and technical guidance.
- Out-of-pocket costs for rehabilitation are difficult to determine owing to a lack of available data at the time of writing this report.

7. Rehabilitation human resources and infrastructure/ equipment

### Overview of key components and their status

Key components	Status
Total number of rehabilitation personnel	Lack of comprehensive information consolidated at central level makes this difficult to determine.
Number of rehabilitation personnel per 10 000 population	The ratio of physical rehabilitation medicine doctors is 2.5/10 000 population. Data on other rehabilitation personnel are not yet standardized, centralized or consistent.
Distribution of rehabilitation personnel across geographical areas	Data available from the CMS and general numbers from the NHSU. No other information is collected at central level.
Licensure and regulations for rehabilitation personnel	Physical and rehabilitation medicine is regulated; licensure is currently not required for physical therapy, occupational therapy or other rehabilitation workers. Logopeds and prosthetics and orthotics are not regulated or recognized by Ministry of Health. speech and language therapist profession does not yet exist in Ukraine.
Rehabilitation infrastructure/equipment	Some minimum standards for rehabilitation equipment exist within the NHSU rehabilitation packages.

## 7.1 Rehabilitation workforce context in Ukraine

Terminology applied to the rehabilitation workforce<sup>24</sup> in Ukraine is varied and evolving. A mix of modern, internationally recognized terms (e.g. physical therapy, physical rehabilitation medicine) and more antiquated terms (e.g. treatment gymnastics, therapist physician) are used concurrently within the National Classifier of Professions (*51*) and other official documents.

In terms of numbers alone, graduates from Ukraine's physical therapy-related programmes dominate the sector. Since 1994, an estimated 80 000 people have been trained in specialist "physical rehabilitation" by 60–70 different universities in Ukraine.<sup>25</sup>

Since 2015, there have been extensive advances in the Ministry of Health's recognition of physical and rehabilitation medicine, physical and occupational therapy professions (see Section 5). Educational standards and opportunities for physical and rehabilitation medicine, physical therapy, occupational therapy and prosthetics and orthotics have also benefited from increased attention and support in recent years.

Unfortunately, speech and language therapy has not been included in these efforts, as the profession does not exist in Ukraine. Logopedy continues to be anchored in the education system, with little attention paid to integrating it into the health sector. Similarly, the prosthetics and orthotics profession is linked with social services; technician-prosthetists or engineer-prosthetists are not recognized by the Ministry of Health, and their employment remains within the framework of the Ministry of Social Policy.

<sup>24</sup> Though no specific definition is provided, WHO notes: "There are a broad range of health professionals who provide rehabilitation interventions, including physiotherapists, occupational therapists, speech and language therapists, orthotic and prosthetic technicians, and physical medicine and rehabilitation physicians" (Source: Rehabilitation. In: World Health Organization [website]. Geneva: World Health Organization; 2021 (https://www.who. int/news-room/fact-sheets/detail/rehabilitation, accessed 14 August 2021).

<sup>25</sup> Source: rehabilitation workforce group discussion in Kyiv, 2 September 2020.

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## 7.2 Rehabilitation workforce training

### 7.2.1 General framework

The Ministry of Health and the Ministry of Education and Science are the two ministries involved in health workforce training. The Ministry of Health is responsible for undergraduate medical training and postgraduate medical specializations and continuing professional development, while the Ministry of Education and Science (Directorate of Higher Education and Education for Adults) is engaged in the following aspects of training:<sup>26</sup>

- training workforce for rehabilitation system (undergraduates)
- defining medical specialties
- development of standards of education (bachelor's degree, master's degree, PhD degree)
- appraisal (minimum level of qualification).

The code applied to the field of study generally directs the graduate to the sector where they will be employed. From 1999 to 2015, the predecessor of the current physical therapist and orthotist (collectively known as "specialist of physical rehabilitation") was coded within the education sector, and graduates were part of the Ministry of Social Policy's list of professionals. Graduates were not authorized to work in hospitals or health facilities. This changed in 2015, when the field of study for physical and occupational therapy moved from education to health. See Table 11 for details.

### Table 11. Fields of study and programme subject areas in higher education in Ukraine

Rehabilitation workforce	Field of study (general code)	Code	Educational specialty
Medical doctor	Health care (22)	222	Medicine
Nurse	Health care (22)	223	Nursing
Physician-psychologist	Health care (22)	225	Medical psychology
Psychologist	Social and behavioural sciences (05)	053	Psychology
Physical therapist	Health care (22)	227	Physical therapy, ergotherapy
Ergotherapist	Health care (22)	227	Physical therapy, ergotherapy
Logoped	Education (01)	016	Special education
Technician-prosthetist	Chemical and bioengineering (16)	163	Biomedical engineering

Note: code 227.01 = specialization in physical therapy at master's level; code 227.02 = specialization in occupational therapy at master's level. *Source*: (*52*).

The Ministry of Education and Science licenses education institutions to provide training. Table 12 summarizes the number of schools that are licensed to provide various levels of education in the rehabilitation sector.

Educational specialty	Code	Number of schools licensed to provide training in the educational specialty				
		Bachelor	Master	PhD	Pre-higher education	
Physical therapy, ergotherapy	227	64	39	8	_	
Special education	016	36	28	6	_	
Psychology	053	139	101	57	_	
Medical psychology	225	N/A	5	3	_	
Medicine	222	N/A	36	49	_	
Nursing	223	25	8	2	105	

### Table 12. Number of schools licensed to provide rehabilitation-related training in Ukraine

Note: there are no curriculum standards for postgraduate medical education in Ukraine.<sup>27</sup> Source: Ministry of Education and Science, sent by email on 15 September 2020.

## 7.3 Rehabilitation workforce numbers and locations

Detailed disaggregated data about numbers and locations of physical and rehabilitation medicine specialists, physical therapists, occupational therapists, logopeds and prosthetists/orthotists<sup>28</sup> working in Ukraine are not yet available. The estimates provided in Table 13 come from discussions during the in-country assessment and follow-up communication by email.

### Table 13. Rehabilitation workforce estimates in Ukraine

Profession	Estimated number <sup>a</sup>	CMS figures <sup>b</sup>	NHSU figures <sup>c</sup>	Ministry of Social Policy figures	Ministry of Education and Science figures <sup>d</sup>
Physical and rehabilitation medicine specialists	283	7	200	Not obtained	-
Physical therapy	80 000	1136	1418	Not obtained	_
Occupational therapy	As above	3	413 <sup>e</sup>	Not obtained	635 in inclusive education
Logopeds	Unclear	-	_	Not obtained	785
Prosthetists/orthotists	216 <sup>f</sup>	_	_	240 <sup>g</sup>	-

Sources: <sup>a</sup> facilitated discussion on workforce focus group meeting during STARS assessment 2020; <sup>b</sup> CMS, 2019 figures sent by email on 25 September 2020; <sup>c</sup> NHSU, sent by email on 8 October 2020; <sup>d</sup> Ministry of Education and Science, sent by email on 15 September 2020; <sup>e</sup> Ibid; figure was disaggregated by occupational therapy (296) and ergotherapist (117); <sup>f</sup> 2015 NSPA-ISPO report (*53*); <sup>g</sup> corrected STARS draft; feedback from URIP.

<sup>27</sup> Ibid.

<sup>28</sup> Generic term used to refer to technician-prosthetists or engineer-prosthetists.

The number of entrants and graduates from rehabilitation-related training programmes can also indicate trends in workforce numbers. Table 14 provides information on the number of entrants in 2019.

		Bachelor's programmes 2019 entrants	Master's programmes 2019 entrants
Physical therapy, ergotherapy	227	2679	1452* (codes 227.01 and 227.02)
Special education	016	1859	1611
Psychology	053	7569	4568
Medical psychology	225	N/A	195
Medicine	222	N/A	13 111
Nursing	223	Junior specialist entrants: 9752	

#### Table 14. Rehabilitation-related workforce entrants in 2019

\* The combined number of entrants for master's level programmes in physical therapy/occupational therapy is 1452. That said, as of 2019, the only programme in occupational therapy (code 227.02) was launched in 2019 at the National University of Physical Culture and Sport, with 15 students (source: correction provided by Ukrainian Society of Ergotherapists (USET) on 2 May 2021). N/A: not available. *Source:* Ministry of Education and Science, sent by email on 15 September 2020.

## 7.4 Supplementary information by profession and intervention

### 7.4.1 Physical and rehabilitation medicine doctors

In 2019, a new programme was introduced to train physical and rehabilitation medicine doctors. Medical doctors with some specialization in rehabilitation can receive a secondary specialization in physical and rehabilitation medicine through a "fast-track" (four-month) retraining programme. This programme is offered at five medical universities in Kyiv and in Dnipro, Kharkiv, Vynnytsia and Zaporizhzhya. In September 2020, three more universities may be added: L'viv, Odesa and Ternopil. To date, 238 individuals have completed this fast-track training. For primary specialization in physical and rehabilitation medicine, beginning August 2020, two universities, Kyiv and Vynnytsia, will offer places to medical doctors who have completed six years of undergraduate training to obtain their medical degree, plus three more years of training internships (Ukrainian name for residency) in physical and rehabilitation medicine.<sup>29</sup>

<sup>29</sup> Source: rehabilitation workforce group discussion, Kyiv, 2 September 2020.

### 7.4.2 Training for medical doctors at MSECs

The total number of people employed by MSECs is not known, but the number of doctors is 1400. There is one MSEC per 100 000 people. There are 363 MSECs in Ukraine – including central MSECs. Medical doctors employed by MSECs are required to attend a two-month "medical expertise course" at the Dnipropetrovs'k State Medical Academy (Department of Medico-Social Expertise and Rehabilitation) (Dnipro) before beginning their work at the MSEC. Training is required every four years: follow-up training lasts 2–3 weeks. Similar training standards are encouraged for medical doctors working at the medical advisory commissions.<sup>30</sup>

### 7.4.3 Physical therapy and occupational therapy (ergotherapy)

Training programmes started in 1994, using the title "specialist in physical rehabilitation". There was no consistency in quality or content and no clinical practice, and training focused on sports and physical education; the field of study was listed as education. Graduates were included in the Ministry of Social Policy's list of professionals and were not allowed to practise at health facilities. Over 65 training facilities provided courses, with an estimated 80 000 graduates.

In 2015, the "physical rehabilitation" training codes shifted to health; since 2017, there has been one joint code for physical therapy/occupational therapy (code 227). At the end of 2018, the curriculum standard for the fouryear bachelor's degree for physical therapy/occupational therapy was approved. According to Ministry of Health Order No. 2013 (2 November 2018), the general specialty (code 227, physical therapy/occupational therapy) was divided into separate master's level specializations – code 227.01 (physical therapy) and code 227.02 (occupational therapy).

As of 2018, any person obtaining a bachelor's degree in physical rehabilitation therapy from 1994 to the present will be identified at the assistant level: physical therapy assistant/occupational therapy assistant. This includes the current four-year bachelor programmes in physical therapy/occupational therapy (code 227). There are discussions about a continuing education course to elevate the knowledge and skills of these graduates; however, course content, student eligibility and Ministry of Health recognition have not yet been determined.

The master's programmes in physical and occupational therapy began in 2019 (course duration is 1.5–2 years). Entrance eligibility is a bachelor's degree in any field. Upon graduation from the master's programme, an individual should be identified as a physical therapist or occupational therapist. That said, the vast majority of universities continue to grant a dual specialization to their students. In addition, the current version of the Ministry of Health qualification characteristics for physical therapist and occupational therapist positions do not require code 227.1 specialization for a physical therapist position or code 227.2 specialization for an occupational therapy are not separated at the educational level or in the workforce.

A national examination for graduates of master's programmes in physical and occupational therapy is to be piloted in 2021. The Unified State Qualifying Examination (*54, 55*) (theoretical knowledge and practical skills examination) for graduates of master's programmes is to be routinely implemented from 2022.<sup>31</sup>

<sup>30</sup> Source: discussion with Ministry of Health expert on MSECs, Kyiv, 9 September 2020.

<sup>31</sup> Source: rehabilitation workforce group discussion in Kyiv, 2 September 2020.

### 7.4.4 Speech and language therapy

The profession of speech and language therapist does not exist in Ukraine, but logoped (special educator) does exist. Logopeds may practise within the education system (focusing on children to develop their speech and articulation) and some of them work in health care institutions.

Within the education system, there are 1355 logoped offices in kindergartens and primary schools – in each office there is at least one logoped. In addition, there are 635 inclusive resource centres; it is estimated that over 50% employ logopeds. Within the master's programme for special education, most focus on development of speech and articulation for children. The programme does not include a wide range of communication disorders; courses on swallowing dysfunction are completely absent.

Other than a few speech and language therapists who have received training outside Ukraine, there is no speech and language therapist with the capacity to work in a clinical setting; this work is covered by logopeds with training for special education and development of speech and articulation. Logopedy does not exist in health care and no formal training programme for logopeds exists outside special education. There is no consistent understanding of the profession of speech and language therapist or why it is needed for children and adults.

Currently, the Ministry of Health is working on the introduction of the profession of speech and language therapist and a new educational specialty, cognitive and communicative therapy.<sup>32</sup>

### 7.4.5 **Prosthetics and orthotics**

Categorization of prosthetists and orthotists in Ukraine is a challenging issue. Within the social services directory of the qualifications of professional workers (56) there is a section "Services of professionals and workers in the sphere of prosthesis" that includes: engineer-technologist-prosthetist, orthopaedic technologist, technician-prosthetist-orthotist and modellier orthoprosthetist.

As of 2018, there are 216 technician-prosthetists in Ukraine (*53*). The field of study for prosthetics and orthotics is within chemical and bioengineering (code 16), with further specialization in biomedical engineering (code 163). KHNURE one known facility that offers biomedical engineering coupled with further specialized study in "orthopaedic technologies and engineering" (*57*).

Universities offer theoretical training, but the main location for practical or clinical work is through URIP in Kharkiv. Until 2018, the training environment for prosthetics and orthotics was poorly regulated and the skill level of graduates was unknown.

In September 2018, the International Society for Prosthetics and Orthotics (ISPO) updated its education standards for prosthetic and orthotic occupations. The prosthetic and orthotic workforce includes three distinct roles, two involving clinical care and one non-clinical. Clinical personnel include prosthetist/orthotists (formerly known as category I) and associate prosthetist/orthotists (formerly known as category II). Non-clinical personnel include prosthetic/orthotic technicians (formerly known as category III).

In 2017, the NSPA/NATO Trust Fund began discussions with School of Rehabilitation Sciences (Human Study eV) on the idea of a category II training for prosthetics and orthotics practitioners.<sup>33</sup> Human Study eV is an educational institution specializing in the organization of blended distance learning in the field of prosthetics and orthotics. It is a German-based non-profit association accredited by WHO and ISPO (*59*).

32 Ibid.

<sup>33</sup> Source: email exchange with Human Study eV on 6 October 2020.

In 2018, the project "Creating prosthetic and orthopaedic education in Ukraine" was launched. The project, funded by NSPA/NATO Trust Fund, involves KHNURE, Human Study eV, the Ministry of Social Policy and URIP. The project is a blended learning programme to train associate prosthetists/orthotists. Upon successful completion of the programme and a skill competency assessment, ISPO experts assign an international qualification – ISPO-recognized associate prosthetist/orthotist – and issue a certificate (*60*).

The first training cohort (January 2018–December 2019) had 10 entrants, while the second cohort (February 2020–January 2022) has 14 entrants. Certified specialists from the first cohort train the second cohort. Table 15 provides details of the number of entrants to the associate prosthetist/orthotist training courses.

Trainee origin/work location		20	)18–2019 Trainii	ng	2020–2022 Training			
Trainee origin/wori		Male	Female	Total	Male	Female	Total	
1 Dnipro		-	-	-		1	1	
2 Kharkiv		4	2	6	2		2	
3 Kyiv		2	-	2	3	1	4	
4 L'viv		1	-	1	3		3	
5 Odesa		-	_	-	1		1	
6 Poltava		1	-	1	1		1	
7 Ternopil		-	_	-	1		1	
8 Zaporizhzhya		-	-	-	1		1	
TOTAL		8	2	10	12	2	14	

### Table 15. Number of entrants on associate prosthetist/orthotist training courses

Source: rehabilitation workforce group discussion in Kyiv, 2 September 2020.

The long-term vision is to establish a national ISPO-recognized prosthetics and orthotics training programme at KHNURE. Selected graduates from the first and second cohort will receive further training to reach the level of prosthetist/orthotist (ISPO category I) and build teacher/trainer capacities. In parallel, Human Study eV, in collaboration with URIP, has developed its own curriculum, which was accepted and began to be used by the education system in Ukraine under KHNURE's lead.<sup>34</sup>

Prosthetics and orthotics is not a recognized health care profession (Ministry of Health); instead, it comes under Ministry of Social Policy responsibility. Most prosthetics and orthotics jobs are based in regional communal enterprises that produce prostheses and orthoses. There are 38 prosthetics and orthotics manufacturers in Ukraine (of which 12 are State-owned enterprises). To be licensed by the Ministry of Social Policy, each is required to have "qualified" specialists. This requirement translates to having participated in short courses offered by URIP. In 2019, URIP offered 10–12 courses for prosthetics and orthotics and 6–7 courses for other rehabilitation specialists (a total of 345 people were trained). In the future, the presence of an associate prosthetist/orthotist may be a minimum requirement for manufacturers to obtain a permit from the Ministry of Social Policy; this requirement is not possible now, as there are too few graduates of the programme<sup>35</sup> and no clear pathway for upgrading the existing prosthetics and orthotics workforce.

<sup>34</sup> Ibid.

<sup>35</sup> Source: Zoom call with URIP, 12 October 2020.

### 7.4.6 Psychologists

There are two fields of study for psychologists – one within behavioural sciences and one within health.

As no psychologists were interviewed during the assessment, the data available on this profession have been obtained through the Ministry of Education and Science and related to number of schools and entrants for these training programmes.

### 7.4.7 Audiologists

There are no trained audiologists sourdologists in Ukraine today. If the educational specialty of "cognitive and communicative therapy" is implemented, this will be a gateway for the audiology profession. Information during the workforce discussion noted that screening for hearing devices is provided through ear-nose-throat doctors. The Ministry of Education and Science trains teachers for hearing assessment. There are sign language interpreters in Ukraine; the Ukrainian Society for the Deaf has interpreters but the quality of service is poor.

### 7.4.8. Assistive products/wheelchair provision

Within the bachelor's prosthetics/orthotics programme (code 227), there is a competency standard related to assistive products. It is valid for four credits (approx. 120 hours) and "includes everything". One challenge is that very few universities have adequate equipment to teach it. For master's programmes, there is no standard and the content depends on the university. There are examples of courses on adaptive assistive technologies, a wheelchair module within paediatric neurology, and wheelchair provision in general. For physical and rehabilitation medicine with primary specialization, there are 68 class hours on assistive technology – mainly through residency.

There is evidence of stand-alone training in wheelchair provision, using WHO's Wheelchair Service Training Packages. Since 2016, UCP Wheels for Humanity and the Latter-day Saint Charities (LDSC) have provided a variety of training courses on wheelchair provision. Details are in Table 16.<sup>36</sup>

Dates	Basic	Intermediate	Training of trainers – basic	Co-training with training of trainers basic graduates
September 2016	16	_	_	-
February 2017	-	14	_	-
July 2018	-	_	7	-
December 2018	16	_	_	3
LDSC (2017–2020)37	22	_	-	-
TOTAL TRAINED	54	14	7	3

#### Table 16. Number of people trained in wheelchair provision (using WHO training packages)

LDSC: Latter-day Saint Charities.

*Source:* UCP Wheels for Humanity, Award No. APC-GM-0075, through Advancing Partners & Communities (APC), cooperative agreement funded by USAID under Agreement No. AID-OAA-A-12-00047, beginning 1 October 2012. APC is implemented by JSI Research & Training Institute, Inc., in collaboration with FHI 360. Final project report (September 2015–June 2019).

<sup>36</sup> Source: rehabilitation workforce group discussion in Kyiv, 2 September 2020.

<sup>37</sup> Source: email from LDSC, 9 October 2020.

## 7.5 Pre-service education – clinical practice

The assessment does not examine details of workforce pre-service training (curriculum content, theory versus practice and clinical supervision and guidance). Many facilities have agreements with universities to serve as clinical sites for pre-service training.

## 7.6 Licensing, regulation and continuous professional development

As of January 2020, continuing professional development (CPD) is required for medical doctors. A minimum of 50 CPD points is required each year. An annual review of the personal educational portfolio with CPD points begins in 2021 (Ministry of Health Order No. 446, 22 February 2019, "Some issues of continuing professional development of doctors") (*61*). No other health professions are required to have CPD, but a draft law on CPD for all health experts is being developed.<sup>38</sup>

Additional regulatory topics were shared during the STARS assessment workforce discussion; these are summarized in Table 17.

Profession	Scope of practice	Ministry of Health recognition	Licensing required	CPD required
Physical rehabilitation medicine	yes	yes	yes	yes
Physical therapy	yes	yes	no	no
Occupational therapy/ergotherapy	yes	yes	no	no
Speech and language therapy <sup>a</sup>	no	no	no	no
Prosthetics/orthotics	no	no	no	no

#### Table 17. Summary of regulatory aspects related to the rehabilitation workforce

<sup>a</sup> Note that this profession did not exist in Ukraine at the time of this report.

Source: information provided during workforce discussion in Ukraine, 2 September 2020.

## 7.7 Professional associations

There are multiple rehabilitation-related professional associations in Ukraine. For some professions, there is more than one association. Details are provided in Table 18.

<sup>38</sup> Source: information provided during workforce discussion in Ukraine, 2 September 2020.

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Name of association	Acronym	Date created	Members	Member description	International affiliation(s)
Ukrainian Society for Physical and Rehabilitation Medicine (www.utfrm.com.ua)	USPRM	2014	150	Physical and rehabilitation medicine physicians and other physicians	The Section and Board of Physical and Rehabilitation Medicine of the European Union of Medical Specialists The European Society of Physical and Rehabilitation Medicine (ESPRM) ISPRM
Ukrainian Society for Neurorehabilitation	USNR	2013	150	Specialists dealing with neuro- rehabilitation	World Federation for Neurorehabilitation (WFNR) European Federation for Neurorehabilitation Societies (EFNRS)
Ukrainian Association of Physical Therapy (www.physrehab.org.ua)	UAPT	2007	163	Physical therapists and physical therapy students	World Physiotherapy <sup>a</sup> 2011
Ukrainian Physical Therapy Association (www.upta.com.ua )	UPTA	2018	approx. 150	Physical therapists and physical therapy students	N/A
Ukrainian Society of Ergotherapists (https://wfot. org/member-organisations/ ukraine-ukrainian-society-of- ergotherapists)	USET	2016	approx. 49	Persons working or employed as ergotherapists; ergotherapy students and teachers	World Federation of Occupational Therapists (WFOT) associate member since 2017
Ukrainian Society for Speech and Language Therapy	US SLT	2018	approx. 10	Ukrainian and American speech and language therapists	Links with American Speech- Language-Hearing Association (ASHA)
Public Union ISPO – Ukraine (www.ispo.org.ua)	PU "ISPO- Ukraine"	2015	Legal entities; not individ- uals	No information	ISPO – 2015

#### Table 18. Rehabilitation-related associations in Ukraine

<sup>a</sup> Formerly known as the World Confederation for Physical Therapy (WCPT). N/A: not applicable.

Source: information provided during workforce discussion in Ukraine, 2 September 2020.

## 7.8 Remuneration

According to informal discussions, the full-time salary of a physical therapist or occupational therapist in a public facility is low; approx. UAH 4500 per month (US\$ 158). During a workforce focus group discussion, nearly all participants indicated that they either work in a private facility or have their own private caseload of patients.

## 7.9 Rehabilitation infrastructure/equipment

Accessible structures and existence of medical equipment in a facility are prerequisites for approval for NHSU funding (62). All buildings must meet the requirements of State building standard DBN B.2.2-40: 2018, "Inclusiveness of buildings and structures" and have a spacious toilet equipped for people who use wheelchairs, large enough for the simultaneous presence of the patient and the therapist.

For each rehabilitation package, a bulleted list of equipment outlines the minimum standards. Assistive products to ensure mobility (wheelchairs of different types, canes, crutches, walkers) and restore participation in daily activities are listed in all packages, but these are for training purposes only and not supplied to patients upon discharge.

Aside from this NHSU requirement, there is no list of essential rehabilitation equipment or materials required at different levels of care.

## 7.10 Impact of COVID-19

"It was bad." This was the resounding quote in response to the question about the impact of COVID-19 on the rehabilitation workforce.<sup>39</sup> Some examples of the challenges the workforce experienced include the following:

- rehabilitation stopped being a priority; hospitals stopped admitting patients for rehabilitation;
- in a hospital with 10 specialists, eight had tested positive for COVID-19 or were self-isolating;
- the three-month lockdown in effect meant an enforced vacation without pay;
- public transportation stopped and people could not get to the hospital;
- new legislation established salary supplements for medical workers, but physical therapists and occupational therapists were not included (see Section 5.6).

### Summary of rehabilitation

Human resources and infrastructure/equipment situation

- Since 1994, over 80 000 people have been trained on physical rehabilitation courses across 60–70 universities. There were no training standards, the curriculum was classified under education, and graduates were not permitted to work in health facilities.
- Rehabilitation workforce terminology in Ukraine is varied and evolving. Modern terms (e.g. physical therapy, physical rehabilitation medicine) are used concurrently with more antiquated terms (e.g. nurses for remedial gymnastics, therapist physician).
- Three rehabilitation workforce professions are formally recognized (physical and rehabilitation medicine specialist, physical therapist, occupational therapist) and these professions have received authorization to work in health facilities.
- There is a new bachelor-level curriculum standard for a joint physical therapy /occupational therapy training
  programme. Graduates of this programme and graduates of all former physical-therapy-related training
  programmes will be recognized at the "assistant" level physical therapy assistant or occupational therapy
  assistant.

<sup>39</sup> Source: information provided during workforce discussion in Ukraine, 2 September 2020.

- Since 2019, master's programmes in physical and occupational therapy have been recognized, although no standard curriculum yet exists for these studies. Graduates are called physical therapists and ergotherapists (occupational therapists). A State qualifying examination is planned for 2021–2022 for graduates of these master's programmes.
- A total of 218 people have been trained in prosthetics and orthotics (as a specialty within biomedical engineering); resultant skills levels are unknown. A two-year blended learning project for associate prosthetists/orthotists (former category II) began in 2018 with 10 entrants in 2018 and 12 entrants in 2020.
- There is a lack of comprehensive, consolidated and up-to-date information on numbers and locations of the rehabilitation workforce working in Ukraine.
- Because salaries are low, the majority of physical therapists and occupational therapists either work in private practice or operate their own personal practice outside public work hours.
- CPD is required for medical doctors. CPD is not yet required for other professions within the rehabilitation workforce.
- Logopeds work only in the educational system; they are not recognized by the Ministry of Health. Logoped training programmes do not include adult clinical care. There is no consistent understanding of speech and language therapy or why it is needed for adults.
- The NHSU terms of purchase for the packages of medical guarantees set parameters for the rehabilitation workforce and require minimum standards for accessibility of buildings and for rehabilitation equipment.
- Professional associations exist, but each has its limitations: physical therapy has two separate groups, occupational therapy and speech and language therapy have few members, and the prosthetics and orthotics group is inactive and appears as a name only.

# 8. Rehabilitation information

### Overview of key components and their status

Key components	Status
Data on population functioning and disability	The last census in Ukraine was in 2001; no data on disability or population functioning were collected.
Data, digitalization and Ukraine's health information systems	Before the NHSU existed, health facility data were largely paper-based. The legacy system is managed by CMS, while NHSU and Ministry of Health are developing and mandating use of eHealth and the Medical Information System (MIS).
Data on availability/utilization of rehabilitation	Very limited information from health system data on the availability or utilization of rehabilitation.
Data on outcomes, quality and efficiency of rehabilitation	There are no centralized data and very limited information on outcomes, quality and efficiency of rehabilitation.
Data-driven decision-making	There is no active planning of health personnel.
Government funding for rehabilitation research	The Ministry of Education and Science and Ministry of Social Policy each have funding for research. The Ministry of Social Policy's entire research budget is paid to URIP (Kharkiv).

## 8.1 Data on population functioning and disability

Ukraine has no data on population functioning. Data on certified disability are derived from processes on certified disability determination through the Ministry of Health or benefits provided for persons with disabilities (invalidities) through the Ministry of Social Policy.

To attain reliable information showing how well a population is functioning, the Government must integrate a detailed "functioning module" in a national census or health survey, or undertake a dedicated functioning and disability survey.

The Washington Group on Disability Statistics promotes and coordinates international cooperation on health statistics focusing on disability measures suitable for census and national surveys (63). The Washington Group developed, tested and adopted the Short Set on Functioning (see Annex 8) for use in national censuses and surveys. The six questions reflect advances in the conceptualization of disability and use the WHO ICF as a conceptual framework.

### 8.1.1 Certified disability status determination

Certified disability ("invalidity") status in Ukraine is determined by medical commissions: MSECs and LCCs. Determination is based on the individual's history, medical documentation, physical examination and other tests. The International Classification of Diseases (ICD-10) is used extensively by MSECs and LCCs, while the ICF is not yet used in determining disability status. The use of ICF is under discussion, and translation of the ICF and ICF tools into Ukrainian is under way.

Individuals under the age of 18 years are assigned to the category of "child with a disability (invalidity)". For adults, there are three groups of disability (invalidity) (64):

- group I: most severe (subgroup 1A person is dependent on others for self-care; subgroup 1B person can partially perform certain elements of self-care);
- group II: high degree of limitation in self-care, mobility, orientation and communication, but does not require permanent caregiver, supervision or assistance; and
- group III: moderate degree of limitation in self-care, mobility, orientation and communication; this category does not preclude the possibility of participating in education or employment.

In 2019, MSECs provided disability determinations<sup>40</sup> for 136 300 adults:<sup>41</sup> group 1: 15 595 (11%); group 2: 48 345 (36%); and group 3: 72 360 (53%). The LCCs identified 163 886 children with disability in 2019.<sup>42</sup>

Table 19 provides a summary of certified disability statistics from 2001 to 2020. It reveals that the number of children with disability (invalidity) is steadily increasing, as are those in group III; group I has steadily decreased in numbers every year. Overall, the number of people with disability (invalidity) is increasing – the anomaly is the jump in 2011, which is higher than the total for 2020.

Year	2001	2006	2011	2016	2018	2019	2020
Total	2597.5	2495.2	2710.0	2614.1	2635.6	2659.7	2703.0
Group I	337.7	337.7	310.5	250.3	235.4	226.3	222.3
Group II	1337.0	1128.4	1078.7	919.0	899.2	896.1	900.8
Group III	768.5	906.5	1155.7	1291.2	1341.9	1375.7	1416.0
Children	154.3	122.6	165.1	153.5	159.0	161.6	163.9

Table 19. Number of people with disabilities in Ukraine, 2001–2020 (in thousands)

Note: figures provided date from the beginning of the year.

*Source*: consolidated information from the Ministry of Health, Ministry of Social Policy and Pension Fund of Ukraine; sent by the Ministry of Social Policy by email on 18 October 2020.

## 8.2 Data, digitalization and Ukraine's health information system

Health statistics data in Ukraine may be obtained from two independent official sources; one is a traditional legacy system under the Ministry of Health, while the other is a central database managed by NHSU.

The CMS of the Ministry of Health of Ukraine, was established by order of the Ministry of Health in 1992. CMS is the main institution that coordinates the activities of territorial information and analytical centres for medical statistics and treatment and prevention facilities for the collection, processing and analysis of statistical information (*65*). CMS data collection is paper-based and digital. Med-Stat is the software for digital data collection. CMS uses approximately 120 forms for two main types of data collection; primary accounting documentation (approx. 90 forms) (*66*) and statistical reporting (approx. 30 forms) (*67*). Frequency of data collection may be quarterly, semi-annual or annual.

On 9 April 2018, the Government adopted Decree No. 411, "Some questions on the electronic health care system". This document establishes operating procedures for the electronic health care system and the procedure for publication of the records of the electronic health care system by the NHSU (*68*).

There are four main parties involved in the electronic health care system in Ukraine: Ministry of Health; State Enterprise "Electronic Health"; NHSU; and MIS (see Fig. 4). Their roles include the following.

- The Ministry of Health<sup>43</sup> regulates the implementation of eHealth (sets policies and laws).
- State Enterprise "Electronic Health" (eHealth) administers the central eHealth database (CBD); the main developer of eHealth technical core is eZdorovya.

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<sup>40</sup> In Ukrainian, this is known as "primary invalidity".

<sup>41</sup> Source: Ministry of Health email on MSECs, 11 October 2020.

<sup>42</sup> Source: Information consolidated from the Ministry of Health; sent by the Ministry of Social Policy by email on 18 October 2020.

<sup>43</sup> Deputy Minister for Digital Development, Digital Transformations and Digitization and the Directorate of Digital Transformation in Health Care.

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- NHSU owns the central database, consolidates and analyses data, signs agreements with health care
  providers, monitors contracts and makes payments for medical services as per the contract.
- The MIS collects mandatory eHealth data and connects to the central eHealth database; the MIS may
  also collect information on primary health care, specialized medical care and pharmacies, depending
  on the needs of the health facility; each health facility can choose their own software development
  company for their MIS, depending on their interests and needs.

### Fig. 4. The four main parties engaged in Ukraine's electronic health system



Source: (69). Translation provided by WHO Country Office in Ukraine.

There is no evidence of a direct relationship between CMS and eHealth. All health facilities must send data to CMS until the end of 2020. In 2021, health facilities have an opportunity to send information to NHSU instead and stop sending information to CMS.<sup>44</sup> One key prerequisite for NHSU support is that a health facility or service provider must have the capacity and the electronic systems to link to eHealth.

## 8.3 Data on availability and utilization of rehabilitation

There are no consolidated data on the availability of rehabilitation in Ukraine. That said, there are pockets of information that provide details on the locations and availability of rehabilitation and assistive products. These

<sup>44</sup> Source: information from Zoom call with NHSU, 11 September 2020.

resources provide details on who, where and what, but do not evaluate the quality or effectiveness of the services rendered. Some examples of information sources on rehabilitation are shown below.

- Ministry of Social Policy Website (www.mosp.gov.ua) has information related to disability and rehabilitation:
  - names and location of eight State centres for complex rehabilitation (70);
  - names and locations of 86 rehabilitation institutions for children (71); and
  - names and locations of 98 enterprises that provide assistive products (72).
- NHSU provides information on locations of facilities that have signed contracts to provide rehabilitation.
- Service mapping project in three regions is hosted on Ukrainian Association of Physical Therapy website:
  - L'viv has 74 rehabilitation facilities and 72 sites for assistive products;
  - Kyiv has 100 rehabilitation facilities and 143 sites for assistive products; and
  - Zaporizhzhya has 52 rehabilitation facilities and 50 sites for assistive products.<sup>45</sup>
- Within CMS, two data collection forms partially capture utilization of rehabilitation:
  - form No. 044, "Card for patients treated in the physiotherapy department", outlines dosage of prescribed procedures; doctor's evaluation of the effectiveness of physiotherapy treatment; data on number of performed procedures; doctor (nurse) signature; completed form is signed by a physician-physiotherapist (73); and
  - form No. 20, report on health care facility (beds, departments, e.g. treatment gymnastics department, staff and procedures performed).

Within eHealth, utilization of rehabilitation may be captured by predefined intervention codes. Health service data in eHealth are based on the Australian Classification of Health Interventions (ACHI). Although there are no codes specific to rehabilitation, there is evidence of health facilities selecting relevant interventions from the ACHI and compiling a list of interventions applicable to rehabilitation.

## 8.4 Data on outcomes, quality and efficiency of rehabilitation

There are no consolidated data on the outcomes, quality or efficiency of rehabilitation in Ukraine.

The eHealth system does not fully reflect rehabilitation interventions and does not contain objective data on the results of these interventions. There are no approved reporting forms for the rehabilitation process in Ukraine.

## 8.5 Government funding for rehabilitation research

The Ministry of Social Policy provides funding for URIP in Kharkiv to conduct 9–10 research projects every year. In 2019, the Ministry of Social Policy provided UAH 9.5 million (US\$ 350 000) to support research on three key topics:<sup>46</sup>

- research on rehabilitation: new developments and techniques, robotics and how to apply to Ukraine;
- prosthetics and orthotics product research: development and adaptation of manufacturing technologies;
- research on surgical techniques: surgical techniques after explosion for best prosthetic outcomes;<sup>47</sup> and
- development and implementation of State standards based on international standards (International Organization for Standardization, ISPO, European Standards).<sup>48</sup>

<sup>45</sup> Project is funded by USAID and implemented by UCP Wheels for Humanity: https://physrehab.org.ua/maps0321759/#6/48.713/30.537.

<sup>46</sup> Source: URIP correction to STARS report, June 2021.

<sup>47</sup> Source: Zoom meeting with URIP, 12 October 2020.

<sup>48</sup> Source: URIP feedback on STARS report, June 2021.

The Ministry of Education and Science also has a budget for research in higher education. In January, the budget was US\$ 2.1 million; because of COVID-19, this budget was reduced by 30%, leaving approx. US\$ 1.5 million for research.<sup>49</sup>

## 8.6 Impact of COVID-19

NHSU, Ministry of Health and other Government websites contain updated information on COVID-19 with limited information on the role of rehabilitation.<sup>50</sup> WHO has published informational materials on the utility of rehabilitation in treating those with COVID-19 (see Section 5.6 and Section 9.9 of this report). One additional impact of COVID-19 is evidence of reduced funding for research in some sectors as resources are diverted for COVID-19 interventions.

### Summary of rehabilitation information situation

- Ukraine's 2001 census did not collect information on disability or functioning.
- The two main sources of statistics on disability are the figures from disability determinations by the Ministry of Health (primary invalidity) and the number of persons with certified disability receiving support from the Ministry of Social Policy. In 2019, the estimated number of persons with certified disability in Ukraine was 2.7 million (5.6% of the population).
- Determination of certified disability status is made by MSECs or LCCs and is based primarily on the ICD-10 diagnosis. There are discussions on use of ICF in this process, but only at a conceptual level so far.
- Health information is collected through two systems: CMS (1992) and eHealth (2018). Both systems contain partial data on rehabilitation services and the rehabilitation workforce.
- At health facility level, the MIS contains mandatory data for eHealth and other content determined by health facility needs. The MIS is managed by a software company selected by the health facility.
- No centralized data are collected on outcomes, quality or efficiency of rehabilitation services.
- Some rehabilitation departments collect data on whether goals have been met upon discharge; this information on treatment outcomes remains at department level.
- Data-driven decision-making is not common practice in workforce planning in rehabilitation.
- The Ministry of Social Policy has a detailed website detailing extensive rehabilitation-related information that includes service provision locations, information on assistive products, etc.
- Research on rehabilitation is conducted by URIP in Kharkiv, with funding from the Ministry of Social Policy and other sources. In 2019, the Ministry paid about US\$ 350 000 to URIP to support 9–10 research projects related to rehabilitation and assistive products.

<sup>49</sup> Source: synthesized email from Ministry of Education and Science, received on 13 October 2020.

<sup>50</sup> See Ministry websites https://nszu.gov.ua/ and https://moz.gov.ua/.

## 9. Rehabilitation service accessibility and quality

#### Overview of key components and their status

Key components	Status				
Percentage of tertiary and secondary hospitals with rehabilitation services	Both CMS and NHSU collect data related to rehabilitation service, but consolidated and centralized data are not available.				
Percentage of districts/communities covered by rehabilitation services	Negligible. Except for individual private practice and some social institutions managed by the Ministry of Social Policy, rehabilitation services are not available at primary health care or community levels.				
Number of specialist rehabilitation facilities/units	There are 98 specialized hospitals in Ukraine <sup>51</sup> but no data on type of specialization or rehabilitation. CMS also notes that there are 28 "stand-alone" rehabilitation facilities in Ukraine. <sup>52</sup>				
Number of rehabilitation beds, and rate per 10 000 population	There are 2778 rehabilitation beds in Ukraine. <sup>53</sup>				

### 9.1 Overview

Rehabilitation services in Ukraine are in transition. Historically, rehabilitation has been linked with exercise therapy, massage therapy, health resorts and sanatoriums. Public perception of rehabilitation continues to be anchored in these post-Soviet practices; it is challenging for current rehabilitation professionals to change this mindset.<sup>54</sup> During the SWOT analysis, information on rehabilitation was identified as a top priority as rehabilitation continues to be misunderstood, from medical professionals and patients alike.

## 9.2 Access to rehabilitation

The three main routes to access rehabilitation in Ukraine are through an individual programme of rehabilitation (IPR), the NHSU or the Ministry of Social Policy.

### 9.2.1 Individual programme of rehabilitation

For persons with certified disabilities in Ukraine, an IPR is a key product of the MSECs and LCCs. Cabinet of Ministers of Ukraine Resolution No. 757 (23 May 2007) "On approval of the Regulations on the individual programme of rehabilitation of people with disabilities (invalidity)" (74) describes the framework within which an IPR is developed.

As noted previously in this report, the Ministry of Health has two forms of medical commission: MSECs for adults and medical advisory commissions (MAC) for children. Among other roles, the commissions determine disability ("invalidity"), develop an IPR and recommend assistive products (technical means of rehabilitation (TMR)).<sup>55</sup>

A medical facility or doctor makes a referral for an MSEC appointment. The mandatory waiting time for an MSEC visit is 120 days of sick leave.<sup>56</sup>

53 Ibid.

<sup>51</sup> Source: Information from CMS in email dated 25 September 2020.

<sup>52</sup> Source: discussion group on rehabilitation information during STARS data collection; Kyiv, 1 September 2020.

<sup>54</sup> Source: information from rehabilitation workforce group discussion, Kyiv, 2 September 2020.

<sup>55</sup> In this report, TMR, technical means of rehabilitation and assistive products are used synonymously.

<sup>56</sup> Source: discussion in finance group meeting during STARS data collection; Kyiv, 1 September 2020.
In 2019, MSECs provided primary certified disability determinations for 136 300 people; nearly all of them (136 295 people) received an IPR, 120 637 received recommendations for social rehabilitation and 20 396 (15%) were prescribed TMR (assistive products).<sup>57</sup> An individual who receives an IPR can take this to any facility in the vicinity that offers rehabilitation services. For assistive product prescriptions, the individual will go to a local social protection office, which will present a catalogue of assistive products from which the individual can choose.

#### 9.2.2 NHSU packages

The NHSU administers 27 packages,<sup>58</sup> 12 of which include rehabilitation (three rehabilitation packages, seven additional packages and two reference assistive products). Table 20 summarizes the rehabilitation-related content of the packages.

No.	Name	Νο	otes	Paraphrased reference to rehabilitation
1.	Primary health care	N	/A	N/A
2.	Emergency medical care	N	/A	N/A
3.	Outpatient care	N	/A	Medical rehabilitation in the recovery period; at the facility, in the home or using telecommunications.
4.–9.	Early detection/diagnostics	N	/A	N/A
10.	Haemodialysis – outpatient	N	/A	N/A
11.	Inpatient; non-surgical		N/A	Medical rehabilitation in acute phase.
12.	Surgery: adults and children		N/A	Rehabilitation in acute phase.
13.	Acute stroke	-		Treatment and early rehabilitation of people with ischaemic and haemorrhagic stroke; subacute care is in neurology package.
14.	Myocardial infarction	Inpatient packages	(ages	Rehabilitation in acute phase; subacute is in outpatient package.
15.	Medical care in children	ent pa	/ pacl	N/A
16.	Newborn babies with complex neonatal needs	Inpatie	Priority packages	N/A
17.	Chemotherapy – oncology for adults and children			Medical rehabilitation in acute condition.
18.	Radiology for oncology	- Vlhbir	<b>`</b>	N/A
19.	Psychiatric care adults/children	and h	alized	Psychological impact and rehabilitation.
20.	Adults/children with tuberculosis	lized	specialized	N/A
21.	HIV diagnosis, treatment and maintenance	Specialized and highly	- -	N/A
22.	Mental disorders due to opioid use	-		N/A

#### Table 20. Rehabilitation-related content of the NHSU packages in Ukraine

<sup>57</sup> Source: email from the Ministry of Health dated 9 October 2020.

<sup>58</sup> Four additional packages specific to COVID-19 were added in mid-2020.

#### Table 20. contd.

23.	Children aged 0–3 years	uo	Initial examination, rehabilitation diagnosis and prognosis, individual rehabilitation programme, provision of medical rehabilitation services, conducting appropriate screening.
24.	Musculoskeletal – adults and children aged over 3 years	 Medical rehabilitation	Initial examination, rehabilitation diagnosis and prognosis, individual rehabilitation programme, medical rehabilitation services in the field of musculoskeletal rehabilitation. Does not cover acute surgery, as this is covered in the surgery package.
25.	Nervous system – adults and children aged over 3 years S	Initial examination, rehabilitation diagnosis and prognosis, individual rehabilitation programme, medical rehabilitation in the field of neurorehabilitation. Does not cover acute stroke (see stroke package), or acute surgery (see surgery package).	
26.	Inpatient palliative care	ve care	Assessment, prevention, treatment of chronic pain; providing patients with assistive technologies for mobility during their stay in the institution.
27.	Mobile palliative care	Palliative care	Assessment, prevention, treatment of chronic pain; providing patients with assistive technologies for mobility during provision of palliative care.

N/A : not applicable. Source: (75).

#### 9.2.3 Ministry of Social Policy-supported services

The Ministry of Social Policy manages eight State centres for complex rehabilitation (70). In addition, they also support 86 rehabilitation institutions for children (71). The Ministry of Social Policy website provides extensive information on these facilities. Because of time constraints, none of these facilities were visited during the STARS process.

#### 9.3 Rehabilitation in health facilities

The two main sources of data for rehabilitation in health facilities are CMS and eHealth (NHSU data). According to CMS, there are two types of facilities that offer rehabilitation: 23 stand-alone rehabilitation facilities, and rehabilitation departments within hospitals.<sup>59</sup> CMS does not have data on the number of rehabilitation departments as CMS anchors its data on the number of hospital beds for rehabilitation.

NHSU signed contracts with 250 suppliers (health facilities) to provide 498 rehabilitation packages: 212 for neurological cases, 223 for musculoskeletal, and 63 for children aged 0–3 years (see Table 8 for details).

The graph in Fig. 5 provides a visual representation of the volume and type of packages supported by NHSU per region. Only two regions (Mykolayiv and Chernihiv) do not have all packages available.

<sup>59</sup> Source: Working group discussion on information as part of STARS data collection; Kyiv, 1 September 2020.





Source: graph constructed from NHSU data (48).

#### 9.4 Rehabilitation in the community

The Ministry of Health does not have rehabilitation programmes at primary health care or community levels.<sup>60</sup> That said, services may be available through private arrangements with a rehabilitation professional. The rehabilitation-user focus group discussion revealed that individuals are also reaching out to the Active Rehabilitation Group as a source of information and support (see Box 1).

#### Box 1. Peer providers and peer support in Ukraine

Living, learning and working with a disability can be challenging. Sometimes the best person to understand what you are going through can be someone who has also been there. A peer provider is someone who draws on their own lived experience of disability, and receives training and professional support, to provide services such as counselling and coaching for people with the same type of disability as themselves.

According to recent studies, peer providers are a rapidly-growing part of the workforce supporting persons with disabilities and chronic conditions (1). As part of the USAID-funded project, peer providers –

<sup>60</sup> Source: participants in rehabilitation service group meeting during the STARS process, Kyiv, 2 September 2020.

#### Box 1. (Continued)

all wheelchair users – were included as staff in the rehabilitation departments of three hospitals. Despite positive reviews, the activity stopped when the project period ended.

Another peer-led initiative is the Active Rehabilitation Group of the All-Ukrainian Association of Persons with Disabilities (2). It is a public organization of people with disabilities designed to promote active rehabilitation of people with spinal cord injuries who use a wheelchair. The Group introduces the principles of active rehabilitation, with the aim of independent and full inclusion of people in all aspects of society after spinal cord injury. Participants in the service-user focus group, highlighted the utility of a peer group in navigating the system to receive support as well as sharing experiences and learning from one another.

1. Peer providers – how your experience makes you right for the job. In: Administration for Community Living [website]. Washington (DC): Administration for Community Living; 2019 (https://acl.gov/news-and-events/announcements/peer-providers-how-your-experience-makes-you-right-job, accessed 20 September 2021).

2. Who we are. In: Active Rehabilitation Group [website]. Kyiv: Active Rehabilitation Group; 2021 (https://gar.org.ua/about/, accessed 20 September 2021).

#### 9.5 Rehabilitation for children

#### 9.5.1 NHSU

Within NHSU, there is a package for rehabilitation for children aged 0–3 years (see Table 20).

#### 9.5.2 El

El and early childhood development work are not yet well established in Ukraine. In 2016, the Cabinet of Ministers adopted an action plan on El, with the Ministry of Health identified as the main stakeholder; in 2019, there was another decision on El – this time the Ministry of Social Policy was identified as the ministry responsible.<sup>61</sup> In 2019, the National Council for Early Intervention was established. The Ministry of Social Policy has a directorate and an expert group on El.<sup>62</sup> The Ministry of Social Policy has a national coordination role in this area, and is exploring ways of operationalizing this role most effectively. Civil society is the main implementer in this field; some local organizations and nongovernmental organizations provide El locally, but it is not properly regulated; there is no legislation at all to back it.<sup>63</sup>

The main initiatives related to El/early childhood development (described in the 10 September 2020 meeting with the Ministry of Social Policy) include the following.

 April 2017: the United Nations Children's Fund (UNICEF) and the National Association of Persons with Disabilities established an early childhood development platform with approx. 10 members (Ministry of Health, Ministry of Social Policy, Ministry of Education and Science, European Association on Early Childhood Intervention, a foundation in the Netherlands, Early Intervention Institute and others).

<sup>61</sup> Source: meeting with Ministry of Social Policy during STARS process; Kyiv, 10 September 2020.

<sup>62</sup> Ibid.

<sup>63</sup> Ibid.

- May 2017–May 2019: Ministry of Social Policy twinning project with the European Union (France) to support El legislation; the goal is to introduce an El system, develop social services for El and access financial support for this sector. A questionnaire for parents (screening tool) was developed to identify needs; it was piloted in four regions (Odesa, L'viv, Kharkiv and Uzhhorod City), with 3121 families participating.
- Ministry of Social Policy is currently collaborating on a joint project with UNICEF. This is a 10-region pilot project on El. One task is to develop a short training course on El for a multidisciplinary team (planned). UNICEF has provided support to train 25 El teams and a train-the-trainer course.

Ukraine is keen to learn from other countries in this area. "Before putting the service into law, we have to decide what the service is about."<sup>64</sup>

#### 9.5.3 Ministry of Social Policy role in rehabilitation for children

The Ministry of Social Policy has a mandate to support children with disabilities – rehabilitation, assistive products and social services (*76*). In 2019, the Ministry of Social Policy budgeted over US\$ 4.5 million for children with a disability. Prior to 2020, the programme for children with a disability was intended only for children with cerebral palsy; this regulation has changed, and the programme is now open for children with all types of diagnosis. Fifty facilities are licensed by the Ministry of Health to provide rehabilitation for children – two of them are overseen by the Ministry of Social Policy.<sup>65</sup>

The Ministry of Social Policy website provides a list of 88 rehabilitation institutions, namely health care institutions that carry out measures for the rehabilitation of children with disabilities (76); see Table 21 for details.

Owing to time constraints during the in-country data collection phase, the STARS team was unable to visit any of these centres.

No.	Administrative territories	Total
1.	Autonomous Republic of Crimea	0
2.	Vinnytsya region	4
3.	Volyn region	1
4.	Dnipropetrovs'k region	5
5.	Donets'k region	2
6.	Zhytomyr region	0
7.	Zakarpattya region	2
8.	Zaporizhzhya region	7
9.	Ivano-Frankivs'k region	0
10.	Kyiv region	3
11.	Kirovohrad region	2
12.	Luhans'k region	1

#### Table 21. Rehabilitation sites supported by the Ministry of Social Policy

<sup>64</sup> Source: Quote from expert group on El during Ministry of Social Policy meeting, 10 September 2020.

<sup>65</sup> Source: Ministry of Social Policy contribution at finance group meeting during the STARS process; 1 September 2020.

#### Table 21. contd.

No.	Administrative territories	Total
13.	L'viv region	5
14.	Mykolayiv region	1
15.	Odesa region	9
16.	Poltava region	1
17.	Rivne region	0
18.	Sumy region	3
19.	Ternopil region	3
20.	Kharkiv region	6
21.	Kherson region	5
22.	Khmelnytsky region	4
23.	Cherkasy region	4
24.	Chernivtsi region	3
25.	Chernihiv region	3
26.	Куіν	14
27.	Sevastopol'	0
Total U	kraine	88

#### 9.6 Assistive products

#### 9.6.1 Providers

The Ministry of Social Policy has the budget and management responsibility for assistive products in Ukraine.<sup>66</sup> There are three main structures involved in the provision of assistive products:

- the Social Insurance Fund, which handles assistive product orders and liaises with companies
- enterprises that manufacture, supply and repair assistive products (98 facilities) (77)
- communal enterprises that produce prosthetics and orthotics (38 producers; 12 public).<sup>67</sup>

The Ministry of Health is essentially absent from the process of providing all but a few assistive products; it has provision for hearing aids, cochlear implants, incontinence products, hand-held urinals and other products (78). Similarly, the Ministry of Education and Science provides a select number of assistive products through the school system.<sup>68</sup>

Health facilities do not provide mobility-related assistive products to use at home. NHSU includes assistive products in the Programme of Medical Guarantees, but these are for training purposes and in-hospital use only.

<sup>66</sup> The exception is hearing aids and incontinence products, as these are managed by the Ministry of Health.

<sup>67</sup> Source: Zoom meeting with URIP, 12 October 2020.

<sup>68</sup> Source: discussion with Ministry of Education and Science during workforce meeting; Kyiv, 2 September 2020.

If patients are willing to pay out of pocket for a device, the hospital can link them with a producer/provider.<sup>69</sup> There is evidence of one hospital engaging a prosthetics and orthotics provider to come to the hospital to take measurements and manufacture a device, but this is an exception to the general process and dependent on the patient's ability to pay.

Occupational and physical therapists are generally not included in the process of prescribing an assistive product, fitting it or training the user There is evidence of individual initiatives on guiding a patient or caregiver through the catalogue of devices<sup>70</sup> and training in use of a device after it has been received.

#### 9.6.2 Process

For assistive products paid for by Ministry of Social Policy's social insurance fund, an individual must receive the requisite product prescription from the MSEC or MAC process (42). The knowledge and skills of MSEC/MAC staff in identifying the appropriate product to meet the individual needs of the patient were not investigated during this assessment.

Next, the individual takes the product prescription to a local branch of the social insurance fund and selects the specific product and supplier from Ministry of Social Policy catalogue. The catalogue offers a wide range of choices for each product. For example, there are over 140 choices for a manual wheelchair (79):

- 58 options for a low-active wheelchair
- 30 options for a medium-active wheelchair
- 31 options for an active wheelchair
- 33 other types of wheelchair.

For an individual or caregiver with no technical expertise, these choices are daunting.

Once the order has been placed, the supplier has 30 days to provide the product. In general, the product is delivered to the home or sent by post. Upon arrival, the beneficiary must sign a form confirming receipt and satisfaction with the product. Often, this is signed without fully assembling or trying the device. The individual can return the product, but must then sign a waiver that would preclude him/her from receiving future products.<sup>71</sup>

#### 9.6.3 Supply and demand

The demand for assistive products outweighs the supply. According to Ministry of Social Policy, approximately 200 000 people request assistive products each year and Ministry of Social Policy can supply about 60% of these requests.<sup>72</sup> That said, in 2019 there were 191 882 requests and 165 226 people benefiting (86%).<sup>73</sup>

<sup>69</sup> Source: discussions with rehabilitation facility providers during site visits in Kyiv.

<sup>70</sup> Source: information from Okhmatdyt Children's Hospital visit, 8 September 2020.

<sup>71</sup> Source: information from assistive product focus group discussion via Zoom, 4 September 2020.

<sup>72</sup> Source: communication between Ministry of Social Policy and WHO European Region assistive technology consultant.

<sup>73</sup> Source: 2019 Ministry of Social Policy assistive product statistics (Excel worksheets) shared with WHO European Region assistive technology consultant.

#### 9.6.4 Data on provision of assistive products

The Ministry of Social Policy organizes data on those who have received assistive products by 11 groups of beneficiaries and 21 types of assistive products. Assistive products are organized in two categories:

- individual rehabilitation means interpreted as custom-made items and
- technical means of rehabilitation interpreted as off-the shelf products (79).

The Ministry of Social Policy has a registry of 620 763 people who currently have assistive products in Ukraine. According to the records, at the beginning of 2019, there were 616 141 people with products. During the year, there were 56 743 new registrants, while 52 121 left the registry (death or other causes). Table 22 and Table 23 provide summary information on assistive products provided in 2019.

#### Table 22. Ministry of Social Policy summary data on beneficiaries and assistive products provided in 2019

No.	Beneficiary description	People benefiting			Assistive products			
		Total	Male	Female	Total	Custom	Off-the-shelf	
1.	Persons with disability from general disease	95 234	43 249	51 985	309 594	243 240	66 354	
2.	Persons with disability from childhood	17 711	9070	8641	47 441	36 409	11 032	
3.	Children with certified disabilities	27 807	16 383	11 424	80 734	69 442	11 292	
4.	Older adults	12 466	189	12 277	54 608	54 197	411	
5.	Seven other types of beneficiaries	12 008	6630	5378	32 034	28 543	3491	
	TOTAL	165 226	75 521	89 705	524 411	431 831	92 580	

#### Table 23. Ministry of Social Policy summary data on the number and type of assistive products provided in 2019

No.	Description of assistive product	Numl	ber of prod	lucts per bei	neficiary t	ype*	No. of
		Adult (1)	Adult (2)	Children	Older adults	Seven types merged	devices
	Individual rehabilitation means	243 240	36 409	69 442	54 197	28 543	431 831
1.	Spinal orthosis	6637	664	1,970	1	2846	12 118
2.	Upper-limb orthosis	107	24	423	0	30	584
3.	Lower limb orthosis	2389	479	7100	2	2726	12 694
4.	Upper-limb prosthesis	268	155	74	1	75	573
5.	Lower limb prosthesis	10 292	929	150	218	847	12 436
6.	Breast prosthesis	20 762	199	1	12 739	2116	35 817
7.	Breast support systems	58 215	530	3	35 164	5453	99 365
8.	Compression sleeve for lymphedema	10 423	85	0	5760	1158	17 426
9.	Orthopaedic footwear	117 875	31 938	59 642	28	11 687	221 170
10.	Covers for the upper limb and lower limb	14 773	1204	67	283	1265	17 592
11.	Auxiliary tools for personal care	1499	202	12	1	342	2056

No.	Description of assistive product	Numl	ber of prod	lucts per bei	neficiary t	ype*	No. of
		Adult (1)	Adult (2)	Children	Older adults	Seven types merged	devices
	Technical means of rehabilitation	66 354	11 032	11 292	411	3491	92 580
12.	Auxiliary tools for personal care	1030	324	95	0	82	1531
13.	Tools for personal hygiene (e.g. bath chairs)	13 507	1697	661	1	645	16 511
14.	One-handed walking tool (cane, crutches)	24 900	2156	202	386	1359	29 003
15.	Two-handed walking tool (walkers)	4301	451	648	2	236	5638
16.	Wheelchairs; including cushions	15 731	2869	4569	12	816	23 997
17.	Auxiliary means for transfers	16	2	6	0	0	24
18.	Auxiliary means for lifting	241	66	38	0	11	356
19.	Furniture (e.g. bed, table, chair)	4353	919	4464	10	203	9949
20.	Equipment	817	124	159	0	33	1133
21.	Special tools: orientation, communication	1458	2424	450	0	106	4438
ΤΟΤΑ	L	309 594	47 441	80 734	54 608	32 034	524 411

#### Table 23. contd.

\* Note: Beneficiary type columns correspond to the "beneficiary description" provided in Table 22.

## 9.7 Rehabilitation and mental health, vision and hearing

#### 9.7.1 Mental health

The University of Washington and WHO assessed the strength of Ukraine's mental health system in January–March 2020 (80). There was no mention of rehabilitation within mental health, but the report provides an excellent synopsis of the mental health situation in Ukraine.

#### 9.7.2 Vision and hearing

The Ministry of Health, Ministry of Education and Science and Ministry of Social Policy provide assistive products for individuals who are blind or have low vision and for those who are deaf or hard of hearing; these are outlined in the State standard programme of rehabilitation for persons with disabilities (78). The Ministry of Education and Science supports computer programs for learning. For those who are blind or have low vision, health facilities provide eyeglasses, contact lenses and thermometers that have speech output; the Ministry of Social Policy (through enterprises) provides dictation equipment and devices that have speech output. For individuals who are deaf/hard of hearing, health facilities provide hearing aids and cochlear implants; while the Ministry of Social Policy offers mobile phones with videocommunication capabilities.

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#### 9.8 Rehabilitation in emergency or disaster

No information was collected during the assessment. The status of these services could not be determined through follow-up actions.

#### 9.9 Quality of rehabilitation

As noted in the limitations section of this report, the assessment team did not observe treatments or visit facilities in regions outside Kyiv, and did not visit any centres managed by the Ministry of Social Policy. Impressions in this section are based on observations of treatment at two sites (Kyiv Regional Hospital Neurorehabilitation Unit and AKSIMED private clinic) and on discussions with service providers and service users.

#### 9.9.1 Rehabilitation interventions

In the sites visited, rehabilitation treatment was delivered in a gym environment that contained a wide variety of equipment. The private clinic was especially well equipped. Active engagement of the therapist was observed, as well as active participation by the patient,. The team did not visit the "modality room" (providing ultrasound, short-wave diathermy and other machine-based treatments).

Note-taking practices vary between settings in respect of content and the way information is collected and stored (paper or electronic storage). Information on treatment outcomes or change in functional status were measured at the time of discharge, through a written question asking whether treatment goals had been met, partially met or not met at all, with space for additional information.

#### 9.9.2 Treatment plans and dosage

Individual treatment plans are developed by MSECs and LCCs. The team did not observe the way these plans are utilized in the clinical environment. In hospitals, rehabilitation assessments are ordinarily conducted by the physician (in some cases, with others in the rehabilitation team). Patients are then referred to the physical therapy department for their own assessment and treatment plan. According to discussions with rehabilitation staff, there are no standard patient evaluation forms for rehabilitation.

No rehabilitation treatment protocols have been established in Ukraine. In 2012, there was a task force (Ministry of Health) on developing unified guidelines for stroke, but it was not specific to rehabilitation. It was updated in 2018, with one part dedicated to rehabilitation.<sup>74</sup> Order No. 751 provides guidance on creating a unified protocol and developing a new protocol. If a literal translation of a foreign based guideline is adopted at a hospital, the client must sign every time it is used.<sup>75</sup> One USAID-funded project is investigating the development of clinical protocols for care management for stroke, traumatic brain injury and spinal cord injury.

Dosage practices appear to be influenced by NHSU in centres where NHSU is the source of funding. The health facility is aware of the capitation rate for a rehabilitation package, and this contributes to the calculation that

<sup>74</sup> Source: group discussion on rehabilitation service quality as part of STARS, Kyiv, 2 September 2020.

determines the time for inpatient care. The unofficial estimates put the calculation for inpatient care coverage at roughly two weeks; at this point, a person is discharged or begins to pay out of pocket if further treatment is desired.<sup>76</sup>

#### 9.9.3 Multidisciplinary team and person-centred care

All sites visited made mention of the importance of a multidisciplinary team and shared information on different practices and the way that multidisciplinary work is implemented. One of the NHSU requirements is the presence of a multidisciplinary team, but NHSU does not offer guidance on how to do it.

There is also evidence of person-centred care. One of the notable initiatives is the use of a peer provider at the neurorehabilitation unit at Kyiv Regional Hospital. This individual has a spinal cord injury and is a wheelchair user. His role is vital in providing personal guidance and advice for patients based on his lived experience. His presence on the team served as a reminder of the dignity of the person and the things that rehabilitation seeks to achieve.

#### 9.9.4 Continuum of care

There is evidence of referral between departments within each of the facilities (for example: from the acute stroke unit to the neurorehabilitation department). The biggest gaps in the continuum of care occur upon discharge and for individuals requiring assistive products.

Upon discharge from a health facility, there is no system of support or follow-up care at community level. Family members take on this role, or individuals may reach out to a therapist to see them on a private basis.

For individuals requiring State-funded assistive products, they must first pass through the MSEC or MAC process. As noted previously, the wait time post-injury is 120 days before an individual can be seen by a commission. For many, this wait time disrupts their rehabilitation process and may cause physical harm.

For example: a woman with a newly acquired spinal cord injury cannot move or feel her legs. The hospital provides a wheelchair for use in the hospital, but nothing is provided at the time of discharge. She is left at home for months waiting for her MSEC review. When this process is complete, she waits longer for the wheelchair to arrive. During this time, she will have lost the learned skills achieved during rehabilitation, potentially lost the range of motion in her legs owing to lying in bed, and may develop pressure sores on her skin from lack of proper positioning and support.

#### 9.10 Impact of COVID-19

The main impact of COVID-19 on provision rehabilitation services in Ukrainian hospitals is the prohibition of planned hospitalization during several periods of lockdown, as well as the conversion of many inpatient rehabilitation departments to COVID-19 hospitals. These factors stopped or made impossible the provision of many inpatient rehabilitation services.<sup>77</sup>

<sup>76</sup> Source: discussion with rehabilitation departments and staff during site visits in Kyiv, September 2020.

<sup>77</sup> Source: stakeholder feedback on draft STARS report.

The WHO Regional Office for Europe has developed a leaflet, Support for rehabilitation self-management after COVID-19-related illness, that provides guidance on self-care (*81*). It provides basic exercises and advice for adults who have been severely unwell and admitted to hospital with COVID-19. It assists in self-rehabilitation and recovery management, addressing the common residual COVID-19 symptoms (specifically breathlessness), starting exercise, getting back to functional activities, mental health, post-intubation symptoms such as voice weakness, eating, drinking and attention and memory deficits (*81*).

#### Summary of rehabilitation accessibility and quality situation

- Rehabilitation services are generally not available in primary or community-level health care settings.
- Health services do not provide assistive products (exceptions are hearing aids and incontinence products).
- In 27 NHSU packages, 12 include rehabilitation (three are specific to rehabilitation, seven other packages include rehabilitation and two reference assistive products).
- NHSU signed contracts with 250 health facilities to provide 498 rehabilitation packages (212 neurological, 223 musculoskeletal and 63 for children aged 0–3 years). NHSU deliberately signed contracts for rehabilitation packages in all regions of Ukraine to promote access.
- The standard tariff set by NHSU for rehabilitation packages (regardless of severity of injury) may negatively impact treatment dosage and outcomes of care.
- There is evidence of effective peer support groups and peer providers in Ukraine.
- El and early childhood development are not well established. In 2019, responsibility for El and early childhood development shifted from the Ministry of Health to the Ministry of Social Policy.
- The Ministry of Social Policy manages eight State centres for complex rehabilitation and 86 "rehabilitation institutions" for children. The Ministry of Health licensed 50 facilities to provide rehabilitation for children; two are managed by the Ministry of Social Policy.
- For persons with disabilities, the MSECs/LCCs determine the individual programme for rehabilitation and provide the requisite prescription for assistive products. For any individual needing State-funded assistive products, the MSEC prescription is required.
- The Ministry of Social Policy manages all issues related to assistive products, and oversees 98 facilities that manufacture, supply and repair assistive products (12 are public).
- Rehabilitation professionals are rarely involved in the provision of assistive products; the Ministry of Social Policy's catalogue of over 1000 different devices is daunting for patients to navigate.
- In 2019, the Ministry of Social Policy supported 165 226 people who received 524 411 assistive products.
- There is evidence of documentation of rehabilitation treatment goals and outcomes in the rehabilitation departments that were visited.
- There are no treatment protocols for rehabilitation, but some initiatives to develop them for stroke, spinal cord injury and traumatic brain injury.
- The gaps in the continuum of care for rehabilitation are related to patient discharge and provision of assistive products.

10. Rehabilitation outcomes and system attributes

#### **10.1 Outcomes**

There is no unified database on rehabilitation at the national level. CMS and eHealth each collect some level of data on rehabilitation, but these data are neither synchronized nor complete.

Outcomes of rehabilitation (measuring functioning gains, or slowing functioning loss) are captured by some rehabilitation departments, but this practice is not uniform. There is no platform within eHealth to capture functioning data or outcomes of rehabilitation interventions. The Ministry of Social Policy does not collect data on outcomes or increase in function resulting from the provision of assistive products.

#### **10.2 Attributes**

#### 10.2.1 Equity

To promote equity in service availability, NHSU deliberately signed contracts with all regions for delivery of rehabilitation packages. Without consolidated details and data analysis of the staffing numbers and qualifications within each of the different rehabilitation settings, it is difficult to assess equity in rehabilitation coverage.

#### 10.2.2 Efficiency

Evidence-based models of care and use of standard tests on functioning were observed and outcomes of treatment were measured by progress in the achievement of goals. That said, Ukraine does not have standard rehabilitation assessment tools or reporting forms. As a result, measuring efficient delivery of rehabilitation is a challenge.

#### 10.2.3 Accountability

There are very few mechanisms ensuring accountability for rehabilitation, and there is no reporting on outcomes of rehabilitation.

#### 10.2.4 Sustainability

The value of rehabilitation in health care to restore or maintain function has not been well established. Identification and recognition of the economic benefits of rehabilitation need further attention. Integrating rehabilitation into the NHSU packages is a positive step towards sustaining rehabilitation service provision within health care.

# 11. Ukraine – WHO RMM scores and details

The RMM is a standard tool used during the STARS process. There are 50 components across seven domains. Each component has illustrative descriptors that indicate levels of maturity of rehabilitation in the health system. The purpose of using the RMM is to provide an overview on the performance of different rehabilitation components. This overview enables comparison across components and domains that can then assist in the identification of priorities and recommendations for strategic planning. The international consultant aligned information from the in-country data collection with the 50 components to determine the score.

Table 24 below summarizes the seven domains, the components within each domain, scores for each component and the rationale for the score. The rationale is taken directly from the description in the RMM associated with each score.

	KEY TO SCORES		JUSTIFICATION				
4	Already present, needs no immediate action		provides standard descriptive content for each maturity				
3	Needs some strengthening	level. Overlap exists between levels. Rationale (justification) for the score describes the key attributes that led to the selection of the					
2	Needs a lot of strengthening	score.					
1	Very limited; needs establishing	-					
	GOVERNANCE SCORE/JUSTIFICATION						
1	Rehabilitation legislation, policies and plans	2	Policy frameworks encompass some aspects of rehabilitation.				
2	Leadership, coordination and coalition-building for rehabilitation	2	Small amount of interagency coordination for rehabilitation.				
3	The capacity and levers for rehabilitation plan implementation	2	Some management processes and mechanisms are in place.				
4	Accountability, reporting and transparency for rehabilitation	2	Accountability for rehabilitation is at a low level.				
5	Regulation of rehabilitation and assistive technology	2	There are low levels of regulation that apply to rehabilitation.				
6	Assistive technology policies, plans and leadership	2	There is little assistive technology integration into wider health policies.				
7	Assistive technology programmes and procurement	2	Assistive technology in health programmes has many gaps.				
	FINANCING		SCORE/JUSTIFICATION				
8	Rehabilitation financing and coverage of the population	2	Rehabilitation integrated into health care financing, but gaps exist.				
9	Scope of rehabilitation included in financing	2	Small range of rehabilitation interventions are financed.				
10	Financing of rehabilitation and out-of-pocket costs	2	Fees for rehabilitation services do not accommodate all clients.				
	HUMAN RESOURCES AND INFRASTRUCTURE		SCORE/JUSTIFICATION				
11	Rehabilitation workforce availability	2	Not enough rehabilitation personnel in the health care system.				
12	Rehabilitation workforce training and competencies	2	Little effort to identify country-specific rehabilitation needs.				

#### Table 24. Ukraine – WHO RMM scores

#### Table 24. contd.

13	Rehabilitation workforce planning and management	1	Information on situation of rehabilitation is incomplete.
14	The rehabilitation workforce mobility, motivation and support	2	International mobility has adverse effects on the workforce.
15	Rehabilitation infrastructure and equipment	2	Some rehabilitation equipment is available within health care.
	HEALTH INFORMATION SYSTEMS		SCORE/JUSTIFICATION
16	Information about rehabilitation needs, including population functioning and disability	1	No population surveys on functioning and disability.
17	Information about rehabilitation availability and utilization	2	There is no unified database on availability of rehabilitation services.
18	Information on rehabilitation outcomes and quality	2	Rehabilitation research is occasionally conducted.
19	Rehabilitation information used during decision-making	1	No reports on the status or performance of rehabilitation.
	SERVICE – ACCESSIBILITY		SCORE/JUSTIFICATION
20	Availability of specialized, high-intensity rehabilitation	2	Small number of units for people with complex needs.
21	Availability of community-delivered rehabilitation	1	Low level of community-delivered rehabilitation.
22	Availability of rehabilitation integrated into tertiary care	2	Low number of rehabilitation professions/personnel.
23	Rehabilitation integrated into secondary care	2	There is a low distribution across the country with many gaps.
24	Rehabilitation integrated into primary care	1	Very low to no integration of rehabilitation with primary health care.
25	Occurrence of informal, self-directed rehabilitation	2	Few opportunities exist for informal self-directed care.
26	Availability of rehabilitation across acute, subacute and long-term phases of care	2	There are few mechanisms supporting access to rehabilitation along the continuum of care across all phases.
27	Availability of rehabilitation across mental health, vision and hearing programmes	1	Rehabilitation interventions are barely or not at all integrated in vision and hearing care.
28	Availability of rehabilitation for target population groups based on country need	2	There is a low level of understanding of rehabilitation needs in the population.
29	El and referral to appropriate health and rehabilitation programmes for children with developmental difficulties and disabilities	1	There is very low or no monitoring of developmental milestones in children in health services, and referral practices are weak.
30	Availability of rehabilitation in hospital, clinical settings and the community for children with developmental difficulties and disabilities	1	There are very few or no early childhood intervention services available.
31	Availability of assistive products, including those for mobility, environment, vision, hearing, communication and cognition	2	There is a low level of assistive products available across health services.
32	Availability of assistive products and service delivery	2	Provision of assistive products is sometimes accompanied by assessment.
33	Affordability of rehabilitation	2	Low evidence and knowledge of affordability of rehabilitation.
34	Acceptability of rehabilitation	2	Rehabilitation interventions are often inconvenient to reach.

#### Table 24. contd.

	SERVICE – QUALITY		SCORE/JUSTIFICATION
35	Extent to which evidence-based rehabilitation interventions are utilized	1	Very few or no clinical practice guidelines, protocols or standards of care.
36	Extent to which rehabilitation interventions are of sufficient specialization and intensity to meet needs	1	There are few or no training opportunities for specialization among rehabilitation personnel.
37	Extent to which rehabilitation interventions empower, educate and motivate people	1	Only a few materials exist across rehabilitation services that support client education.
38	Extent to which rehabilitation interventions are underpinned by appropriate assessment, treatment planning, outcome measurement and note-taking practices	2	Low and variable level of quality and consistency in the assessment, treatment planning, measurement of outcomes and note-taking practices in rehabilitation personnel.
39	Extent to which rehabilitation is timely and delivered along a continuum, with effective referral practices	1	Very low level of timely rehabilitation across all levels of care and during all phases of care.
40	Extent to which rehabilitation is person-centred, flexible and engages users, family and carers in decision-making	2	Person-centred care is not widely understood; a small number of personnel practice it when they can.
41	Extent to which health personnel and community members are aware, knowledgeable and seek rehabilitation	2	Across health personnel there is a low level of knowledge about rehabilitation; many do not know when and where to refer.
42	Extent to which rehabilitation is safe	1	No established mechanisms to support quality assurance.
0	UTCOME AND ATTRIBUTES OF REHABILITATION		SCORE/JUSTIFICATION
43	Coverage of rehabilitation interventions for population groups that need rehabilitation	2	Rehabilitation is available for some of the population that needs it but many groups miss out on the rehabilitation they need.
44	Functioning outcomes of rehabilitation for those who receive rehabilitation	1	Very low level of effective rehabilitation, where it is available.
45	Equity of rehabilitation coverage across disadvantaged population groups	2	There is a low level of equitable access to rehabilitation.
46	Allocative and technical efficiency of rehabilitation	1	Allocative and technical efficiency not well understood or measured.
47	Multilevel accountability for rehabilitation performance	1	Very few or no mechanisms ensuring rehabilitation accountability.
48	Financial and institutional sustainability of rehabilitation	2	There has been little planning for future needs.
49	Resilience of rehabilitation for crisis and disaster	2	Rehabilitation is integrated into emergency plans to a small extent.

# 12. Conclusions and recommendations

#### **12.1 Conclusions**

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The rehabilitation situation in Ukraine is evolving and continues to transition from post-Soviet practices to contemporary understandings of and approaches to rehabilitation.

While the strengths of **rehabilitation governance** are exhibited through the existing focal points for rehabilitation within Ministry of Health and Ministry of Social Policy, the exchanges on rehabilitation within and between ministries is ad hoc and not systematic. Similarly, there is no overarching document or national strategy on rehabilitation to bring relevant departments, ministries and stakeholders together.

With reference to **rehabilitation financing** within the Programme of Medical Guarantees, the NHSU has included rehabilitation across many packages and has three packages **specific** to rehabilitation. Unfortunately, assistive products are not part of health financing and continue to be financed through social programmes for persons with disabilities.

Regulatory structures and licensing are required for doctors, but these do not apply to other **human resources for rehabilitation** (physical therapists, occupational therapists, speech and language therapists). There are accredited training programmes in physical and occupational therapy, but no continuing education requirements. Although technician-prosthetists or engineer-prosthetists exist, prosthetics and orthotics is not a recognized profession in Ukraine. Logopedy is linked with the education system and focuses on children; speech and language therapy training and treatment for adults do not formally exist in Ukraine.

There is no national data collection on population functioning and disability. The eHealth system and CMS each collect partial data related to rehabilitation, but there is no consolidated or centralized **rehabilitation information** (including locations of workforce, availability and utilization of services, or outcome data from rehabilitation interventions).

**Rehabilitation services** are largely absent at the community and primary health care levels; this disrupts the continuum of health care and can negatively impact functional gains achieved within more specialized facilities. Assistive products are generally provided without the involvement of the rehabilitation workforce, which may also negatively impact the utility of the assistive product (due to poor fitting, products inappropriate for patient needs, or lack of training in the use of the product).

#### 12.2 Recommendations

To address some of the challenges that Ukraine faces related to rehabilitation, the following recommendations are submitted for consideration.

#### 12.2.1 Governance

#### 1. Consolidate rehabilitation leadership and coordination

It is recommended that the Government of Ukraine:

- 1.1 establish an intraministerial and interministerial committee to develop and implement a national rehabilitation strategy and serve as a channel for ongoing communication in the sector; and
- 1.2 develop a national strategy on rehabilitation that involves and includes all relevant ministries, departments and stakeholders.

#### 2. Address gaps in the Law of Ukraine "On rehabilitation in health care" No. 1053-IX

It is recommended that the Government of Ukraine:

- 2.1 support multisectoral working groups in creating regulatory documents to support the Law; and
- 2.2 develop by-laws and other necessary documents pertinent to the Law.<sup>78</sup>

#### 3. Clarify information on rehabilitation and rehabilitation-related terminology

It is recommended that the Ministry of Health, Ministry of Social Policy and relevant stakeholders:

- 3.1 review and amend rehabilitation-related terminology to reflect contemporary and international standards (e.g. health vs. medical; invalidity vs. disability; antiquated terms such as physiotherapist physician, etc.); and
- 3.2 conduct awareness campaigns to inform the public about modern-day rehabilitation.

#### 4. Strengthen frameworks related to procurement and provision of assistive products

It is recommended that the Government of Ukraine:

- 4.1 continue to engage with WHO to assess the assistive technology situation to include assistive technology in a national rehabilitation strategy and/or create a substrategy on assistive technology; and
- 4.2 develop a unified intersectoral system for provision of assistive products, starting from the acute rehabilitation phase.

<sup>78</sup> Note: The President of Ukraine signed this Law on 28 December 2020. Details of the Law are not included in this report as the signing occurred after the September 2020 assessment. That said, it is relevant to note that some additional actions and support will likely be needed in the implementation of this Law.

#### 12.2.2 Financing

#### 5. Identify equitable and efficient financing approaches to scale up rehabilitation services

It is recommended that Government of Ukraine:

- 5.1 review existing sources of financing for rehabilitation and compile baseline information on budgeting and expenditure related to rehabilitation in Ukraine; and
- 5.2 develop financing targets and practices to address rehabilitation needs within and across ministries.

#### 6. Adjust NHSU rehabilitation packages to address limitations encountered during the initial launch

It is recommended that NHSU, the Ministry of Health and relevant stakeholders:

- 6.1 analyse data and lessons learned from experiences with the NHSU rehabilitation packages;
- 6.2 incorporate treatment outcome measures within package requirements; and
- 6.3 consider the type of rehabilitation setting (inpatient or outpatient) and a person's level of functioning when determining funding for rehabilitation services.

#### 12.2.3 Human resources

#### 7. Resolve identified challenges related to the rehabilitation workforce

It is recommended that the Ministry of Health, together with the Ministry of Education and Science and other relevant stakeholders:

- 7.1 establish the profession of speech and language therapist in Ukraine;
- 7.2 fully separate the physical therapy and occupational therapy professions at the educational level, with separate master's-level programmes in the two specializations;
- 7.3 separate physical therapy and occupational therapy in the workforce, with updated Ministry of Health qualification requirements for both professions;
- 7.4 clarify details of the prosthetics and orthotics profession in Ukraine and set up an internationally accredited prosthetics and orthotics training programme within Ukraine's education system;

- 7.5 upskill the estimated 80 000 people trained in physical-therapy-related courses between 1994 and 2018; and
- 7.6 address existing gaps related to competencies, regulations, licensing and continuing education requirements for existing physical therapy, occupational therapy and prosthetics and orthotics professions, and future speech and language therapist professions.

#### 12.2.4 Information

#### 8. Collect national, standardized data on population functioning

It is recommended that the State Statistics Service of Ukraine:

8.1 incorporate questions on population functioning within the next national census.

#### 9. Expand the eHealth platform to include essential rehabilitation-related information

It is recommended that the Ministry of Health, State Enterprise "Electronic Health (eHealth)" and NHSU, together with relevant stakeholders:

- 9.1 develop an essential register for all rehabilitation professionals (not just physicians) or integrate the register of rehabilitation professionals into the existing register system; and
- 9.2 identify information platforms on rehabilitation that are weak or missing and determine how these gaps may be addressed.

#### 12.2.5 Rehabilitation service

#### 10. Promote timely rehabilitation interventions across the continuum of health care

It is recommended that the Ministry of Health and NHSU, together with relevant stakeholders:

- 10.1 encourage expansion of rehabilitation services at primary and community levels;
- 10.2 incorporate the provision of assistive products within health care, utilizing the rehabilitation workforce in this process; and
- 10.3 identify or develop an appropriate and standardized outcome measurement tool to capture the results of rehabilitation interventions.

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спричинену коронавірусом SARS-CoV-2, та тим, що забезпечують життєдіяльність населення, що мають право на встановлення доплати до заробітної плати з 01 вересня 2020 року до 31 грудня 2020 року» [Ministry of Health Order No. 2021 (3 September 2020), On approval of the list of types of health care facilities and the list of positions of medical and other employees for whom salary supplements are set for medical and other health care workers who provide medical care to patients with acute respiratory disease COVID-19 caused by severe acute respiratory syndrome coronavirus-CoV-2, and those who ensure the livelihood of the population, entitled to the establishment of a surcharge on wages from September 1, 2020 to December 31, 2020]. Kyiv: Ministry of Health of Ukraine; 2020 (https://moz.gov.ua/article/ministry-mandates/nakaz-moz-ukraini-vid-03092020--2021-pro-zatverdzhennja-pereliku-tipiv-zakladiv-ohoroni-zdorov%e2%80%99ja-ta-pereliku-posad-medichnih-ta-inshih-pracivnikiv-dlja-jakih-vstanovljujutsja-doplati-do-zarobitnoi-plati-medichnim?fbclid=IwAR0Rp2bFoaxtSVFhQex39qzUMy806 m9zwjpEPBed7utrdlKroY5I\_sclZ7g, accessed 27 August 2021) [in Ukrainia].

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#### **Annex 1. Overview of rehabilitation**

Rehabilitation is a health strategy alongside other health strategies, including promotion, prevention, curative and palliative care (1) (see Fig. A1.1). It is a fundamental part of health services and integral to the realization of universal health coverage (2). Rehabilitation covers multiple areas of health and functioning, including physical and mental health, vision and hearing. "Rehabilitation interventions"<sup>1</sup> primarily focus on improving the functioning of an individual. Rehabilitation is a highly integrated form of health care, with most rehabilitation delivered within the context of other (i.e. not rehabilitation-specific) health programmes, for example orthopaedic, neurology, cardiac, mental health and paediatric programmes. Rehabilitation improves people's everyday functioning and increases their inclusion and participation in society and is thus an investment in human capital.

#### Fig. A1.1 Rehabilitation in health framework



Source: (1).

<sup>1</sup> Rehabilitation interventions are a form of health intervention. A health intervention is an act performed for, with or on behalf of a person or population whose purpose is to assess, improve, maintain, promote or modify health, functioning or health conditions.

Rehabilitation should be available at all levels of health care, from specialist referral centres through to primary and community settings.<sup>2</sup> Rehabilitation interventions are delivered in health facilities as well as in the community, such as in homes, schools and workplaces. Rehabilitation is a highly person-centred form of health care; it is goal oriented (i.e. very individually tailored), timebound and an active rather than passive process. Rehabilitation is most commonly delivered through a multidisciplinary team, including therapy personnel, namely physiotherapists, occupational therapists, speech and language therapists, prosthetists and orthotists and psychologists and through specialist rehabilitation medicine doctors and nurses. It can also be delivered through appropriately trained community-based rehabilitation personnel and other health personnel. In this report, as with other WHO documents, the word rehabilitation also includes habilitation.<sup>3</sup>

Rehabilitation is for all the population; this includes people with disability, as defined by the UNCRPD<sup>4</sup> and many others. People with short-term health conditions also benefit from rehabilitation.

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<sup>2</sup> The Services Framework for Rehabilitation reflects the distribution of rehabilitation required to meet community needs.

<sup>3</sup> Article 26 of the UNCRPD refers to both rehabilitation and habilitation. Habilitation refers to rehabilitation in the context of people who were born with congenital health conditions.

<sup>4</sup> As defined by the UNCRPD, people with disabilities are "those who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others". However, rehabilitation is for all the population; for example, people with short-term functioning difficulties and many people who do not identify as having a disability or are not legally acknowledged as disabled by a government procedure.

## Annex 2. Rehabilitation in health systems – a guide for action





#### **REHABILITATION IN HEALTH SYSTEMS – A GUIDE FOR ACTION**

#### Overview

"Rehabilitation in Health Systems – A Guide for Action" (the Guide) assists governments in **strengthening the** health system to provide rehabilitation.

This initiative is a result of the February 2017 meeting **Rehabilitation 2030: a call for action** (Geneva, 6–7 February 2017).

The Guide is a four-step process that is estimated to take about one year to complete (each country is different). WHO has developed standard data collection tools; these were first used in 2018.

In general, the process starts when the Ministry of Health expresses interest in the process and/or requests technical support from WHO for this activity.

The assessment is based around the six building blocks for health systems strengthening. Application to rehabilitation is outlined for each building block. See Table A2.1 below.

#### Table A2.1. The four-phase process

Objective	WHO guidance	Tools	Activity timeline
1. Assess the situation	Systematic Assessment of Rehabilitation Situation (STARS)	Template for Rehabilitation Information Collection (TRIC): eight domains, 97 questions; Ministry of Health self-assessment RMM: seven domains, 50 questions; consultant-supported scoring	TRIC: Not filled in prior to in- country assessment In-country assessment: 31 August–11 September 2020 Zero-draft report: 30 October 2020 First draft: 30 January 2021
2. Develop a rehabilitation strategic plan	Guidance for Rehabilitation Strategic Planning (GRASP)	Results from STARS report contribute to development of strategic plan	Anticipated dates: March 2021
3. Establish monitoring evaluation and review process	Framework for Rehabilitation Monitoring and Evaluation (FRAME)	FRAME guidance assists in establishing a monitoring framework including the selection of indicators	To happen simultaneously with Strategic Plan
4. Implement the strategic plan	Action on Rehabilitation (ACTOR)	Planning, action and evaluation cycle	After Strategic Plan and Monitoring Framework are in place

The WHO health system building blocks are an important framework reflected within the Guide.

Across the six building blocks are components that reflect rehabilitation.

Table A2.2 below illustrates the health system building blocks and corresponding rehabilitation components. The assessment and measurement of these rehabilitation components is a subject of the tools in the Guide.

The six building blocks of the health system	Components reflecting rehabilitation
1. Leadership and governance	<ul> <li>Laws, policies, plans and strategies that address rehabilitation</li> <li>Governance structures, regulatory mechanisms and accountability processes that address rehabilitation</li> <li>Planning, collaboration and coordination processes for rehabilitation</li> </ul>
2. Financing	<ul><li>Health expenditure for rehabilitation</li><li>Health financing and payment structures inclusive of rehabilitation</li></ul>
3. Health workforce	<ul> <li>Health workforce that delivers rehabilitation interventions – primarily rehabilitation medicine, rehabilitation allied health/therapy personnel and rehabilitation nursing</li> </ul>
4. Service delivery	<ul> <li>Health services that deliver rehabilitation interventions, including rehabilitation delivered in rehabilitation wards, units and centres, in hospital settings and rehabilitation delivered in primary care facilities and other community settings; the availability and quality of rehabilitation are considered</li> </ul>
5. Medicines and technology	Medicines and technology commonly utilized by people accessing rehabilitation, primarily     assistive products
6. Health information systems	• Data relevant and inclusive of rehabilitation in the health information systems; for example, population functioning data, rehabilitation availability and utilization data, rehabilitation outcomes data

# Annex 3. Map of Ukraine


# **Annex 4. In-country schedule**

# Systematic assessment of rehabilitation situation in Ukraine

Date	Activity	Location	
Thu 27 Aug 2020	Thu 27 Aug 2020 Ms. Eitel arrival in Ukraine		
Monday	1. Introduction meeting with Ministry of Health (Ministry of Health)		
31 August 2020	2. Topic-specific: governance /emergency	Kyiv	
Tuesday	3. Topic-specific: finance	Kyiv	
1 September 2020	4. Topic-specific: information systems	Kyiv	
Wednesday	5. Topic-specific: human resources (training and workforce)	Kyiv	
2 September 2020	6. Topic-specific: service delivery	Kyiv	
Thursday 3 September 2020	7. SWOT	Kyiv	
Friday	8. Focus group – Service Providers	Kyiv	
4 September 2020	9. Focus group – Service Users (virtual)	Kyiv	
Monday	10. Kyiv Regional Hospital – neurorehabilitation unit	Kyiv	
7 September 2020	11. War Veterans Hospital – Lisova Poliana	Kyiv	
Tuesday	12. AKSIMED Private Clinic	Kyiv	
8 September 2020	13. Okhmatdyt Children's Hospital	Kyiv	
	14. Ministry of Veterans Affairs	Kyiv	
Wednesday	15. Ministry of Health Directorate of Digital Transformation	Kyiv	
9 September 2020	16. Ministry of Health Quality of Life Directorate – MSEC expert	Kyiv	
	17. President's Office focal point for health care and social policy	Kyiv	
	18. Parliamentarian – draft rehabilitation law	Kyiv	
Thursday	19. Focus group – physical therapy / occupational therapy students	Kyiv	
10 September 2020	20. National Institute of Physical Culture and Sport	Kyiv	
	21. Ministry of Social Policy	Kyiv	
	22. Kyiv City Lead MSEC	Kyiv	
Friday	23. NHSU eHealth department (virtual)	Kyiv	
11 September 2020	24. Debrief – World Health Organization	Kyiv	
	25. Debrief – Ministry of Health	Kyiv	
	26. Oberih Clinic – Acute Stroke Unit	Kyiv	
Saturday 12 September 2020	Ms Eitel departure to USA	Kyiv	

Follow-up meetings via Zoom		
Tuesday 15 September 2020	USAID Ukraine (2 participants)	
Friday 18 September 2020	Ministry of Health debrief with slideshow (6 participants)	
Friday 9 October 2020	Stakeholder debrief with slideshow (17 participants)	
Monday 12 October 2020	URIP, Kharkiv	

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# Annex 5. Key contacts from in-country assessment

NO.	NO. NAME ORGANIZATION		
1.	Ministry of Health INTR	ODUCTION MEETING (31 AUGUST 2020)	
1	Iryna Mykychak	Deputy Minister of Health, Ministry of Health	
2	Andriy Havryliuk	Director of Quality of Life Directorate, Ministry of Health	
3	Natalia Ostropolets	Head of Expert Group on Medical Rehabilitation and Sanatorium Treatment, Ministry of Health	
4	Renata Perepelychna	Head of Expert Group on Medical-Social Expertise, Ministry of Health	
5	Viktor Yaroshevsky	State Expert of Expert Group on Medical Rehabilitation and Sanatorium Treatment, Ministry of Health	
6	Alisa Hondarieva	State Expert of Expert Group on international collaboration, Ministry of Health	
7	Anastasiya Bugnon	The WHO Country Office in Ukraine, Rehabilitation Focal Point, Health Service Delivery Officer	
8	Susan Eitel	WHO Consultant, Rehabilitation	
9	Andrea Pupulin	WHO Consultant, Assistive Technology	
2.	TOPIC-SPECIFIC MEETIN	IG: GOVERNANCE (31 AUGUST 2020)	
In-pei	rson		
1	Yevgen Kostin	Chief Specialist of the Department of Health Benefit Packages Development, NHSU	
2	Roman Pylypenko	State Expert of Directorate of Social Protection of People with Disabilities, Ministry of Social Policy	
3	Svitlana Dudnyk	Chief Specialist of the Department of Health Benefit Packages Development, NHSU	
4	Andriy Havryliuk	Director of Quality of Life Directorate, Ministry of Health	
5	Natalia Ostropolets	Head of Expert Group on Medical Rehabilitation and Sanatorium Treatment, Ministry of Health	
6	Viktor Yaroshevsky	State Expert of Expert Group on Medical Rehabilitation and Sanatorium Treatment, Ministry of Health	
7	Volodymyr Golyk Docent, Department of PRM and Sport Medicine, Shupyk National Medical Academy of Postgraduate Education		
8	Oksana Astrova	Adviser to Minister, Ministry of Social Policy	
9	Sergiy Buchynsky	Department of Health Care, Kyiv city	
Virtua	al		
1	Tatiana Rastiygina	Senior Health Officer, USAID Ukraine	
2	Maryna Mruga	State Expert, Directorate of Higher and Adult Education, Ministry of Education and Science	
*	Assessment Team: Anasta	asiya Bugnon, Susan Eitel, Andrea Pupulin	
3.	TOPIC-SPECIFIC MEETING: FINANCE (1 SEPTEMBER 2020)		
In-pei	rson		
1	Mariana Hladkevych	Head of the Division of Strategic Planning, NHSU	
2	Renata Perepelychna	Head of Expert Group on Medical-Social Expertise, Ministry of Health	
3	Oleksandr Vladimirov	Oleksandr Vladimirov FEBPRM, Chair of Department of PRM and Sport Medicine, Shupyk National Medical Academy Postgraduate Education, President, nongovernmental organization "Ukrainian PRM Society"	
4	Oksana Astrova	Adviser to Minister, Ministry of Social Policy	

NO.	NAME	ORGANIZATION	
5	Roman Pylypenko	State Expert of Directorate of Social Protection of People with Disabilities, Ministry of Social Policy	
6	Svitlana Dudnyk	Chief Specialist of the Department of Health Benefit Packages Development, NHSU	
7	Oksana Syvak	PRM Association	
Virtua	I		
1	Olena Puhka	Head of Governance for Social and Medical Services of Fund of Social Insurance of Ukraine	
2	Anna Fenchak	Deputy Head of Department for Health Benefit Package Development	
*	Assessment Team: A	nastasiya Bugnon, Susan Eitel, Andrea Pupulin	
4.	TOPIC-SPECIFIC ME	ETING: INFORMATION SYSTEMS (1 SEPTEMBER 2020)	
In-per	son		
1	Yevgen Kostin	Chief Specialist of the Department of Health Benefit Packages Development, NHSU	
2	Natalia Ostropolets	Head of Expert Group on Medical Rehabilitation & Sanatorium Treatment, Ministry of Health	
3	Viktor Yaroshevsky	State Expert of Expert Group on Medical Rehabilitation & Sanatorium Treatment, Ministry of Health	
4	Valentyna Zabolotko	Acting Head, Center for Medical Statistics	
5	Svitlana Dudnyk	Chief Specialist of the Department of Health Benefit Packages Development, NHSU	
*	Assessment Team: A	nastasiya Bugnon, Susan Eitel, Andrea Pupulin	
5.	TOPIC-SPECIFIC ME	ETING: WORKFORCE (2 SEPTEMBER 2020)	
In-per	son		
1	Oleksandra Kalandyak	Technical Director, UCPW Ukraine	
2	Natalia Ostropolets	Head of Expert Group on Medical Rehabilitation and Sanatorium Treatment, Ministry of Health	
3	Volodymyr Golyk	Docent, Department of PRM and Sport Medicine, Shupyk National Medical Academy of Postgraduate Education	
4	Tatyana Baryshok	CEO of nongovernmental organization Ukrainian Association of Physical Therapists, Vice-chair of Khortitsa National Rehabilitation Academy	
5	Oleksandr Vladimirov	FEBPRM, Chair of Department of PRM and Sport Medicine, Shupyk National Medical Academy of Postgraduate Education, President, nongovernmental organization "Ukrainian PRM Society"	
6	Prof Olena Lazareva	Head of Department of Physical Therapy and Ergotherapy of National University of Physical Culture and Sport	
7	Yevgen Kostin	Chief Specialist of the Department of Health Benefit Packages Development, NHSU	
8	Sergiy Buzhynsky	Department of Health care, Kyiv city	
9	Larysa Samsonova	Head of Expert Group of Directorate Pre-school and Inclusive Education, Ministry of Education and Science	
Virtua	I		
1	Stepan Kobelev	Head of UAPT	
2	Alina Terechshenko	Board Member USET	
3	Maryna Mruga	State Expert, Directorate of Higher and Adult Education, Ministry of Education and Science	
4	Oksana Lyalka	Head of US SLT	
*	Assessment Team: Anastasiya Bugnon, Susan Eitel, Andrea Pupulin		

NO.	NAME	ORGANIZATION	
6.	TOPIC-SPECIFIC MEETING: SERVICE DELIVERY (2 SEPTEMBER 2020)		
In-pe	rson		
1	Oleksandra Kalandyak	Technical Director, UCPW Ukraine	
2	Natalia Ostropolets	Head of Expert Group on Rehabilitation and Sanitary-Resort Treatment, Ministry of Health Ukraine	
3	Volodymyr Golyk	Docent, Department of PRM and Sport Medicine, Shupyk National Medical Academy of Postgraduate Education	
4	Tatyana Baryshok	CEO of nongovernmental organization Ukrainian Association of Physical Therapists, Vice-chair of Khortitsa National Rehabilitation Academy	
5	Oleksandr Vladimirov	FEBPRM, Chair of Department of PRM and Sport Medicine, Shupyk National Medical Academy of Postgraduate Education, President, nongovernmental organization "Ukrainian PRM Society"	
6	Prof Olena Lazareva	Head of Department of Physical Therapy and Ergotherapy of National University of Physical Culture and Sport	
7	Yevgen Kostin	Chief Specialist of the Department of Health Benefit Packages Development, NHSU	
8	Sergiy Buzhynsky	Department of Health care, Kyiv city	
9	Oksana Syvak	PRM Association	
10	Viktor Yaroshevsky	State Expert of Expert Group on Medical Rehabilitation and Sanatorium Treatment, Ministry of Health	
11	Alina Terechshenko	Board Member USET	
Virtua	al		
1	Oksana Lyalka	Head of Ukrainian Society of Speech & Language Therapy	
2	Stepan Kobelev	Head of UAPT	
3	Maryna Gulyaeva	Head of Ukrainian Stroke Association	
*	Assessment Team: A	nastasiya Bugnon, Susan Eitel, Andrea Pupulin	
7.	SWOT (3 SEPTEMBI	ER 2020)	
In-pe	rson		
1	Oleksandra Kalandyak	Technical Director, UCPW Ukraine	
2	Alina Terechshenko	Board Member Ukrainian Society of Ergotherapists	
3	Oleksandra Kalinkina	First Deputy Chair USET	
4	Prof Olena Lazareva	Head of Department of Physical Therapy and Ergotherapy of National University of Physical Culture an Sport	
5	Sergiy Buchynsky	Department of Health care, Kyiv city	
6	Yevgen Kostin	Chief Specialist of the Department of Health Benefit Packages Development, NHSU	
7	Yana Kohut	Stakeholder coordinator, UCPW	
8	Natalia Ostropolets	Head of Expert Group on Medical Rehabilitation and Sanatorium Treatment, Ministry of Health	
9	Roman Pylypenko	State Expert of Directorate of Social Protection of People with Disabilities, Ministry of Social Policy	
10	Viktor Yaroshevsky	State Expert of Expert Group on Medical Rehabilitation & Sanatorium Treatment, Ministry of Health	

NO.	NAME	ORGANIZATION
Virtua	I	
1	Iuliia Prysiazhniuk	Medical Rehabilitation TF & ELT Project Assistant, NATO Trust Fund
2	Oksana Lyalka	Head of Ukrainian Society of Speech and Language Therapy
3	Natalia Skrypka	Executive Director, National Assembly for People with Disabilities
×	Assessment Team: Anast	asiya Bugnon and Susan Eitel
8.	FOCUS GROUP SERVIC	E PROVIDERS (4 SEPTEMBER 2020)
In-pers	son	
1	Hanna Kravets	PRM, Okmatdyt Hospital
2	Oleksandra Kalandyak	Technical Director, UCPW Ukraine
3	Alina Terechshenko	Board Member USET
4	Oleksandra Kalinkina	First Deputy Chair USET
Virtual		
1	Oksana Lyalka	Head of Ukrainian Society of Speech and Language Therapy
2	Stepan Kobelev	Head of Association of UAPT
3	Iuliia Prysiazhniuk	Medical Rehabilitation Trust Fund Project Assistant, NATO Trust Fund
×	Assessment Team: Anast	asiya Bugnon, Susan Eitel, Andrea Pupulin
9.	FOCUS GROUP SERVIC	E USERS (4 SEPTEMBER 2020)
All virt	ual	
27	Service users joined fror different disabilities	n across Ukraine; 13 parents of children with disabilities, 10 wheelchair users and others with
×	Assessment Team: Anast	asiya Bugnon, Susan Eitel, Andrea Pupulin
10.	<b>KYIV REGIONAL HOSPI</b>	TAL – Neurorehabilitation UNIT (7 SEPTEMBER 2020)
1	Andrii Turchyn	Chief Physician Kyiv Regional Hospital
2	Constantine Gorobets	Head of Neurorehabilitation Department
3	Alina Terechshenko	Occupational therapist
4	Denis Maistrenko	Peer mentor
×	Assessment Team: Anast	asiya Bugnon, Susan Eitel, Andrea Pupulin
11.	WAR VETERANS HOSPI	TAL – LISOVA POLIANA (7 SEPTEMBER 2020)
1	Ksemia Voznitsyna	Head of Hospital of Veterans "Forest Glade"
*	Assessment Team: Anast	asiya Brylova, Susan Eitel, Andrea Pupulin
12.	AKSIMED PRIVATE CLINIC (8 SEPTEMBER 2020)	
1	Aleksey Sidelkovskiy	Chief Executive Officer, Neurologist, PhD
2	Mykhaile Savchuk	Physical Therapist, Head of Unit
	Assessment Team: Anastasiya Bugnon, Susan Eitel, Andrea Pupulin	
*	Assessment Team: Anast	asiya bughon, susan ener, Anurea Pupulin
* 13.		N'S HOSPITAL (8 SEPTEMBER 2020)

NO.	NAME	ORGANIZATION		
3	Hanna Kravets	PRM Doctor		
4	Pavel Andreev	PRM Doctor, Head of Acute Rehabilitation Department		
*	Assessment Team: Anastasiya Bugnon, Susan Eitel, Andrea Pupulin			
14.	MINISTRY OF VETERAN	IS AFFAIRS (8 SEPTEMBER 2020)		
1.	Ihor Bezkaravainy	Deputy Minister of Veterans Affairs		
*	Assessment Team: Anast	asiya Bugnon, Susan Eitel, Andrea Pupulin		
15.	Ministry of Health DIRI	ECTORATE OF DIGITAL TRANSFORMATION (9 SEPTEMBER 2020)		
1	Kucher Yaroslaw	Deputy Minister of Health for Digital Development, Digital Transformation & Digitization		
2	Mariia Karchevych	Head of Expert Group on Digital Transformation		
3	Mariia Sakuta	Expert technical group		
*	Assessment Team: Anast	asiya Bugnon, Susan Eitel, Andrea Pupulin		
16.	Ministry of Health DIRI	ECTORATE OF QUALITY OF LIFE (9 SEPTEMBER 2020)		
1	Renata Perepelychna	Head of Expert Group on Medical-Social Expertise (MSEC)		
*	Assessment Team: Anast	asiya Bugnon, Susan Eitel, Andrea Pupulin		
17.	PRESIDENT'S OFFICE F	OCAL POINT FOR HEALTH CARE AND SOCIAL POLICY (9 SEPTEMBER 2020)		
1	Oksana Zholnovych	Head of Department Responsible for Health Care and Social Policy		
*	Assessment Team: Anast	asiya Bugnon, Susan Eitel, Andrea Pupulin		
18.	UKRAINE PARLIAMENT	ARIAN SUPPPORTING DRAFT LAW ON REHABILITATION (9 SEPTEMBER 2020)		
1	Oksana Dmytrieva	Parliamentary Deputy, Deputy Chair, Parliamentary Commission on Health Care		
2	Svitlana Tykhonenko	Deputy Assistant		
3	Oksana Syvak	PRM Association		
*	Assessment Team: Anast	asiya Bugnon, Susan Eitel, Andrea Pupulin		
19.	FOCUS GROUP – PHYSI	CAL THERAPY/OCCUPATIONAL THERAPY STUDENTS (10 SEPTEMBER 2020)		
1	2 men; 3 women – (3) oc	cupational therapy master's (1) physical therapy master's, (1) physical therapy PhD		
20.	NATIONAL UNIVERSITY	OF PHYSICAL CULTURE AND SPORT (10 SEPTEMBER 2020)		
1	Prof Olena Lazareva	Head of Department of Physical Therapy and Ergotherapy of the National University of Physical Culture and Sport		
2	Alina Terechshenko	Occupational therapy instructor		
3	Denis Maistrenko	Occupational therapy Master's student; instructor for assistive technology aspects of occupational therapy / physical therapy programme		
4	Svitlana [FAMILY NAME Instructor for occupational therapy / physical therapy on accessibility MISSING]			
5	Iryna Zharova	Professor, physical therapy		
6	Liydmile [FAMILY NAME MISSING]	Associate Professor, physical therapy		
7	Viktoria Zhuchenko	Physical therapy programme		
*	Assessment Team: Anastasiya Bugnon, Susan Eitel, Andrea Pupulin			

NO.	NAME ORGANIZATION		
21.	MINISTRY OF SOCIAL POLICY (10 SEPTEMBER 2020)		
1	Oksana Polyakova	General Director of Directorate for Social Protection of People with Disabilities	
2	Svitlana Petrusha	Head of expert group on social guarantees	
3	Ruslan Kolbasa	General Director of Directorate for Development of Social Services & Child Protection	
4	Oksana Sulima	Deputy General Director of Directorate for Devt. of Social Services & Child Protection	
5	Maksym Androsenko	Head of Expert Group on Rehabilitation	
6	Oksana Grozd	State expert on policies for people with disabilities	
7	Andriy Nezdoliy	State expert on social guarantees for people with disabilities	
8	Roman Pylypento	State expert for social protection for people with disabilities	
9	Oksana Stefanova	State expert for child protection	
10	Marym Ludvenko	Expert of international cooperation department	
*	Assessment Team: Anas	stasiya Bugnon, Susan Eitel, Andrea Pupulin	
22.	KYIV CITY LEAD MSEC	(10 SEPTEMBER 2020)	
1	Irina Dorosheko	Head Doctor (acting)	
2	Renata Perepelychna	Ministry of Health Head of Expert Group on Medical-Social Expertise (MSEC)	
*	Assessment Team: Anas	stasiya Bugnon, Susan Eitel, Andrea Pupulin	
23.	NHSU E-HEALTH DEPA	RTMENT – VIRTUAL (11 SEPTEMBER 2020)	
1	Ihor Kostyrya	Deputy Director of the eHealth Department, NHSU	
2	Mariana Hladkevych International Relations Department		
*	Assessment Team: Anastasiya Bugnon, Susan Eitel, Andrea Pupulin		
24.	THE WHO COUNTRY OFFICE IN UKRAINE DEBRIEF (11 SEPTEMBER 2020)		
1	Jarno Habicht WHO Representative and Head of Country Office in Ukraine		
*	Assessment Team: Anastasiya Bugnon, Susan Eitel, Andrea Pupulin		
25.	MINISTRY OF HEALTH DEBRIEF		
1	Andriy Havryliuk	Director of Quality of Life Directorate, Ministry of Health	
2	Renata Perepelychna	Head of Expert Group on Medical-Social Expertise, Ministry of Health	
*	Assessment Team: Anastasiya Bugnon, Susan Eitel, Andrea Pupulin		
26.	OBERIH CLINIC, ACUTE STROKE UNIT		
1	Marina Gulyayeva	Medical Director of Stroke Service	
*	Assessment Team: Anastasiya Bugnon, Susan Eitel, Andrea Pupulin		

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# Annex 6. Rehabilitation SWOT analysis – RAW DATA

This annex presents raw data in note form from the SWOT analysis

# GOVERNANCE

### Strengths

- Many laws exist related to rehabilitation health care reform, State financial guarantees, payments for rehabilitation services, requirements for health care
- Draft law on rehabilitation is before Parliament
- Definition of rehabilitation biopsychosocial model
- Introduction of new professions
- ICF: there is a decree to use ICF as a standard UNICEF is working on the translation
- Ministry of Health has eight directorates Quality of Life Directorate provides rehabilitation two experts in medical rehabilitation/resort therapy

### Weaknesses

- No State evaluation of rehabilitation in Ukraine no comprehensive analysis of the system
- Lack of national strategy
- Lack of monitoring and control system
- No regulation in some key areas no clinical protocols
- Standards for facilities/equipment; evaluation of quality
- Not enough coordination; NATO, ministries, nongovernmental organizations are all fragmented
- Multidisciplinary team, but in legislation the focus is still all on the doctor; every member of the team should be recognized
- Doctors do not trust physical therapists do not know their capacity
- Last 20 years changes
- Legal documents reference medical field doesn't clarify/indicate rehabilitation health care fields vs. medical fields
- Process of draft law started in collaborative fashion but now unclear who and how many are involved

# **Opportunities**

- WHO-supported baseline
- Active interest among international partners
- Speech and language therapist profession
- Law on rehabilitation is for patients and not lobbying for specific professions

### Threats

- Adoption of draft law
- Confusing in providing rehabilitation no clear vision
- War, COVID-19, change of government

# **FINANCE**

## Strengths

- · Amount of financing for rehabilitation; State guarantees for rehabilitation in municipalities
- · Coordination council for rehabilitation at municipalities to discuss finance distribution of funds for rehabilitation – NHSU duplication?
- NATO Trust Fund and coordination council (??) Trust Fund also provides prosthetic services for military
- · Availability of rehabilitation packages

### Weaknesses

- Not enough financing for advanced prosthetics
- · Lack of clear monitoring of money used what money is paying for
- Volume of rehabilitation is not detailed
- Distribution of funds is not transparent enough
- Same tariff for all pathologies e.g. fracture vs. spinal cord injury have the same tariff, so spinal cord injury loses money
- Only for medical rehabilitation no financing for communication disorders
- · Few hospitals comply with NHS criteria for financing
- Lots of services are duplicated and financed from many sources—and others not financed at all
- Need more rehabilitation packages

# **Opportunities**

- Good start for more packages
- Speech and language therapist no one financing this profession because they do not know what it is

# **Threats**

- Economic situation of Ukraine
- Lack of monitoring system
- Reduction of number of hospitals in regions unequal access
- Need to look at protocols for spinal cord injury, stroke and traumatic brain injury and look at actual costs.

# **INFORMATION**

### **Strengths**

- Interaction between health centres and eHealth
- EHealth and NHSU can analyse demand etc.—management of process as the eHealth system is mandatory for contracted facilities
- Awareness-raising on rehabilitation
- Diagnosis and therapeutic materials for speech and language therapists
- Availability of some information on rehabilitation services (media, departments of health) previously there was nothing
- Informing of and referral to the Ministry of Social Policy social protection department

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#### Weaknesses

- Not enough understanding of demand no information on who needs services; mostly people think rehabilitation is for people with disabilities and not general population
- · No understanding of who needs which rehabilitation services
- Health system focused on pathologies (ICD, not ICF), not conditions
- Even the name used is "invalidity" not "persons with disability"; self-discrimination
- Lack of awareness about communication disorders differentiation between mental vs. communication and speech vs. communication
- Lack of inclusivity of information, e.g. for people with visual/hearing impairments
- People who need rehabilitation do not know where to go
- Lack of centralized system for quality of rehabilitation no statistics on quality
- Lack of information for patients about where to find care
- Public doesn't really know that NHSU exists; there is information on the website, but many don't look on the internet
- Mapping in only three regions lack of national coverage NHSU had map of contracted sites
- Lack of research culture

### **Opportunities**

- Easy launch of virtual materials
- Evidence-based rehabilitation
- Quality assurance, CPD, research
- Introduce the profession of communication speech and language therapist

### Threats

- Too much information for consumers all disconnected/ not synchronized
- Social isolation sensory-impaired people can't access information
- Society is not inclusive
- · Incompetent media professionals need to inform journalists

# **ASSISTIVE TECHNOLOGY**

#### Strengths

- Provided free of charge with disability determination
- Start of dialogue between institutions about the importance of assistive technology
- List of assistive technology
- Most assistive technology needs of people with disabilities are met
- Training conducted on assistive technology
- Assistive technology manufactured in Ukraine and is not expensive
- Organization that develops alternative communication, IT academy special software

#### Weaknesses

- Need to have disability status to get assistive technology free of charge
- Not enough qualified experts to select necessary assistive technology
- Expensive speech and language therapy/no State support for speech and language therapy
- Quality of assistive technology (made in Ukraine) is low

- Range of assistive technology is limited (occupational therapy devices are not listed) speech and language therapy comes under paediatrics
- Assistive technology is provided, but without associated services
- List of assistive technology is focused on mobility
- · Patients with temporary limitations also need assistive technology
- A lot of red tape not well coordinated
- Ministry of Social Policy oversees workforce (prosthetists and orthotists)
- Clients gets a device that is not appropriate need to use qualified workforce

# **Opportunities**

- There is a budget to provide assistive technology
- Create a working group to develop a new list of assistive technology

### Threats

- Lack of financing
- Assistive technology is included in the NHSU packages, but only for use in the clinics
- Ministry of Social Policy disability only weakness and strength

# **SERVICES**

## Strengths

- Procurement of rehabilitation services by NHSU
- Criteria set by NHSU clinics should have physical therapists and occupational therapists
- Services for speech and language therapy
- · There are more providers for rehabilitation than before
- Good initiatives to pilot programmes that provide rehabilitation

### Weaknesses

- Number of rehabilitation services guaranteed by the State are limited
- · There are many declared rehabilitation services but they do not actually exist
- Lots of private services but they are expensive and inaccessible to patients
- · Geographical and physical in accessibility
- Discrepancy in quality of services
- Speech and language therapist rehabilitation services are expensive no State support for these
- El is limited without disability can't access them; not enough services
- No standards for services
- High prices financial limitations
- Low quality no monitoring and evaluation
- No evidence-based methods
- Unqualified people who work in services
- No monitoring to measure satisfaction

# **Opportunities**

- Implementing standards of quality
- Official examination for physical therapists/occupational therapists will help improve quality

- Competition exists and drives quality
- War... helps develop rehabilitation services
- Organize events to help retain workforce in rural areas maybe mandate workforce to go to rural areas

#### Threats

• War, political instability, COVID-19, frequent restructuring of departments

# WORKFORCE

#### Strengths

- 2020 NHSU has necessary requirement to have rehabilitation workforce present
- Qualification requirements are adopted for physical therapists/occupational therapists and added to classifications of professions
- · Qualification requirements are prepared for speech and language therapists
- There are "qualified" physical therapists about 80 000 trained volume trained. About 3000 are working
- Quota physical therapy / physical and rehabilitation medicine 949 unclear what this is not relevant is written in flipchart

### Training

- Standard bachelor programme physical therapy /occupational therapy
- Training of assistants physical therapy /occupational therapy
- Master's programme standard physical therapy /occupational therapy
- Trainers trained through ERASMUS and NATO improves quality of trainers
- USAID invested in training multidisciplinary teams in 2018
- WFOT courses training of trainers
- UCP Wheels wheelchair provision is part of internship for physical therapist/occupational therapist practical training
- Clinic (maybe universities?): out of 68 only 6–7 have solid internship opportunities
- Indicative price for studies has been introduced Ministry of Education and Science for all universities.
   Price: 60–70% of budget funds all programmes are the same price people do not shop for the cheapest programme

#### Weaknesses

- Level of training is low
- State does not have the opportunity to send people abroad for service (training?)
- Combination physical therapist/occupational therapist training
- Physical therapists/occupational therapists are not trained by physical therapist/occupational therapist professionals
- Use of outdated equipment in facilities
- Non-certified equipment; manufacturers have standards but some facilities are making their own equipment
- · Barriers in accessing services; physical accessibility to services
- People use equipment instead of exercises
- Need for high tech equipment locomat...
- Local officials do not understand rehabilitation use different terms inconsistent rehabilitation vocabulary
- Low salaries = low motivation
- Lenient accreditation not interested in content; accreditors do not really understand what we do

- 68 university-level institutions with weak teachers and equally weak graduates, so professional reputation decreases in eyes of doctors
- No licensing for physical therapy/occupational therapy professions
- No qualifications continuing professional development for therapists: physical therapy/occupational therapy/speech and language therapist
- Lack of supervisors at clinics; lack of clinical placement sites
- Lack of regulations on relations between universities and clinics
- Low motivation of teachers and staff at universities
- No specialization for speech and language therapists not trained anywhere

# **Opportunities**

- Separation of physical therapist and occupational therapist in classifiers opportunity to add speech and language therapist
- Unified standard of education
- · International medical examination for physical therapist/occupational therapist
- Licensing promote transparency of licensing for universities
- Draft law on regulated professions

# Threats

- People do not understand physical therapy/occupational therapy
- Low salaries shift from public to private practices to get more money
- Corrupt practices clinics say they have professionals, but they do not
- Uncontrolled number of professional associations that destabilize the situation they are nongovernmental organizations so Government cannot control them
- Medical universities train physical therapists/occupational therapists but do not have physical therapy/ occupational therapy trainers

# **SWOT** priorities

#### Governance

- Improve legislation
- Improve coordination

### Finance

- Same tariffs within NHSU
- Unclear monitoring on what money is used for

### Information

- Lack of information on rehabilitation for the public
- Lack of information/monitoring on quality

### Workforce

- Quality of training
- Not enough experts
- Low motivation

#### Service

- Lack of standards
- Low quality/not measuring quality
- Lack of accessibility uneven access
- Evidence-based treatment

# Assistive technologies

- Free only for persons with disability status
- Lack of professionals providing assistive technology
- Range of assistive technology

# **Annex 7. Preliminary findings**

# PRELIMINARY DEBRIEF – STARS UKRAINE (31 AUGUST–11 SEPTEMBER 2020)

# (Ministry of Health Ukraine - in-person meeting)

### PROCESS

In-country data collection summary: approx. 26 different interventions

(4) Ministry participation – Ministry of Health, Ministry of Social Policy, Ministry of Veterans, and Ministry of Education and Science (during building block meetings)

(2) Meetings specific to draft law on rehabilitation (President's office and parliamentarian)

(5) Group meetings on building blocks (governance, finance, information, workforce, services)

(1) SWOT that covered five areas plus assistive technology

(3) Focus groups - workforce, services users (Zoom), and physical therapy/occupational therapy students

(7) Site visits – Kyiv Regional Hospital, War Veterans Hospital "Lisova Poliana", AKSIMED Private Clinic, Okhmatdyt Children's Hospital, Kyiv city lead MSEC, National Institute of Physical Culture and Sport, and Acute Stroke Unit of Oberih clinic (Friday).

(3) Follow-up meetings: Ministry of Health Directorate of Digital Transformation, NHSU E-health unit, Ministry of Health Directorate of Quality of Life discussion on MSEC

#### Follow-up Zoom meetings from United States of America

(14–25 September) – NATO Trust Fund, UNICEF, USAID and others as needed.

Presentation of findings - slide presentation over Zoom

Ideally during the week of 14–18 September

Zero-draft report (English) to WHO – 30 October 2020.

# Key impressions

Building block	Achievements	Challenges
GOVERNANCE	<ul><li> Quality of Life Directorate</li><li> Commitment to rehabilitation</li><li> Extensive legal documents</li></ul>	<ul> <li>Draft law on rehabilitation</li> <li>Lack of formal coordination mechanism</li> <li>Underdeveloped licensing requirements</li> </ul>
INFORMATION	<ul><li>Emerging e-health system</li><li>Some service mapping initiatives</li></ul>	<ul> <li>Incomplete data on rehabilitation (outcomes)</li> <li>No data on population functioning</li> </ul>
FINANCE	<ul> <li>NHSU rehabilitation packages</li> <li>US\$ 32 million budget for assistive products (Ministry of Social Policy)</li> </ul>	<ul> <li>Standard tariff for conditions is limiting</li> <li>Disaggregated budget for rehabilitation unknown</li> </ul>
WORKFORCE	<ul> <li>physical and rehabilitation medicine, occupational therapy, physical therapy recognition</li> <li>master's-level training programmes (physical therapy/occupational therapy)</li> <li>Est. 80 000 people with rehabilitation basic training</li> </ul>	<ul> <li>No prosthetics and orthotics or speech and language therapist recognition (job codes, Ministry of Social Policy prosthetics and orthotics)</li> <li>No in-country training programmes for speech and language therapists, prosthetists or orthotists</li> <li>Minimal/no rehabilitation workforce planning</li> </ul>
SERVICE PROVISION	<ul> <li>Existing "good practice" examples</li> <li>Emerging El (Ministry of Social Policy)</li> </ul>	<ul> <li>No rehabilitation at primary or community level</li> <li>assistive products rare/non-existent in health systems</li> </ul>
ASSISTIVE PRODUCTS	<ul> <li>93 approved assistive product providers (12 State)</li> <li>Diverse availability of mobility products</li> <li>Ministry of Social Policy engagement to improve assistive technology system</li> </ul>	<ul> <li>Only persons with disability get assistive products through Government</li> <li>Low quality and variety of non-mobility assistive products</li> <li>Lack of involvement of rehabilitation workforce</li> </ul>

SLT= speech and language therapy

OT = occupational therapy/ergotherapy

P&O = prosthetics and orthotics

PT = physical therapy

#### SLIDE PRESENTATION VIA ZOOM TO MINISTRY OF HEALTH – 16 SEPTEMBER 2020

Systematic Assessment of Rehabilitation Situation (STARS) Ukraine

> Preliminary Read-Out MOH September, 2020

#### Slide 1.

#### Rehabilitation in Health Systems: A Guide for Action

Objective	WHO Guidance	Tools	Activity Timeline
1. Assess the situation	Systematic Assessment of Rehabilitation Situation (STARS)	Template for Rehabilitation Information Collection (TRIC): 8 domains, 97 questions: Moll self- assessment Rehabilitation Maturity Model (RMM): 7 domains, 50 questions; consultant-supported scoring	TRIC: Not filled In-country assessment Aug 28-Sep 11, 2020 Zero-draft report: October 30, 2020 First draft: Jan 30, 2021
2. Develop a rehabilitation strategic plan.	Guidance for Rehabilitation Strategic Planning (GRASP)	Results from STARS report contributes to development of strategic plan.	Anticipated dates: March 2021
3. Establish monitoring evaluation and review process	Framework for Rehabilitation Monitoring and Evaluation (FRAME)	FRAME guidance on establishing a monitoring framework including the selection of indicators. (RIM) Rehabilitation Indicator Menu.	To happen simultaneously with Strategic Plan
4. Implement the strategic plan	Action on Rehabilitation (ACTOR)	Planning, action, and evaluation cycle	After Strategic Plan and Monitoring Framework are in place.

#### Slide 3.

## In-country Assessment (August 31-September 11, 2020)

- Over 85 people engaged in the process
- Four ministries (MOH, MOSP, MOES, Veterans)
- Three focus groups (providers, users, students)
- Seven site visits (MSEC, 5 Hospitals, University)

#### SWOT analysis

- Limitations
- Remained within Kiev area
- Did not visit primary or community levels



#### Objectives

- Review WHO Rehabilitation in Health Systems - Guide for Action
- Summarize STARS Process in Ukraine
- Present preliminary findings from STARS
- Identify next steps

#### Slide 2.

### In-country Assessment (August 31-September 11, 2020)

- MOH /WHO commitment
- Funding /Logistics Support: USAID/WHO
- WHO standard tools
- Template for Rehabilitation Information Collection (TRIC)
   Rehabilitation Maturity Model (RMM)
- Satish Mishra WHO/EURO
- Anastasiya Brylova WHO Georgia
- Susan Eitel WHO Consultant
   Andrea Pupulin WHO Consultant (Assistive Technology)
- Stakeholder contributions (meetings / site visits)

#### Slide 4.

### **Rehabilitation Maturity Model**



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Governance (7) Needs a lot of strengthening 7

MAIN ACHIEVEMENTS

- Quality of Life Directorate and expert group on Rehabilitation established in MOH.
   Demonstrated commitment to understanding rehabilitation needs.

#### MAIN CHALLENGES

- 1. High government ministry turn-over and resultant disruption in continuity in the sector.
- 2. Lack of formal coordination mechanism on rehabilitation. 3. Draft Law on Rehabilitation is anchored in disability and lacks consistent messaging.

#### MAIN RECOMENDATIONS

- 1. Rejuvenate formal review process of Draft Law on Rehabilitation to address shortcomings.
- 2. Establish cross-ministerial national level Rehabilitation Committee / Working Group.



#### MAIN ACHIEVEMENTS

- NHSU rehabilitation packages (3) and integration of rehabilitation in other packages.
   \$32 million USD budget for assistive products (AP) in MOSP budget.

#### MAIN CHALLENGES

- Government financing for AP is anchored in disability status; APs not included NHSU package.
- Standard tariff in NHSU package is inadequate for those with severe impairments.
   Disaggregated budget for rehabilitation is not calculated or available.

#### MAIN RECOMENDATIONS

- 1. Identify and pilot one AP per rehabilitation package to serve as roadmap for learning.
- 2. Conduct study to identify adverse effects of inadequate tariff for sever impairments.



# Human Resources and Infrastructure (5)

Needs a lot of strengthening Very limited, needs establishing

#### MAIN ACHIEVEMENTS

#### 1. MOH recognition of PRM, OT and PT professions.

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- Vision and action for bachelor and master training programs in PT and OT.
   Estimated 80,000 people trained in rehabilitation-related fields.

#### MAIN CHALLENGES

- No recognition or in-country training for P&O and SLT (in MOH / medical field). No readily available information about situation of rehabilitation personnel. Minimal / no evidence of rehabilitation workforce planning.
- 2. 3.

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#### MAIN RECOMENDATIONS

- Refocus efforts to integrate and recognize SLT as part of MOH rehabilitation workforce.
- 2. Continue efforts aimed at integrating workforce previously trained PT-related fields.



#### Services–Accessibility (15)

Needs a lot of strengthening 10 Very limited, needs establishing 5

#### MAIN ACHIEVEMENTS

- 1. Emerging early childhood identification program through MOSP.
- 2. Evidence of newly established rehabilitation departments in secondary/tertiary hospitals.

#### MAIN CHALLENGES

- 1. No rehabilitation services available at primary or community levels.
- Assistive products are rarely / not provided within health systems. 2.
- 3. Range of non-mobility assistive products is low and service provision is not included.

#### MAIN RECOMENDATIONS

- 1. Explore process to involve rehabilitation workforce in the provision of assistive products.
- 2. Investigate opportunities to introduce rehabilitation at primary and community levels.



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### Health Information Systems (4) Needs a lot of strengthening

Very limited, needs establishing 2

#### MAIN ACHIEVEMENTS

- Emerging e-Health system with existing codes related to rehabilitation . Some mapping initiatives on location of rehabilitation and AT service providers. 1.
- 2

#### MAIN CHALLENGES

No data collection on population functioning (census data or model disability survey).
 Available fields in e-Health system do not capture rehabilitation outcome data.

#### MAIN RECOMENDATIONS

Include data on population functioning (Washington Group Questions) in next census. Assess current rehabilitation-related data collected through e-Health and explore opportunities to augment this data to reflect rehabilitation outcomes.





# Services-Quality (8)

#### Needs a lot of strengthening Very limited, needs establishing 5

#### MAIN ACHIEVEMENTS

1. Existing "good practice" examples in Ukraine from which to build and share experiences. Evidence of development of protocols for some conditions (SCI, TBI, Stroke). 2

#### MAIN CHALLENGES

- Very limited clinical practice guidelines, protocols, standards or models of care for rehab. 1.
- 2.
- Attention to functional gains is not yet common practice within most rehabilitation settings. Application and understanding of multidisciplinary team is highly variable. Provision of assistive products rarely involves a professional from the rehabilitation workforce. 4.

# MAIN RECOMENDATIONS

- 1. Clarify process of multidisciplinary team and identify model practice in Ukraine.
- Continue to invest in development of protocols, practice guidelines and standards of care.
   Explore process to involve rehabilitation workforce in the provision of assistive products.



#### MAIN ACHIEVEMENTS

- Some rehabilitation units utilize internationally recognized evaluation tools and capture data on functioning.
   Evidence of sustainable rehabilitation financing through integration within NHSU packages.
- MAIN CHALLENGES
- There is very little attention given to efficiency within rehabilitation service settings.
   Lack of equitable access to rehabilitation (community and primary levels).
- MAIN RECOMENDATIONS
- 1. Review existing achievements to expand utilization of good practices.

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#### Next Steps

#### STARS REPORT

- Zero Draft in English to WHO (October 30, 2020)
- Translation to Ukranian (Nov 30, 2020)
- Feedback on Zero Draft to WHO (Jan 15, 2021)
- First Draft (Jan 30, 2021)
- First Draft to Stakeholders (Feb 15, 2021)
- STRATEGIC PLAN
  - Begin process March 2021

Thank You!

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# **Annex 8. Washington Group Short Set on Functioning**

Washington Group on Disability Statistics

19 March 2020

### The Washington Group Short Set on Functioning (WG-SS)

#### Introduction

The Washington Group Short Set on Functioning (WG-SS) was developed, tested and adopted by the Washington Group on Disability Statistics (WG). The questions reflect advances in the conceptualization of disability and use the World Health Organization's International Classification of Functioning, Disability, and Health (ICF) as a conceptual framework.

The WG-SS is intended for use in censuses and surveys. In many countries, the decennial census may be the sole or most reliable means of collecting population-based data; and because of the restrictions inherent in the census format, the module had to be short and parsimonious. The brevity of the module – six questions – makes it also well suited for inclusion in larger surveys, and for disaggregating outcome indicators by disability status.

To maximize international comparability, the WG-SS obtains information on difficulties a person may have in undertaking basic functioning activities that apply to people in all cultures and societies and of all nationalities and so are universally applicable. Given the need to keep the module short, a single question per functional domain is included. The final set of questions includes difficulties seeing, hearing, walking or climbing stairs, remembering or concentrating, self-care, and communication (expressive and receptive).

The questions are designed to collect information on the population aged 5 years and above, with a knowledgeable proxy respondent providing information for children. The WG-SS was not specifically designed for use among children, as it does not include key aspects of child development important for identifying disability in children and the wording of certain domains may not be relevant (or suitable) for children and adolescents. The WG-UNICEF Module on Child Functioning (CFM) is designed to meet the needs of identifying and measuring disability in children.

The Washington Group website [<u>http://www.washingtongroup-disability.com</u>/] contains supporting documentation, including information for translation, cognitive testing, question specifications and interview administration guidance, and analytic guidelines, including SPSS, SAS and STATA syntaxes.

It is important to note that each question has four response categories, which are to be read after each question.

> For more information on the Washington Group on Disability Statistics, visit. http://www.washingtongroup-disability.com/.

#### WG Short Set on Functioning Questions

#### Preamble to the WG-SS:

Interviewer read: "The next questions ask about difficulties you may have doing certain activities because of a HEALTH PROBLEM."

#### VISION

VIS\_SS [Do/Does] [you/he/she] have difficulty seeing, even if wearing glasses? Would you say... [*Read response categories*]

- 1. No difficulty
- 2. Some difficulty
- 3. A lot of difficulty
- 4. Cannot do at all
- 7. Refused
- 9. Don't know

#### HEARING

- HEAR\_SS [Do/Does] [you/he/she] have difficulty hearing, even if using a hearing aid(s)? Would you say... [Read response categories]
  - 1. No difficulty
  - 2. Some difficulty
  - 3. A lot of difficulty
  - Cannot do at all
  - 7. Refused
  - 9. Don't know

#### MOBILITY

MOB\_SS [Do/Does] [you/he/she] have difficulty walking or climbing steps? Would you say... [Read response categories]

- 1. No difficulty
- 2. Some difficulty
- 3. A lot of difficulty
- Cannot do at all
- 7. Refused
- 9. Don't know

#### **COGNITION (REMEMBERING)**

COG\_SS [Do/does] [you/he/she] have difficulty remembering or concentrating? Would you say... [Read response categories]

- 1. No difficulty
- 2. Some difficulty
- 3. A lot of difficulty
- 4. Cannot do at all
- 7. Refused
- 9. Don't know

#### SELF-CARE

SC\_SS [Do/does] [you/he/she] have difficulty with self-care, such as washing all over or dressing? Would you say... [*Read response categories*]

- 1. No difficulty
- 2. Some difficulty
- 3. A lot of difficulty
- 4. Cannot do at all
- 7. Refused
- 9. Don't know

#### COMMUNICATION

COM\_SS Using [your/his/her] usual language, [do/does] [you/he/she] have difficulty communicating, for example understanding or being understood? Would you say... [Read response categories]

- 1. No difficulty
- 2. Some difficulty
- 3. A lot of difficulty
- 4. Cannot do at all
- 7. Refused
- 9. Don't know



#### The WHO Regional Office for Europe

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

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