



# **Rehabilitation**

## **of people with visual impairments:**

analysis of the situation

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# List of abbreviations

<b>WHO</b>	World Health Organisation
<b>HCF</b>	Healthcare facility
<b>IRP</b>	Individual rehabilitation programme
<b>CMU</b>	Cabinet of Ministers of Ukraine
<b>CRI</b>	Communal Rehabilitation Institution
<b>MinVeterans</b>	Ministry of Veterans Affairs of Ukraine
<b>MinSocPolicy</b>	Ministry of Social Policy of Ukraine
<b>ISF</b>	The International Classification of Functioning, Disability and Health
<b>MoH</b>	Ministry of Health of Ukraine
<b>MES</b>	Ministry of Education and Science of Ukraine
<b>MRT</b>	Multidisciplinary rehabilitation team
<b>MSEB</b>	Medico-social expert board
<b>IVRS</b>	International Vision Rehabilitation Standard
<b>NHSU</b>	National Health Service of Ukraine
<b>NHCI</b>	National Health Care Institute
<b>PVI</b>	Persons with visual impairments (blind and visually impaired)
<b>UNDP</b>	United Nations Development Programme
<b>HCS</b>	Health Care Sector
<b>USU</b>	Ukrainian State University
<b>UNICEF</b>	United Nations Children's Fund
<b>O&amp;M</b>	Orientation and mobility
<b>DLS</b>	Daily Living Skills

# Abstract

To evaluate the situation in the field of rehabilitation abroad, WHO documents, the International Vision Rehabilitation Standard (IVRS), analysis of the activities of rehabilitation centres in Ukraine and abroad (USA, UK, Germany) were used.

The collection of data on rehabilitation in Ukraine was carried out based on the analysis of legislative and regulatory provisions of the Ministry of Health (MoH), the Ministry of Social Policy (MinSocPolicy), the Cabinet of Ministers of Ukraine (CMU), the Ministry of Education and Science (MES), as well as the founding documents of rehabilitation centres of Ukraine.

The rehabilitation legislation of Ukraine is based on the Constitution of Ukraine.

Laws regulating the process of rehabilitation of people with disabilities in Ukraine:

"On Rehabilitation of Persons with Disabilities in Ukraine" No. 2961-IV dated 06.10.2005.

"On Rehabilitation in the Health Care Sector" No. 1053-IX dated 03.12.2020.

The main area of analysis of the current situation is comprehensive rehabilitation of persons with visual impairments (blind and visually impaired) (PVI).

The branch of PVI rehabilitation, in particular, of people with visual disabilities, is part of the general rehabilitation system.

## Main results. Positive aspects

### Information on rehabilitation

The term "rehabilitation" as defined by the WHO<sup>1</sup> and in accordance with the Law of Ukraine "On Rehabilitation in the Health Care Sector"<sup>2</sup> is considered in a similar way as a set of measures needed by a person who experiences or may experience

<sup>1</sup> Rehabilitation in health systems: guide for action. <https://apps.who.int/iris/handle/10665/325607>

<sup>2</sup> <https://zakon.rada.gov.ua/laws/show/1053-20#n2>

limitations in daily living activities due to a health condition or ageing in interaction with their environment.

The legislation of Ukraine<sup>3</sup> also uses a separate terminological definition of "rehabilitation of persons with disabilities" – a system of medical, psychological, pedagogical, physical, professional, labour, physical education and sports, social and household measures aimed at providing assistance to persons in the restoration and compensation of impaired or lost body functions to achieve and maintain social and material independence, labour adaptation and integration into society, as well as providing persons with disabilities with rehabilitation aids and medical products.

### **Rehabilitation service management**

Since 2017, the WHO recommends<sup>4</sup> clearly defining the responsibility for the management of rehabilitation processes with the possibility of integrating rehabilitation services into the health care system (HCS), which will coordinate the activities of other social areas involved in rehabilitation: social security, education and work.

In Ukraine, the Ministry of Health<sup>5</sup> is responsible for the overall management of rehabilitation processes in HCS; coordination of rehabilitation of people with disabilities is entrusted to the Ministry of Social Policy<sup>6</sup>; medical care and rehabilitation of veterans is coordinated by the Ministry of Veterans Affairs in Ukraine (MinVeterans)<sup>7</sup>; state management of the rehabilitation system of people with disabilities within their competence is provided in the areas of social protection of the population, health care, education, culture, physical education and sports, construction and architecture and other areas that carry out measures for the rehabilitation of people with disabilities, children with disabilities.

### **Persons entitled to rehabilitation**

WHO<sup>8</sup> emphasize in their studies and initiatives that rehabilitation services are needed not only for people with disabilities, but also for other people with disabilities for the prevention of disability.

<sup>3</sup> <https://zakon.rada.gov.ua/laws/show/2961-15#Text>

<sup>4</sup> Rehabilitation 2030: a call for action. <https://apps.who.int/iris/handle/10665/339910>

<sup>5</sup> <https://zakon.rada.gov.ua/laws/show/1053-20#n2>

<sup>6</sup> <https://zakon.rada.gov.ua/laws/show/2961-15#Text>

<sup>7</sup> <https://mva.gov.ua/ua/tag/protezuвання-ta-reabilitaciya>

<sup>8</sup> The need for rehabilitation services in the WHO European Region. <https://apps.who.int/iris/handle/10665/364705>

It is defined in the IVRS<sup>9</sup> that the availability of quality rehabilitation services should be provided for all PVI, regardless of age and the disorder degree.

The scope of the Law of Ukraine "On Rehabilitation of Persons with Disabilities in Ukraine" includes people with disabilities, in particular children with disabilities, families of persons with disabilities, military personnel, regardless of whether their disability is officially established.

Rehabilitation care in the field of health care in accordance with the Law of Ukraine "On Rehabilitation in the Health Care Sector" is provided to person with a mobility impairment in daily living activities before the status of "person with disability" or "child with disability" status is officially established, as well as to people with disabilities depending on their needs.

### **Availability of rehabilitation services**

Ensuring the availability of rehabilitation services is reflected in the provisions of the Convention on the Rights of Persons with Disabilities, adopted by the UN General Assembly in 2006 and ratified by Ukraine in 2009<sup>10</sup>. The availability of rehabilitation services contributes to the observance of the rights of all people to health, which is of particular importance in the context of the protection of the rights of persons with disabilities and other population groups with limitations in daily living activities, for the prevention of disability<sup>11</sup>.

According to the IVRS, the accessibility of rehabilitation should meet the following characteristics: non-discrimination, physical accessibility, economic accessibility and availability of information about rehabilitation services.

In Ukraine, rehabilitation services in the health care system are included in the medical guarantee packages of the National Health Service of Ukraine (NHSU), which improves access to them<sup>12</sup>.

The availability of rehabilitation services for people with disabilities contributes to their social protection, which is a component of the governmental activities to ensure the rights and opportunities of people with disabilities on an equal basis with other citizens<sup>13</sup>.

<sup>9</sup> International Vision rehabilitation standards. <https://polonazionaleipovisione.it/wp-content/uploads/2022/07/International-Vision-Rehabilitation-Standards.pdf>

<sup>10</sup> OHCHR. <https://www.refworld.org/docid/52fa3be54.html>

<sup>11</sup> Rehabilitation competency framework. <https://apps.who.int/iris/handle/10665/338782>

<sup>12</sup> <https://zakon.rada.gov.ua/laws/show/1053-20#n2>

<sup>13</sup> <https://zakon.rada.gov.ua/laws/show/875-12#Text>

## **Funding of rehabilitation services**

WHO defines rehabilitation as an important aspect of medical care and therefore it should be covered by health insurance, but at the same time funding of rehabilitation services from other sources is not excluded: state and local budgets, direct payments of rehabilitation service users and external aid<sup>14</sup>.

Funding of rehabilitation in HCS is included in the programme of state guarantees of medical care for the population and can be performed at the expense of state and local budgets, funds of legal entities and individuals, as well as from other sources<sup>12</sup>.

Rehabilitation programmes for persons with disabilities are funded at the expense of the state budget, the Fund for Social Protection of Persons with Disabilities, local budgets, as well as other sources<sup>15</sup>.

## **Infrastructure of rehabilitation services**

The WHO has developed a concept for the organisation of rehabilitation care in the healthcare system<sup>16</sup>, which identifies general types of rehabilitation services and provides a scheme for their optimal combination. According to the concept, rehabilitation assistance is provided at different levels of the healthcare system and in different settings: hospitals, rehabilitation centres, educational institutions, workplaces, at the community level, in the form of self-rehabilitation and rehabilitation on an informal basis.

Separate governmental and private rehabilitation institutions have been created in foreign countries (USA, UK, Germany) exclusively for PVI.

In Ukraine, a separate rehabilitation system in HCS<sup>12</sup> and a rehabilitation system for persons with disabilities<sup>15</sup> have been created; in particular, the latter is performed in rehabilitation institutions depending on the content of rehabilitation measures (rehabilitation in the field of healthcare, medical and social rehabilitation, social rehabilitation, psychological and pedagogical rehabilitation, professional rehabilitation, labour rehabilitation, physical education and sports rehabilitation; rehabilitation institutions can also be of a mixed type, providing comprehensive rehabilitation), but not depending on the medical aspects of a PVI's primary disorder. Thus, there are state and private rehabilitation institutions in Ukraine for persons with disabilities of various subordination levels.

<sup>14</sup> Rehabilitation in health systems. <https://apps.who.int/iris/handle/10665/254506>

<sup>15</sup> <https://zakon.rada.gov.ua/laws/show/2961-15#Text>

<sup>16</sup> Rehabilitation in health systems: guide for action. <https://apps.who.int/iris/handle/10665/325607>



Rehabilitation in the health care system is carried out in rehabilitation institutions, departments, units; in addition, the need for home rehabilitation and rehabilitation in a territorial community is determined<sup>17</sup>.

Currently, there is only one rehabilitation institution for the blind in Ukraine: the Municipal Rehabilitation Institution (MRI) "Kyiv Centre for the Blind"<sup>18</sup>. Non-governmental organizations also play an important role in the rehabilitation of PVI.

### **Human resources potential**

According to the WHO Rehabilitation Competency Framework<sup>19</sup>, in addition to medical specialists in the field of rehabilitation, rehabilitation personnel also include rehabilitation workers in the community and other narrow specialists who provide rehabilitation services according to individual needs.

The IVRS<sup>20</sup> defines a list of narrow specialists who participate in the provision of rehabilitation services for visual impairment: ophthalmologists, optometrists, vision therapists, PVI rehabilitation specialists, specialists in orientation and mobility (O&M), specialists in the formation of daily life skills (DLS), psychologists, and involve other specialists depending on the PVI age and functional condition (teachers, professional consultants, social workers).

The American Academy of Ophthalmology<sup>21</sup> notes that the composition of the vision rehabilitation team depends on the age of a PVI. For adults with visual impairments, the following team of specialists is suggested: an ophthalmologist, a vision therapist, an occupational therapist, a rehabilitation teacher, an orientation and mobility specialist, a specialist in adaptive technologies, a social worker, and a consultant.

In Ukraine, rehabilitation in the health care system is carried out by medical specialists in HCS; if necessary, a Doctor of Physical and rehabilitation medicine can invite doctors of other specialties to participate in the work of a multidisciplinary rehabilitation team to provide consultations<sup>22</sup>.

<sup>17</sup> <https://zakon.rada.gov.ua/laws/show/1268-2021-%D0%BF#Text>

<sup>18</sup> [https://kyivaudit.gov.ua/vr/ka/company.nsf/0/A40C72F68490E6CEC22583430050C0B7/\\$file/%D0%A1%D1%82%D0%B0%D1%82%D1%83%D1%82%20%D0%9A%D0%A0%D0%A3%20%D0%9A%D0%A6%D0%9D.pdf](https://kyivaudit.gov.ua/vr/ka/company.nsf/0/A40C72F68490E6CEC22583430050C0B7/$file/%D0%A1%D1%82%D0%B0%D1%82%D1%83%D1%82%20%D0%9A%D0%A0%D0%A3%20%D0%9A%D0%A6%D0%9D.pdf)

<sup>19</sup> Rehabilitation competency framework. <https://apps.who.int/iris/handle/10665/338782>

<sup>20</sup> International Vision rehabilitation standards. <https://polonazionaleipovisione.it/wp-content/uploads/2022/07/International-Vision-Rehabilitation-Standards.pdf>

<sup>21</sup> <https://www.aao.org/eye-health/diseases/low-vision-aids-rehabilitation>

<sup>22</sup> On Multidisciplinary Rehabilitation Team. <https://zakon.rada.gov.ua/laws/show/1268-2021-%D0%BF#n262>

Rehabilitation of individuals with disabilities is carried out in accordance with the Law of Ukraine "On Rehabilitation of Persons with Disabilities in Ukraine"<sup>23</sup> by specialists in HCS, education, social branch, industrial training, and sports. Social rehabilitation measures for persons with visual disabilities are carried out by speech therapists and mobility instructors<sup>23</sup>. In addition, it is possible to create multidisciplinary rehabilitation teams, the composition of which should correspond to the needs of a person undergoing rehabilitation.

### **Rehabilitation services**

The IVRS stipulate that rehabilitation services provided to PVI should be individualized and aimed at improving the quality of life of persons with irreversible and progressive visual impairments; this involves the use of medical, social, educational and professional rehabilitation measures.

The IVRS presents a complex of interdisciplinary rehabilitation services, which are described at different levels of the health care system with consideration of a patient's age. The list of PVI rehabilitation services is selected on a case-by-case basis after a detailed assessment of their condition. The main rehabilitation measures: prescription of optical correction devices and training in their use; orientation and mobility training; development of visual perception and compensatory means of perception; learning Braille; provision of telerehabilitation services; organization of self-aid groups; training in the use of technical means of rehabilitation; household management training; evaluation and adaptation of the home and working environment; training in the use of rehabilitation aids; provision of social and educational services; use of leisure programmes and wellness programmes; psychological counselling; professional counselling; monitoring the use of rehabilitation services.

An analysis of foreign experience in providing rehabilitation services to people with visual impairments (USA, Germany, UK) confirmed their compliance with the IVRS.

The list of HCS rehabilitation measures for persons with disabilities of daily living activities is established by the "State Model Rehabilitation Plan for Persons with Disabilities of Daily Living Activities"<sup>24</sup>. They include: physical and rehabilitation medicine, physical therapy, occupational therapy, speech and language therapy, psychological assistance, prosthetics/orthotics and provision of medical devices, in particular rehabilitation aids.

<sup>23</sup> <https://zakon.rada.gov.ua/laws/show/2961-15#Text>

<sup>24</sup> <https://www.kmu.gov.ua/npas/deiaki-pytannia-orhanizatsii-reabilitatsii-u-sferi-okho-a1462>

The need for rehabilitative care for ophthalmological patients is stated in the clinical guideline "Comprehensive eye and vision examination: evidence-based clinical guideline"<sup>25</sup>, depending on the results of the eye and vision examination of a PVI, eye therapy and (or) vision rehabilitation can be recommended.

In Ukraine, the list of rehabilitation services provided to persons with disabilities according to their impairment and age is defined in the Resolution of the CMU "On Approval of The State Model Programme for Rehabilitation of Persons with Disabilities"<sup>26</sup>. For adults with visual disabilities (from 18 years of age), services are provided in the following areas of rehabilitation: medical, psychological-pedagogical, physical, professional, labour, physical education-sports, and social. List of social rehabilitation services: training of basic social skills, social and household patronage, occupational therapy. The Resolution also provides a recommended list of rehabilitation aids for persons with disabilities.

Regardless of age, education is one of the important means of PVI rehabilitation. Provision of educational services in institutions of professional (vocational and technical), pre-higher and higher education for PVI involves the creation of an accessible educational environment and provision of psychological and pedagogical support for students with special educational needs<sup>27</sup>.

## Main results. Problematic aspects

PVI rehabilitation in recommendations by WHO and IVRS is viewed as a continuous process of interdisciplinary interaction throughout an individual's life, regardless of their age and severity of their disorder.

Two directions of rehabilitation are distinguished in the legislative and normative documents of Ukraine: in HCS and for people with disabilities. Although the documents emphasize compliance with the principle of continuity of rehabilitation services, such a division does not allow to ensure continuity and coordination of rehabilitation services between different levels of medical service provision and the system of rehabilitation of people with visual disabilities.

<sup>25</sup> [https://www.dec.gov.ua/wp-content/uploads/2019/11/2019\\_09\\_20\\_kn\\_kompl\\_obst\\_okazory.pdf](https://www.dec.gov.ua/wp-content/uploads/2019/11/2019_09_20_kn_kompl_obst_okazory.pdf)

<sup>26</sup> <https://zakon.rada.gov.ua/laws/show/1686-2006-%D0%BF#n37>

<sup>27</sup> Procedures for Organizing Inclusive Education:  
<https://zakon.rada.gov.ua/laws/show/636-2019-%D0%BF#Text>  
<https://zakon.rada.gov.ua/laws/show/635-2019-%D0%BF#Text>

## Governing

**1. There is no clearly defined responsibility for the issues of PVI rehabilitation, insufficient coordination of cooperation between social sectors responsible for certain areas of rehabilitation.** The Directorate of Medical Services has been established at the Ministry of Health, which provides regulatory and legal framework of rehabilitation issues in the field of healthcare; an expert group on rehabilitation issues was created under the Ministry of Social Policy; the Department of Rehabilitation and Medical Services was established under the Ministry of Veterans Affairs. Other ministries also play a role in rehabilitation, but there is no defined plan for sharing information and discussing rehabilitation issues. Insufficient consistency and coordination of cooperation can slow down the development in the field of rehabilitation.

**2. The laws "On rehabilitation of Persons with Disabilities in Ukraine" and "On Rehabilitation in the Healthcare Sector" list rather vaguely the list of persons entitled to rehabilitation in each rehabilitation system.** As long as the provision of rehabilitation services, which should be provided throughout the life of PVI, regardless of official confirmation of their disability, does not comply with the provisions of the WHO on rehabilitation, it will not meet the important principles: consistency, continuity and functional orientation of the rehabilitation care of the PVI, since rehabilitation should be aimed at achieving an optimal level of functioning and quality of life of a person in their environment.

**3. The procedure for the provision of rehabilitation services to PVI is not clearly defined.** People with disability can receive rehabilitation services optionally in accordance with the "Procedure for the implementation of rehabilitation measures"<sup>28</sup> or on the basis of the "Procedure for the provision of rehabilitation care in the healthcare sector"<sup>29</sup>, which is impractical and causes difficulties for people with disabilities to undergo rehabilitation and assess the effectiveness of the services provided throughout life.

**4. There is no unified procedure for monitoring the provision of rehabilitation services.** Evaluation of the effectiveness of the provided rehabilitation services to PVI is performed on the basis of reporting indicators based on the model of the International Classification of Functioning, Disability and Health (ICF<sup>30</sup>), but for the organization of rehabilitation assistance in HCS, information is entered into the electronic healthcare system, and for rehabilitation of people with disabilities – into the centralized data bank on disability issues. Entering data into two different systems makes it impossible to fully coordinate cooperation between rehabilitation service providers.

<sup>28</sup> <https://zakon.rada.gov.ua/laws/show/31-2022-%D0%BF#n13>

<sup>29</sup> <https://zakon.rada.gov.ua/laws/show/1268-2021-%D0%BF#Text>

<sup>30</sup> <https://moz.gov.ua/mkf>

**5. The clinical guideline "Comprehensive eye and vision examination: evidence-based clinical guideline"<sup>31</sup>** lacks information on PVI rehabilitation. The clinical guideline states that, depending on the results of PVI eye and vision examination, vision therapy and/or vision rehabilitation can be recommended, but the document does not define what "vision rehabilitation" is, and does not specify what services are provided during vision rehabilitation and which specialists belong to the rehabilitation team.

**6. A national standard for rehabilitation of PVI is lacking.** Without a unified document, which directs activities in the field of PVI rehabilitation and applies to all relevant units, ministries and interested persons, work in this field will not be effective and does not ensure the continuity of the provision of rehabilitation services.

### **Availability of rehabilitation services**

**1. Funding of rehabilitation services.** According to the WHO provisions, the economic availability of rehabilitation measures is one of the conditions for the availability of rehabilitation. The presence of two laws on rehabilitation in Ukraine, which prescribe different sources of funding and, accordingly, different procedures for referral to rehabilitation, prevents timely initiation of PVI rehabilitation.

In 2023, rehabilitation care in inpatient and outpatient conditions was included in the Programme of State Guarantees of Medical Services for the Population by the Resolution of the CMU<sup>32</sup>.

Provision of rehabilitation aids (technical and other rehabilitation aids) for people with disabilities, children with disabilities and other separate categories of the population (participants in hostilities, victims of hostilities, elderly people and others) and payment of monetary compensation for the cost of such independently purchased aids<sup>33</sup> from the list approved by the CMU<sup>34</sup> is carried out from the Fund for Social Protection of Persons with Disabilities.

The procedure for paying for rehabilitation services provided to people with disabilities is unclear in the legislation, in contrast to the procedure for using budget funds provided for the rehabilitation of children with disabilities<sup>35</sup>.

<sup>31</sup> [https://www.dec.gov.ua/wp-content/uploads/2019/11/2019\\_09\\_20\\_kn\\_kompl\\_obst\\_okazory.pdf](https://www.dec.gov.ua/wp-content/uploads/2019/11/2019_09_20_kn_kompl_obst_okazory.pdf)

<sup>32</sup> <https://zakon.rada.gov.ua/laws/show/1464-2022-%D0%BF#Text>

<sup>33</sup> <https://www.ispf.gov.ua/diyainist/zabezpechennya-tehnichnimi-zasobami-reabilitaciyi/zagalna-informaciya>

<sup>34</sup> <https://zakon.rada.gov.ua/laws/show/z0953-21#n14>

<sup>35</sup> <https://zakon.rada.gov.ua/laws/show/309-2019-%D0%BF#Text>

**2. The legislation does not clearly regulate the procedure for providing rehabilitation services outside a rehabilitation institution or health care institution.** According to the legislation<sup>36</sup>, it is stated that rehabilitation at home and rehabilitation in the territorial community can be carried out in the health care system, but there are no regulatory documents that would regulate the procedure for providing such rehabilitation services. In the normative provisions concerning the rehabilitation of people with disabilities, services in the territorial community do not belong to the structure of the rehabilitation system for people with disabilities<sup>37</sup>. Thus, this gives reason to state the unavailability of these PVI services, which requires a solution to this issue at the state level.

**The absence of the PVI Rehabilitation Standard** and, accordingly, the list of specialists and institutions that can provide high-quality rehabilitation services for visual impairments, preclude the availability of this service, especially during a long rehabilitation period.

### **Human resources potential**

**1. In case of providing rehabilitation services to people with visual impairments, inclusion of an optometrist in the multidisciplinary rehabilitation team is not provided**, which makes it impossible, in accordance with the IVRS, to carry out measures to prevent the loss of visual functions; slowing down the rate of vision loss; improvement or restoration of visual function; maintenance of the current state of vision functions.

**2. Optometrist training programmes lack educational components related to the ethics of communication and support of PVI in professional activities.** According to the concept of optometry of the World Council of Optometry<sup>38</sup>, an optometrist carries out the rehabilitation of the visual system conditions, therefore, in order to provide high-quality rehabilitation services for the PVI, an optometrist needs to know the basics of the ethics of communication with the PVI and be able to provide this category of people with elementary physical support.

**3. Lack of educational programmes for training and retraining of vision therapists.** According to the clinical guideline "Comprehensive eye and vision examination: evidence-based clinical guideline"<sup>39</sup>, vision therapy can be recommended to PVI, although the National Classifier of Professions of Ukraine does not include

<sup>36</sup> <https://zakon.rada.gov.ua/laws/show/1268-2021-%D0%BF#n11>

<sup>37</sup> <https://zakon.rada.gov.ua/laws/show/2961-15#Text>

<sup>38</sup> [https://worldcouncilofoptometry.info/wp-content/uploads/2020/08/curricular\\_support\\_element\\_final\\_web2.pdf](https://worldcouncilofoptometry.info/wp-content/uploads/2020/08/curricular_support_element_final_web2.pdf)

<sup>39</sup> [https://www.dec.gov.ua/wp-content/uploads/2019/11/2019\\_09\\_20\\_kn\\_kompl\\_obst\\_okazory.pdf](https://www.dec.gov.ua/wp-content/uploads/2019/11/2019_09_20_kn_kompl_obst_okazory.pdf)

the professional qualification "vision therapist", and Ukraine does not train these specialists either.

**4. Mandatory components that cover people with ophthalmic diseases are missing in the educational programmes for training and advanced training of occupational therapists and physical therapists.** Due to the lack of educational components on rehabilitation, physical therapy, occupational therapy for visually impaired in educational programmes for the training of specialists in the specialty "227. Therapy and Rehabilitation"<sup>40</sup>, rehabilitation services are provided to this category of people in a low-quality manner.

**5. Lack of training of typhlopedagogues for the PVI rehabilitation.** The National Classifier of Professions of Ukraine does not include a professional qualification "typhlopedagogue". At the same time, the qualification "rehabilitator teacher" is included into the National Classifier, but the category of persons with which they are supposed to work is not specified. Currently, in Ukraine, to work with children who have visual impairments, special education teachers are being trained in the bachelor's and master's degrees in the specialty "016.05 Special education. Typhlopedagogy". The activities of these specialists are focused on issues of education, upbringing and correction of development, and services are provided to students with visual impairments in educational institutions. Ukraine does not train specialists (rehabilitation teachers for people with visual impairments) who can provide rehabilitation services to PVI: orientation and mobility training, Braille training; household management training; training in the use of auxiliary and technical means of rehabilitation; assessment and adaptation of the home and work environment, etc. Until Ukraine closes this gap, adults with disabilities will not receive the help they need to reduce the risks to their lives, increase their independence, and improve their quality of life.

**6. Lack of educational programmes for training and advanced training instructors in orientation and mobility.** In accordance with the legislation of Ukraine<sup>41</sup>, mobility instructors provide rehabilitation for people with visual disabilities, although the National Classification of Professions of Ukraine does not include the professional qualification "mobility instructor". First of all, it is worth noting that the term "orientation and mobility instructor" is used in international practice. Professional competencies for mastering the techniques of spatial support and orientation of the blind and people with residual vision are formed during the training of special education teachers of the bachelor's and master's degrees in the specialty "016.05 Special education. Typhlopedagogy", but they do not concern the issues of rehabilitation of adult PVI.

<sup>40</sup> <https://zakon.rada.gov.ua/laws/show/1392-2022-%D0%BF#Text>

<sup>41</sup> <https://zakon.rada.gov.ua/laws/show/2961-15#Text>

**7. Absence of advanced professional development programmes for social workers working with PVI.** In accordance with the legislation of Ukraine, social workers are participants in the rehabilitation process<sup>42</sup> and must possess the skills of physical support of PVI, as well as carry out measures for social adaptation of this category of persons. Inadequate preparedness for work with PVI can lead to violation of ethical norms in interaction and low-quality rehabilitation services during the long-term rehabilitation stage at the patient's place of residence<sup>43</sup>.

### **Infrastructure of rehabilitation services**

**MRI "Kyiv Centre for the Blind" is the only municipal rehabilitation institution for PVI in Ukraine.** The facility is owned by the territorial community of Kyiv and accepts only residents of Kyiv for rehabilitation<sup>44</sup>.

### **Rehabilitation services**

**Comprehensive rehabilitation is not provided to PVI in HCS and at the level of territorial communities.** The main rehabilitation measures at different levels (primary, secondary, tertiary) are highlighted in the Unified Clinical Protocols for the Medical Care Provision<sup>45</sup>, which are divided into mandatory (monitoring of the adherence to recommendations according to the prescriptions; modification of lifestyle; duration of incapacity for work; medical checkups; periodicity of control examinations and, preferably, health resort treatment in specialized health resorts for ophthalmological patients, which makes it impossible to develop a rehabilitation route for PVI and does not reflect a comprehensive approach to the rehabilitation of this category of persons.

**The list of rehabilitation services provided in HCS states rehabilitation measures, but there are no clearly defined services provided by these specialists.** The main rehabilitation measures are defined as: physical and rehabilitation medicine, physical therapy, occupational therapy, speech and language therapy, psychological assistance, prosthetics and orthotics and the provision of rehabilitation aids, but without the PVI Rehabilitation Standard, drawing up and implementing an individual rehabilitation plan, in accordance with rehabilitation routes, will not be effective enough.

<sup>42</sup> <https://zakon.rada.gov.ua/laws/show/z1209-16#n15>

<sup>43</sup> <https://zakon.rada.gov.ua/laws/show/2671-19#Text>

<sup>44</sup> [https://kyivaudit.gov.ua/vr/ka/company.nsf/0/A40C72F68490E6CEC22583430050C0B7/\\$file/%D0%A1%D1%82%D0%B0%D1%82%D1%83%D1%82%20%D0%9A%D0%A0%D0%A3%20%D0%9A%D0%A6%D0%9D.pdf](https://kyivaudit.gov.ua/vr/ka/company.nsf/0/A40C72F68490E6CEC22583430050C0B7/$file/%D0%A1%D1%82%D0%B0%D1%82%D1%83%D1%82%20%D0%9A%D0%A0%D0%A3%20%D0%9A%D0%A6%D0%9D.pdf)

<sup>45</sup> Unified clinical protocols:  
[https://www.dec.gov.ua/wp-content/uploads/2019/11/2016\\_49\\_ykpm\\_d\\_katarakta.pdf](https://www.dec.gov.ua/wp-content/uploads/2019/11/2016_49_ykpm_d_katarakta.pdf)  
[https://www.dec.gov.ua/wp-content/uploads/2019/11/816dod2\\_1.pdf](https://www.dec.gov.ua/wp-content/uploads/2019/11/816dod2_1.pdf)



**Incompetence of rehabilitation specialists in health care sector in providing rehabilitation aids to PVI.** The main rehabilitation measures in the HCS<sup>46</sup> include the provision of rehabilitation aids during all rehabilitation periods and the need for training in their use, but rehabilitation specialists are not familiar with the use of PVI rehabilitation aids and have not mastered the training methodology for this category of people.

**Rehabilitation centers do not provide a full range of rehabilitation services for adult PVI.** In the structure of the rehabilitation system for people with disabilities, no rehabilitation center has been created that would provide a full list of services to adult disabled PVI in accordance with the IVRS<sup>47</sup>. Ukraine's only rehabilitation facility for the blind, the MRI "Kyiv Center for the Blind" does not provide all the services required for the PVI rehabilitation, in particular, the following services are missing: assessment and adaptation of the home and work environment; provision of services in remote format.

**Social rehabilitation measures are limited In the structure of comprehensive rehabilitation services for adults with visual disabilities, and they do not correspond to the IVRS.** According to the list of rehabilitation services<sup>48</sup>, social rehabilitation is aimed only at social and household patronage, occupational therapy and social skills training, which makes it impossible to achieve the desired results of social rehabilitation and does not contribute to the independence of PVI.

**Psychological rehabilitation measures are not described in the list of rehabilitation services for disabled PVI.** This list<sup>49</sup> contains only measures of psychological and pedagogical rehabilitation, but they do not make it possible to systematically solve the issue of psychosocial adaptation of PVI to the altered life situation.

**Lack of a unified list of PVI rehabilitation aids.** According to the regulatory provisions, there are two current lists of rehabilitation aids: in the "State Model Programme for the Rehabilitation of Persons with Disabilities"<sup>45</sup> and in the "Procedure for Providing Rehabilitation Aids (Technical and Other Rehabilitation Aids) to Persons with Disabilities, Children with Disabilities and Other Individual Categories of the Population and Payment of Monetary Compensation for the Cost of Such Independently Purchased Aids, Their List"<sup>46</sup>. This approach complicates the provision of rehabilitation services to PVI.

<sup>46</sup> <https://www.kmu.gov.ua/npas/deiaki-pytannia-orhanizatsii-reabilitatsii-u-sferi-okho-a1462>

<sup>47</sup> International vision rehabilitation standards. <https://polonazionaleipovisione.it/wp-content/uploads/2022/07/International-Vision-Rehabilitation-Standards.pdf>

<sup>48</sup> State Model Programme for the Rehabilitation of Persons with Disabilities. <https://zakon.rada.gov.ua/laws/show/1686-2006-%D0%BF#n37>

<sup>49</sup> <https://zakon.rada.gov.ua/laws/show/321-2012-%D0%BF#Text>

**An insufficient list of PVI rehabilitation aids.** The list offers a limited number of aids (tactile sticks, mobile phones, voice recorders with voiced buttons and menus, magnifiers (electronic, portable), color determining devices with speech output) compared to the IVRS and WHO recommendations, which does not contribute to the successful solution of all social rehabilitation tasks. To solve this issue, it is worth conducting a special study and determining the necessary list of PVI rehabilitation aids, taking into account national needs and available resources.

**Agree on the terminology for rehabilitation aids.** The Procedure for providing rehabilitation aids (technical and other rehabilitation aids)<sup>46</sup> to persons with disabilities uses the term "tactile canes", the international name of this rehabilitation aid is "white cane". In addition, tactile canes in the Procedure belong to "one-handed walking aids" in the section "Auxiliary devices for personal mobility, transfer and lifting", although their purpose is: special aids for orientation, which is the section "Special aids for orientation, communication and exchange of information". This approach complicates the search for the necessary rehabilitation aids both for specialists who prescribe them and for PVI.

**Rehabilitation specialists are not involved in the selection of aids.** The need for provision of rehabilitation aids of people with disabilities is determined by Medico-Social Expert Boards and recorded in individual rehabilitation programmes of people with disabilities<sup>50</sup>.

Selection and training in use of rehabilitation aids, in particular tactile sticks and magnifiers of various types, is an important step to ensure the effective use of aids to maximize the recovery of vital functions. PVI rehabilitation specialists (optometrists, PVI rehabilitation teachers, orientation and mobility instructors) should play an important role in this process, as they have the necessary knowledge and skills of using these devices and have the competence to teach PVI to use them. Selection of aids without the involvement of such specialists can lead to low effectiveness of rehabilitation measures.

## Recommendations

### Governing

#### 1. Consolidation of management and coordination in the field of rehabilitation.

The Government of Ukraine is recommended to take the following measures:

1.1. Create departmental and interdepartmental groups for the development and implementation of a national strategy in the field of rehabilitation and serve as a channel of permanent communication in this field.

1.2. Develop a national rehabilitation strategy that would involve and include all relevant ministries: MoH, MinSocPolicy, MinVeterans, MES, nongovernmental organizations and all interested parties.

1.3. Develop normative provisions on rehabilitation in territorial communities.

#### 2. Develop a unified law on rehabilitation that would ensure the continuity of rehabilitation services, in particular for people with disabilities.

The Office of the President of Ukraine is recommended to take the following measures:

2.1. Create a task team to develop the Law on Rehabilitation.

#### 3. Develop the state Standard for the Rehabilitation of People with Visual Impairments, based on the International Vision Rehabilitation Standard.

The Office of the President of Ukraine is recommended to take the following measures:

3.1. Create a task team for the development of the State Standard for the Rehabilitation of People with Visual Impairments, which would involve and include all relevant ministries: Ministry of Health, MinSocPolicy, MES; divisions: Chair of Ophthalmic Pedagogy and Ophthalmic Psychology of Mykhailo Drahomanov Ukrainian State University; Department of Education for Children with Visual Impairments of Mykola Yarmachenko Institute of Special Pedagogy and Psychology of the National Academy of Pedagogic Sciences of Ukraine; Department of Ophthalmology of the P.L. Shupyyk National University of Health Care of Ukraine; interested parties.

3.2. Develop the state Standard for the Rehabilitation of People with Visual Impairments.

#### 4. Develop a Model Regulation on a Specialized Rehabilitation Center for People with Visual Impairments, which would present the state social regulations in the field of PVI rehabilitation.

4.1. Create a task team for the development of the Model Regulation on a Specialized Rehabilitation Centre for People with Visual Impairments, which would involve and include the ministries: MinSocPolicy, MES; divisions: Chair of Ophthalmic Pedagogy and Ophthalmic Psychology of Mykhailo Drahomanov Ukrainian State University; Department of Education for Children with Visual Impairments of Mykola Yarmachenko Institute of Special Pedagogy and Psychology of the National Academy of Pedagogic Sciences of Ukraine; interested parties.

4.2. Develop the Model Regulation on a Specialized Rehabilitation Centre for People with Visual Impairments.

### **5. Strengthen the systems related to the provision of rehabilitation aids.**

MinSocPolicy and MoH are recommended to take the following measures:

5.1. Continue engagement with WHO to assess the situation regarding assistive technologies for their inclusion in the national rehabilitation strategy and/or create a sub-strategy on these issues.

5.2. Finalize the list of rehabilitation aids for PVI, taking into account the recommendations by WHO, IVRS and "Typical list of teaching aids (special means for psychophysical development correction) for persons with special educational needs studying in educational institutions"<sup>51</sup>.

### **6. Clarify the information about rehabilitation and terminology in this area.**

MoH, MES, MinSocPolicy and relevant interested parties are recommended to take the following measures:

6.1. Review existing regulatory documents and clarify terminological definitions in this sector and areas of rehabilitation.

6.2. Conduct information campaigns to raise public awareness of modern rehabilitation of PVI.

6.3. Review the existing legal documents that concern specialists in the field of PVI rehabilitation, and make recommendations on changes to them.

## **Funding**

### **7. Finalize PVI rehabilitation service packages, taking into account the mobility conditions identified after implementation.**

<sup>51</sup> <https://zakon.rada.gov.ua/laws/show/z0582-18#Text>

MoH, NHSU, MinSocPolicy, MES and relevant interesting parties are recommended to take the following measures:

- 7.1. Evaluate the data and experience gained during the implementation of rehabilitation services for PVI.
- 7.2. Consider the possibility of expanding the list of rehabilitation aids for PVI and the procedure for providing them.
- 7.3. To develop a system of funding the rehabilitation care for PVI: in rehabilitation centres, in the territorial community.
- 7.4. To determine the need for funding the rehabilitation services directly provided to PVI according to the "money follows the person" principle, which will make it possible to ensure targeting, transparency and improve the quality of the provision of rehabilitation services (following the example of the procedure for funding rehabilitation services for children with disabilities)<sup>52</sup>.

### **Human resource potential**

#### **8. To eliminate identified problems related to human resource potential in the rehabilitation sector.**

MES in cooperation with MoH, MinSocPolicy and other relevant interesting parties are recommended to take the following measures:

- 8.1. To ensure the training of rehabilitation teachers for PVI.
- 8.2. To develop an educational programme for the training of rehabilitation teachers for PVI in the higher education system of the MES.
- 8.3. To ensure the training of orientation and mobility instructors by entering the appropriate professional qualification into the National Classifier of Professions of Ukraine.
- 8.4. To provide for the additional qualification of "orientation and mobility instructor" during the development of the educational programme for the training of rehabilitation teachers for PVI in the higher education system of the MES.
- 8.5. To include a training course or a module in a training course: Prescription, Provision and Training of PVI to Work with Rehabilitation Aids in the process of training (retraining or advanced training) of specialists who provide rehabilitation services to PVI.

<sup>52</sup> <https://zakon.rada.gov.ua/laws/show/309-2019-%D0%BF#Text>

8.6. To consider the possibility of inclusion of an optometrist in the multidisciplinary rehabilitation team for the provision of services to PVI.

8.7. To provide advanced training of occupational therapists, physical therapists, psychologists, social workers, optometrists and all those interested in providing rehabilitation services to PVI.

## **Information**

### **9. Collection of nationwide standardized data on the functioning of the population's vital activities.**

The State Statistics Service is recommended to take such measures:

9.1. Include questions on the functioning of vital activities in the next population census.

### **10. Consider the possibility of operation of a unified informational electronic system for the provision of rehabilitation services.**

MinSocPolicy, MoH, eHealth State Enterprise and NHSU in collaboration with relevant interested parties are recommended to take the following measures:

10.1. Identify which rehabilitation information platforms are weak or lacking and find ways to close such gaps through the operation of a unified electronic system.

## **Rehabilitation services**

### **11. To contribute to the provision of rehabilitation services to PVI, regardless of the degree of visual impairment.**

MinSocPolicy, MoH in collaboration with relevant interested parties are recommended to take the following measures:

11.1. To determine the list of PVI rehabilitation services in accordance with the developed PVI Rehabilitation Standard.

11.2. To rely on the list of services defined in the PVI Rehabilitation Standard during the development of individual PVI rehabilitation programmes.

11.3. To create specialized rehabilitation facilities (departments at comprehensive rehabilitation centres) of regional or interregional subordination for PVI.

11.4. To include and continue the provision of rehabilitation services to persons with visual disabilities, according to the rehabilitation route, at the level of territorial communities.

11.5. To include the provision of rehabilitation care using remote technologies in the PVI Rehabilitation Standard.

11.6. To include the provision and training in the use of rehabilitation aids in PVI rehabilitation system.

## Background

### International, regional and national developments in the rehabilitation sector

Historically, the issue of rehabilitation was associated with disability.

Modern approaches to the rehabilitation of people with disabilities are based on the provisions of the UN Convention on the Rights of Persons with Disabilities<sup>53</sup>, adopted by the UN General Assembly in 2006 and ratified by Ukraine in 2008. The convention is the main UN international treaty on human rights and establishes framework requirements for the rehabilitation of persons with disabilities.

Taking into account the provisions of the UN Convention on the Rights of Persons with Disabilities of 2010, WHO, UNESCO and other partner organizations jointly developed the methodological guide "Rehabilitation in the Community: Recommendations"<sup>54</sup>, which includes the following components: health, expansion of rights and opportunities, social issues, education, the issue of self-sufficiency. Methodical guide is primarily aimed at people with various types of disabilities, but also takes into account the rights and needs of people with mental disorders and serious health conditions.

In 2013, WHO Member States approved the WHO Global Disability Action Plan 2014–2021<sup>55</sup>, which called for removing barriers and improving access to health services and programmes; strengthen and expand rehabilitation measures; ensure the use of assistive devices and technologies, support services, improve rehabilitation at the community level, which will allow to implement prophylactic measures to prevent disability.

<sup>53</sup> OHCHR. <https://doi.org/10.18356/46bfff7d-en>

<sup>54</sup> <https://apps.who.int/iris/handle/10665/44405>

<sup>55</sup> <https://www.who.int/publications/i/item/who-global-disability-action-plan-2014-2021>

In order to improve access to rehabilitation services, in 2016 WHO presented the Priority Assistive Products List, selected based on the most common needs and their potential impact on human life<sup>56</sup>. Further on, the issue of providing rehabilitation aids for people with disabilities was raised several times at WHO meetings<sup>57</sup>.

In 2017, methodological recommendations for the provision of rehabilitation services in the health care system<sup>58</sup> at the first, second and third levels of the health care system were developed to implement the WHO Global Disability Action Plan.

To draw attention to rehabilitation issues in 2017, the WHO launched the initiative "Rehabilitation 2030: a Call to Action"<sup>59</sup>, which resulted in the adoption of the important statement that rehabilitation services are needed not only by people with disabilities, but also by other people with a physical impairment, for disability prevention.

In response to the Rehabilitation 2030 initiative in 2020, WHO published the Rehabilitation Competency Framework<sup>60</sup>, according to which every person will be able to access high-quality rehabilitation services when needed.

Approaches to the rehabilitation of people with visual impairments correspond to the main provisions of the WHO:

- For the first time, the WHO Global Disability Action Plan<sup>61</sup> emphasizes the prevention of blindness, the restoration of vision and the importance of rehabilitation services as an integral component of ophthalmic care.
- In 2015, the European Union of the Blind presented the minimum standards for the rehabilitation of people with visual impairments in Europe<sup>62</sup> in order to implement the General Action Plan of the WHO.
- Continuing the implementation of the WHO Global Action Plan, in 2015, the "Vision Rehabilitation Standards"<sup>63</sup> were adopted at the WHO International Consensus Conference in Rome.

<sup>56</sup> <https://www.who.int/publications/i/item/priority-assistive-products-list>

<sup>57</sup> <https://www.who.int/publications/i/item/9789240049451>

<sup>58</sup> Rehabilitation in health systems. <https://apps.who.int/iris/handle/10665/254506>

<sup>59</sup> Rehabilitation 2030: a call for action. <https://apps.who.int/iris/handle/10665/339910>

<sup>60</sup> Rehabilitation competency framework. <https://apps.who.int/iris/handle/10665/338782>

<sup>61</sup> <https://www.who.int/publications/i/item/who-global-disability-action-plan-2014-2021>

<sup>62</sup> <https://www.euroblind.org/sites/default/files/media/position-papers/EBU-joint-position-paper-on-Rehabilitation.pdf>

<sup>63</sup> <https://www.iapb.org/learn/resources/who-international-consensus-conference-on-vision-rehabilitation-standards/>



- In 2021, the UN General Assembly adopted a resolution that sets the goal of "Preventing visual impairment for everyone by 2030"<sup>64</sup>, which obliges the Member States to take care of people with visual impairments, to apply prophylactic measures to prevent the loss of residual vision.
- In 2022, the "International Vision Rehabilitation Standards"<sup>65</sup> were adopted for three levels of the health care system with the involvement of specialists from other sectors, in the development of which the WHO team and the Italian National Centre of Services and Research for the Prevention of Blindness and Vision Rehabilitation of participated.
- In 2022, WHO also presented developed guidelines for the PVI rehabilitation, including: "Package of Eye Care Interventions", "WHO Eye Care Competency Framework", "Guide for the Application of the WHO Eye Care Competency Framework"<sup>66</sup>, which consider complex ophthalmological care at all levels of the health care system, in particular comprehensive interdisciplinary rehabilitation at different age periods, taking into account the degree of the primary impairment.

The main legislative documents on which the PVI rehabilitation process in Ukraine is based:

- The Constitution of Ukraine.
- Law of Ukraine "On the Fundamentals of Social Protection of Persons with Disabilities in Ukraine".
- Law of Ukraine "Fundamentals of the Legislation of Ukraine on Health Care".
- Law of Ukraine "On Rehabilitation of Persons with Disabilities".
- Law of Ukraine "On Rehabilitation in the Health Care Sector".
- Law of Ukraine "On Social Services".

According to the Constitution of Ukraine<sup>67</sup>, the state ensures everyone's right to social protection in case of total, partial or temporary disability (Article 46), the right to health care, medical care and medical insurance (Article 49).

<sup>64</sup> <https://documents-dds-ny.un.org/doc/UNDOC/GEN/N21/204/98/PDF/N2120498.pdf?OpenElement>

<sup>65</sup> International Vision rehabilitation standards. <https://polonazionaleipovisione.it/wp-content/uploads/2022/07/International-Vision-Rehabilitation-Standards.pdf>

<sup>66</sup> Eye care, vision impairment and blindness. [https://www.who.int/health-topics/blindness-and-vision-loss#tab=tab\\_2](https://www.who.int/health-topics/blindness-and-vision-loss#tab=tab_2)

<sup>67</sup> Constitution of Ukraine. <https://www.president.gov.ua/documents/constitution>

The Law of Ukraine "On the Fundamentals of Social Protection of Persons with Disabilities" No. 875-XII dated 12.03.1991<sup>68</sup> defined the need to develop a comprehensive programme for solving disability problems and to develop Regulations on Individual Rehabilitation Programmes for the first time.

The Law of Ukraine "Fundamentals of the Legislation of Ukraine on Health Care" No. 2801-XII of 19.11.1992<sup>69</sup> provides a description of the procedure for conducting a medical and social examination of persistent disability of the activity of Medico-Social Expert Boards (MSEB), which establish the degree and cause of disability, draw up (correct) an individual rehabilitation programme of a person with a disability, in which rehabilitation measures are defined (Article 69).

The Law of Ukraine "On the Rehabilitation of Persons with Disabilities in Ukraine" No. 2961-IV of 06.10.2005<sup>70</sup> defines the basic principles of the organization and functioning of the system of rehabilitation care of persons with disabilities, children with disabilities, families of persons with disabilities, and military personnel, regardless of whether their disability is officially documented. The Law presents the structure of the rehabilitation system and specifies different types of rehabilitation institutions depending on the content of rehabilitation measures.

The Law of Ukraine "On Rehabilitation in The Health Care Sector" No. 1053-IX of 03.12.2020<sup>71</sup> regulates the rehabilitation process in the field of health care of a person with disability in daily living activities in order to achieve and maintain an optimal level of their functioning in the environment. According to the Law, rehabilitation assistance is also provided to persons in whom diseases, injuries, congenital disorders or other health conditions may lead to limitation of daily living activities or permanent limitation of living activities, i.e. for the prevention of disability.

The Law of Ukraine "On Social Services" No. 2671-VIII dated 17.01.2019<sup>72</sup> defines the basic principles of providing social services aimed at preventing difficult life circumstances, overcoming or minimizing their negative consequences. Among the factors that determine difficult life circumstances are disability and diseases that require long-term treatment. Basic social services are: supported accommodation; social adaptation; social integration and reintegration; consultancy; social support; representation of interests; mediation; physical support of persons with disabilities; support during inclusive education; informing (Article 16). In accordance with the content of social services, a social worker participates in the PVI rehabilitation regardless of official documenting of their disability.

<sup>68</sup> <https://zakon.rada.gov.ua/laws/show/875-12#Text>

<sup>69</sup> <https://zakon.rada.gov.ua/laws/show/2801-12#Text>

<sup>70</sup> <https://zakon.rada.gov.ua/laws/show/2961-15#Text>

<sup>71</sup> <https://zakon.rada.gov.ua/laws/show/1053-20#n2>

<sup>72</sup> <https://zakon.rada.gov.ua/laws/show/2671-19#Text>

# Introduction to rehabilitation

In 2019, the WHO<sup>73</sup>, taking into account the recommendations and experience of specialists in the field of rehabilitation, improved the definition of the "rehabilitation" concept. Rehabilitation is considered as a set of activities that help people who experience or may experience life limitations due to aging or health conditions, in particular due to chronic diseases or disorders, lesions or injuries<sup>74</sup>.

Rehabilitation is considered as one of the most important types of services of the health care system for people with various health conditions at all stages of the life cycle and at all stages of providing medical assistance and care. During the provision of rehabilitation services, the main attention should be paid not to the disease, but to the maintenance and restoration of the body's functional capabilities, therefore one of the most important elements of the rehabilitation process is teaching people to adapt to living conditions, achieving and maintaining the maximum level of independence and activity. Thus, the rehabilitation process is not limited to medical rehabilitation measures, it covers other types of rehabilitation measures (social, psychological-pedagogical, professional, physical education and sports, etc.), which makes it possible to expand the participation of people with a mobility impairments, in particular, PVI, in the fields of education, employment and social life.

According to the "Rehabilitation Competency Framework" developed by WHO<sup>75</sup>, everyone should be able to access high-quality rehabilitation services when needed. Thus, PVI rehabilitation should be available to everyone, regardless of the severity of visual impairment.

<sup>73</sup> Rehabilitation in health systems: guide for action. <https://apps.who.int/iris/handle/10665/325607>

<sup>74</sup> <https://www.who.int/news-room/fact-sheets/detail/rehabilitation>

<sup>75</sup> Rehabilitation competency framework. <https://apps.who.int/iris/handle/10665/338782>

**According to the legislation in Ukraine, there are two approaches to defining the term "rehabilitation":**

In accordance with the Law of Ukraine "On the Rehabilitation of Persons with Disabilities in Ukraine" No. 2961-IV of 06.10.2005, the concept of "rehabilitation of persons with disabilities" is considered, which is defined as a system of medical, psychological, pedagogical, physical, professional, labour, physical education and sports, social and household measures aimed at providing assistance to persons in the restoration and compensation of impaired or lost body functions in order to achieve and maintain social and material independence, labour adaptation and integration into society, as well as providing persons with disabilities with rehabilitation aids and medical devices<sup>76</sup>.

According to the Law of Ukraine "On Rehabilitation in the Health Care Sector" No. 1053-IX dated 03.12.2020, "rehabilitation" is a set of measures required by a person who suffers or may suffer limitations in daily living activities due to health conditions or aging in interaction with their environment<sup>77</sup>. This definition coincides with WHO approach to the concept of "rehabilitation".

## **Infrastructure of rehabilitation services**

**The concept of the organization of rehabilitation care in the WHO health care system.** In 2019, the concept of the organization of rehabilitation care in the health care system was published, in which the general types of rehabilitation services are highlighted and the scheme of their optimal combination is presented. According to the concept, rehabilitation care is provided at different levels of the health care system and in different settings: hospitals, rehabilitation centres, educational institutions, workplaces, at the community level, in the form of self-rehabilitation and rehabilitation on an informal basis (**Diagram 1**, p. 29).

<sup>76</sup> <https://zakon.rada.gov.ua/laws/show/2961-15#Text>

<sup>77</sup> <https://zakon.rada.gov.ua/laws/show/1053-20#n2>

### **Specialized highly effective rehabilitation**

Predominantly tertiary care for people with complex rehabilitation needs in acute or post-acute period. These types of services are usually provided in rehabilitation hospitals, centers, departments intended for longer stay of patients

### **Rehabilitation services are integrated into the activities of the tertiary and secondary levels of health care**

Services are intended for individuals with less complex rehabilitation needs. Such services are usually provided in departments and hospitals of the third or second level in a short time in the acute and post-acute periods

### **Rehabilitation services are integrated into the primary healthcare system**

Rehabilitation services are provided by specialists of first-level medical institutions. Such services are usually provided in primary healthcare centers, general practitioner offices or in certain settings at the community level

### **Rehabilitation services provided at the community level**

Such services – predominantly of a secondary level – are provided within the framework of special programmes in the post-acute and long-term stages of providing medical care, as a rule, at home, at workplaces, as well as in schools, community centers and other similar places

### **Self-rehabilitation and rehabilitation on an informal basis**

As a rule, such rehabilitation is carried out at home, health resort facilities, community centers and long-term care facilities

**Diagram 1.** The concept of the organization of rehabilitation care in the health care system<sup>78</sup>.

## **Infrastructure of rehabilitation services provided to PVI in the USA, Germany and UK**

For the study of experience, the process of PVI rehabilitation in Germany, the USA and UK was chosen. Prerequisites: availability of information for office research, availability of state (or those subject to state supervision) rehabilitation centers for PVI, many years of working experience in this field.

**USA.** Rehabilitation programmes in the United States constitute an extensive system of providing rehabilitation services to PVI<sup>79</sup>: at home, in local care centers, regional clinics for PVI of advanced and intermediate level, participation in VISOR outpatient programmes, educational programmes of inpatient rehabilitation centers for the blind, and vocational rehabilitation centers.

Every state in the country has a Department of Rehabilitation (DOR) under the direction of the Territorial Services for the Blind<sup>80</sup>, which provides specialized and comprehensive PVI rehabilitation services in the Orientation Centers for the Blind. In them, PVI acquire the skills necessary for professional success: household skills for independent living, use of assistive technologies and movement in space. The decision to apply to the Territorial Services for the Blind is made by PVI and their rehabilitation consultant in the Department of Rehabilitation.

Every state in the country has a Department of Veterans Affairs (VA)<sup>81</sup> that provides rehabilitation services to PVI who are veterans or eligible under law. Depending on the needs, rehabilitation of veterans is carried out in outpatient centers, rehabilitation centers for visually impaired veterans, in medical institutions for people with reduced vision, in the form of social assistance at home.

**Germany.** Federal Working Group for Rehabilitation (BAR) e. V.<sup>82</sup> is responsible for coordination and provision of rehabilitation services to persons with disability in daily living activities. The Federal Working Group for Rehabilitation is under the legal supervision of the Federal Ministry of Labour and Social Affairs. In the German social security system, there are a large number of rehabilitation service providers (PVI rehabilitation centers) and other organizations involved in the comprehensive rehabilitation system (for example, rehabilitation clinics, vocational rehabilitation institutions, organizations for persons with disabilities and self-help organizations, etc.), involved in mutual coordination and cooperation. The Federal Working Group on Rehabilitation (BAR) is developing the necessary framework conditions across

<sup>79</sup> <https://www.prosthetics.va.gov/blindrehab/>

<sup>80</sup> <https://www.dor.ca.gov/Home/BlindFieldServices>

<sup>81</sup> <https://www.rehab.va.gov/PROSTHETICS/blindrehab/index.asp>

<sup>82</sup> <https://www.bar-frankfurt.de/>

the country. The list of rehabilitation services is approved by representatives of health insurance funds, after which a direct contract is signed between PVI and the service provider. Representatives of the German Association for Education and Employment of the Blind and Visually Impaired (DVBS) are involved in coordinating the rehabilitation services for the PVI.

**United Kingdom.** Vision rehabilitation is provided across the country by local authorities under the National Health Services “Care Act”<sup>83</sup>, which aims to prevent, reduce and delay the need for further social support; promote independence through the formation of daily life skills and mobility training. ADASS (Association of Directors of Adult Social Services)<sup>84</sup> has produced a position statement which makes clear reference to the responsibilities of local authorities to provide vision rehabilitation services under the Care Act. Local authority services can be provided through a community rehabilitation team, or local authorities can outsource them to: the NHS, charities dealing with PVI, private sector service providers.

### **Infrastructure of rehabilitation services in Ukraine**

In accordance with the legislation in Ukraine, rehabilitation institutions, departments, divisions in the field of health care<sup>85</sup> and institutions of the rehabilitation system for people with disabilities<sup>86</sup> with different subordination are operating. Rehabilitation of people with disabilities is carried out in rehabilitation institutions of various types, depending on the content of rehabilitation measures: rehabilitation in the field of health care, medical and social rehabilitation, social rehabilitation, psychological and pedagogical rehabilitation, professional rehabilitation, labour rehabilitation, physical education and sports rehabilitation; rehabilitation institutions can also be of a mixed type, providing comprehensive rehabilitation. According to the WHO concept<sup>87</sup> of the organization of rehabilitation assistance in the health care system, all specified types of rehabilitation facilities should be available to all PVI, regardless of officially documented disability.

Rehabilitation measures in the HCS can also be carried out in the territorial community, which corresponds to WHO approaches, but they are not reflected in the Law "On the Rehabilitation of Persons with Disabilities in Ukraine".

<sup>83</sup> <https://www.gov.uk/government/publications/care-act-statutory-guidance/care-and-support-statutory-guidance>

<sup>84</sup> <https://www.euroblind.org/convention/article-26/united-kingdom>

<sup>85</sup> <https://zakon.rada.gov.ua/laws/show/1053-20#n2>

<sup>86</sup> <https://zakon.rada.gov.ua/laws/show/2961-15#Text>

<sup>87</sup> Rehabilitation in health systems: guide for action. <https://apps.who.int/iris/handle/10665/325607>

In 2020, the WHO analyzed the problems of rehabilitation in Ukraine<sup>88</sup> before the adoption of the Law of Ukraine "On Rehabilitation in the Health Care Sector". The development of a national strategy for rehabilitation is among the main recommendations. Given the presence of two laws related to rehabilitation in Ukraine, this recommendation remains relevant to this day.

**Table 1.** Comparative characteristics of the levels of organization of PVI rehabilitation care

Levels of organization of rehabilitation care according to WHO	Germany <sup>89</sup>	USA <sup>90</sup>	UK <sup>91</sup>	Ukraine	
				MoH <sup>92</sup>	MinSocPolicy <sup>93</sup>
Specialized highly effective rehabilitation	+	+	+	+	–
Rehabilitation services are integrated into the activities of the tertiary and secondary levels of health care	+	+	+	+	–
Rehabilitation services are integrated into the primary healthcare system	+	+	+	–*	–
Rehabilitation services provided at the community level	+	+	+	–	+**
Self-rehabilitation and rehabilitation on an informal basis	+	+	+	+	+

<sup>88</sup> Situation assessment of rehabilitation in Ukraine. <https://apps.who.int/iris/handle/10665/349595>

<sup>89</sup> Sources of studying the experience of Germany:

<https://www.bar-frankfurt.de/>

<https://dvbs-online.de/>

<https://www.dbsv.org/>

<sup>90</sup> Sources of studying the experience of USA:

<https://www.prosthetics.va.gov/blindrehab/>

<https://www.dor.ca.gov/Home/BlindFieldServices>

<https://nfb.org/>

<sup>91</sup> Sources of studying the experience of UK:

<https://www.england.nhs.uk/wp-content/uploads/2016/04/rehabilitation-comms-guid-16-17.pdf>

<https://www.blindveterans.org.uk/>

<sup>92</sup> Unified clinical protocols:

[https://www.dec.gov.ua/wp-content/uploads/2019/11/2016\\_49\\_ykpm\\_d\\_katarakta.pdf](https://www.dec.gov.ua/wp-content/uploads/2019/11/2016_49_ykpm_d_katarakta.pdf)

[https://www.dec.gov.ua/wp-content/uploads/2019/11/816dod2\\_1.pdf](https://www.dec.gov.ua/wp-content/uploads/2019/11/816dod2_1.pdf)

<sup>93</sup> [https://kyivaudit.gov.ua/vr/ka/company.nsf/0/A40C72F68490E6CEC22583430050C0B7/\\$file/%D0%A1%D1%82%D0%B0%D1%82%D1%83%D1%82%20%D0%9A%D0%A0%D0%A3%20%D0%9A%D0%A6%D0%9D.pdf](https://kyivaudit.gov.ua/vr/ka/company.nsf/0/A40C72F68490E6CEC22583430050C0B7/$file/%D0%A1%D1%82%D0%B0%D1%82%D1%83%D1%82%20%D0%9A%D0%A0%D0%A3%20%D0%9A%D0%A6%D0%9D.pdf)



Unified clinical protocols of medical care for glaucoma (primary and secondary) and cataract (primary, secondary and tertiary) were chosen for the analysis of the situation in Ukraine, because these are chronic diseases that progress, lead to serious visual impairment and blindness and require long-term rehabilitation.

\* medical follow-up

\*\* one rehabilitation center for PVI, which is funded from the local budget; the center is funded, not the services provided.

## Human resources potential

**Human resources potential according to the WHO System of Rehabilitation Competencies.** The main rehabilitation specialists include rehabilitation workers who work in the field of audiology, occupational therapy, prosthetics and orthotics, physiotherapy, speech therapy, as well as specialists in medical, nursing and psychological rehabilitation; rehabilitation staff also includes rehabilitation assistants, technicians, community rehabilitation workers and other narrow specialists who provide rehabilitation services according to individual needs<sup>94</sup>.

**International Vision Rehabilitation Standard.** A list of narrow specialists participating in the provision of rehabilitation services for visual impairments has been defined: ophthalmologists, optometrists, vision rehabilitation therapists, PVI rehabilitation specialists, orientation and mobility specialists (O&M), specialists in the formation of daily life skills (DLS), psychologists, other specialists are also involved depending on PVI age and functional condition (teachers, professional consultants, social workers)<sup>95</sup>.

### Training and advanced training of PVI rehabilitation specialists abroad.

The training of specialists for the provision of rehabilitation services to PVI (USA<sup>96</sup>, UK<sup>97</sup>, Germany<sup>98</sup>) corresponds to the IVRS and takes place according to international and regional standards with further mandatory certification in the areas of PVI rehabilitation: specialists in orientation and mobility (O&M); PVI rehabilitation specialists; teachers for students with visual impairments; specialists in the formation

<sup>94</sup> Rehabilitation competency framework. <https://apps.who.int/iris/handle/10665/338782>

<sup>95</sup> International Vision rehabilitation standards.

<https://polonazionaleipovisione.it/wp-content/uploads/2022/07/International-Vision-Rehabilitation-Standards.pdf>

<sup>96</sup> <https://aerbvi.org/resources/career-center/become-a-vision-professional/>

<sup>97</sup> <http://dera.ioe.ac.uk/id/eprint/29199>

<sup>98</sup> <https://www.iris-hamburg.org/weiterbildung-vollzeit.html>

of daily life skills (DLS); specialists in low vision therapy; assistive technology instructors.

The American Academy of Ophthalmology<sup>99</sup> notes that the composition of the visual rehabilitation team should depend on the PVI age. For adults with visual impairments, the following team of specialists is suggested: an ophthalmologist, a specialist for reduced vision management, an occupational therapist, a rehabilitation teacher, a specialist in orientation and mobility, a specialist in adaptive technologies, a social worker, a consultant. For children, the rehabilitation team consists of an ophthalmologist, a specialist for reduced vision management and a typhlopedagogue.

### **Human resources potential for providing rehabilitation services in Ukraine.**

Specialists who carry out rehabilitation in the health care system<sup>100</sup> include: doctors of physical and rehabilitation medicine, physical therapists, occupational therapists, speech and language therapists, prosthetists-orthotists, psychologists, psychotherapists, rehabilitation nurses, assistants of physical therapists and assistants of occupational therapists; a doctor of physical and rehabilitation medicine, if necessary, invites doctors of other specialties to the work of a multidisciplinary rehabilitation team to provide consultations.

According to the Model Regulation on a multidisciplinary rehabilitation team<sup>95</sup>, the tasks entrusted of an occupational therapist are: applying methods of correction of sensory, motor and psychosocial disorders related to daily living activities; determining the needs, implementing the selection, adjustment and training regarding the use of technical and other means of rehabilitation; assessment of the environment of a person in need of rehabilitation, assessment and prediction of the safety of independent living of a person in need of rehabilitation.

The training of occupational therapists is carried out according to the Standards of Higher Education<sup>101</sup> of the first (Bachelor's) level and the second (Master's) level of the specialty "227 Physical Therapy, Occupational Therapy" of the field of knowledge "22 Health Care". In accordance with the Resolution of the CMU No. 1392 dated 16.12.2022<sup>102</sup>, the name of the specialty was changed to "227 Therapy and Rehabilitation".

In order to determine the preparedness of occupational therapists to carry out PVI rehabilitation measures, the educational and professional training programmes of

<sup>99</sup> <https://www.aaof.org/eye-health/diseases/low-vision-aids-rehabilitation>

<sup>100</sup> On multidisciplinary rehabilitation team. <https://zakon.rada.gov.ua/laws/show/1268-2021-%D0%BF#n262>

<sup>101</sup> <https://mon.gov.ua/ua/osvita/visha-osvita/naukovo-metodichna-rada-ministerstva-osviti-i-nauki-ukrayini/zatverdzeni-standarti-vishoyi-osviti>

<sup>102</sup> <https://zakon.rada.gov.ua/laws/show/1392-2022-%D0%BF#Text>

occupational therapists of the first and second higher educational levels of higher education institutions<sup>103</sup> in different regions of Ukraine were analyzed. No mandatory educational component regarding the rehabilitation of clients/patients with ophthalmic diseases was found in them. Thus, it is possible to establish unpreparedness of occupational therapists to carry out PVI rehabilitation in accordance with the tasks assigned to them.

Pursuant to the clinical guideline "Comprehensive eye and vision examination: evidence-based clinical guideline"<sup>104</sup>, an optometrist provides rehabilitation of conditions of the visual system, which corresponds to the concept of optometry of the World Council of Optometry<sup>105</sup>. Order of the Ministry of Health of Ukraine No. 117 dated 29.03.2002 defines the qualification characteristics of the professions of healthcare professionals of the Ministry of Health of Ukraine<sup>106</sup>, in particular optometrists. According to the order, a position of optometrist can be held by persons with a professional pre-higher education in the fields of training "Medicine", specialty "Nursing" or "General Medicine", who were majoring in "Medical Optics (Optometry)". Analysis of training programmes<sup>107</sup> for optometrists allows to determine that the curriculum does not include the following topics: selection of rehabilitation aids (optical aids to improve visual functions) and training PVI to use them; ethics of communication with the PVI; teaching the elementary basics of physical support of PVI, which does not allow an optometrist to implement all the rehabilitation tasks of PVI eye conditions.

Ukraine lacks training programmes for vision therapists, pleopto-orthoptic treatment is performed by a nurse of hardware treatment in vision management offices.

Rehabilitation of people with disabilities is carried out in accordance with the Law of Ukraine "On the Rehabilitation of Persons with Disabilities in Ukraine"<sup>108</sup> by the following specialists: pedagogical, social, music workers, doctors of physical

**103** The educational and professional training programmes of occupational therapists were analyzed:

[https://fzfv.kubg.edu.ua/images/stories/Departaments/ilid/kfr/plani/%D0%97%D0%BC%D1%96%D0%BD%D0%B8\\_%D0%B4%D0%BE\\_%D0%9E%D0%9F\\_%D0%A4%D0%A2%D0%95%D0%B1\\_2022.pdf](https://fzfv.kubg.edu.ua/images/stories/Departaments/ilid/kfr/plani/%D0%97%D0%BC%D1%96%D0%BD%D0%B8_%D0%B4%D0%BE_%D0%9E%D0%9F_%D0%A4%D0%A2%D0%95%D0%B1_2022.pdf)

[https://fzfv.kubg.edu.ua/images/stories/Departaments/ilid/kfvps/program/OP\\_FTEm\\_zmini2021.pdf](https://fzfv.kubg.edu.ua/images/stories/Departaments/ilid/kfvps/program/OP_FTEm_zmini2021.pdf)

[https://osvita.kpi.ua/sites/default/files/opfiles/227\\_OPPB\\_FTET\\_2022.pdf](https://osvita.kpi.ua/sites/default/files/opfiles/227_OPPB_FTET_2022.pdf)

[https://nupp.edu.ua/uploads/files/0/main/page/licenzuvannia-ta-akredetacia/fks/opp/2021/opp\\_bakalavr\\_227\\_2022.pdf](https://nupp.edu.ua/uploads/files/0/main/page/licenzuvannia-ta-akredetacia/fks/opp/2021/opp_bakalavr_227_2022.pdf)

<https://www.uzhnu.edu.ua/en/infocentre/get/16087>

[https://knmu.edu.ua/wp-content/uploads/2022/08/op\\_fte-b2022.pdf](https://knmu.edu.ua/wp-content/uploads/2022/08/op_fte-b2022.pdf)

<https://mcollege.rv.ua/document/download/123>

[https://uni-sport.edu.ua/sites/default/files/vseDocumenti/opp\\_magistr\\_227\\_2\\_ergoterapiya.pdf](https://uni-sport.edu.ua/sites/default/files/vseDocumenti/opp_magistr_227_2_ergoterapiya.pdf)

[https://uni-sport.edu.ua/sites/default/files/vseDocumenti/227\\_fizyczna\\_terapiya\\_ergoterapiya\\_0.pdf](https://uni-sport.edu.ua/sites/default/files/vseDocumenti/227_fizyczna_terapiya_ergoterapiya_0.pdf)

**104** [https://www.dec.gov.ua/wp-content/uploads/2019/11/2019\\_09\\_20\\_kn\\_kompl\\_obst\\_okazory.pdf](https://www.dec.gov.ua/wp-content/uploads/2019/11/2019_09_20_kn_kompl_obst_okazory.pdf)

**105** [https://worldcouncilofoptometry.info/wp-content/uploads/2020/08/curricular\\_support\\_element\\_final\\_web2.pdf](https://worldcouncilofoptometry.info/wp-content/uploads/2020/08/curricular_support_element_final_web2.pdf)

**106** [https://zakononline.com.ua/documents/show/107236\\_\\_\\_107236](https://zakononline.com.ua/documents/show/107236___107236)

**107** <https://ukroptika.ua/kursi-medichna-optika.-optometriya/>

**108** <https://zakon.rada.gov.ua/laws/show/2961-15#Text>

and rehabilitation medicine, physical therapists, occupational therapists, speech and language therapists, prosthetists-orthotists, psychologists, psychotherapists, rehabilitation nurses, assistants of physical therapists, assistants of occupational therapists, sports coaches, foremen of industrial training of a rehabilitation institution, sign language interpreters, typhlopedagogues, mobility instructors and other specialists related to the rehabilitation process. In addition, it is possible to create multidisciplinary rehabilitation teams, the composition of which should correspond to the needs of the person undergoing rehabilitation.

In accordance with the Law<sup>87</sup>, the human resources potential for the implementation of measures of social rehabilitation of persons with visual disabilities is provided by typhlopedagogues and mobility instructors. Until now, there is no training of specialists who can provide rehabilitation services to PVI (rehabilitation teachers for PVI and orientation and mobility instructors). Clarification of the name and justification of the need for specialists are outlined in: "Main results. Problematic aspects", "Human resources potential – point 5 and 6".

The training of special education teachers (typhlopedagogues) is carried out according to the Standards of higher education of the first (Bachelor's) level<sup>109</sup> and the second (Master's) level<sup>110</sup> of the specialty "016.05 Special education. Typhlopedagogy", field of knowledge "01 Education/Pedagogy" (0113 Teacher training without subject specialization). The activities of these specialists are focused on the issues of education, upbringing, assessment, and correction of the development of children with visual impairments. The professional qualification "orientation and mobility instructor" is also missing in the National Classifier of Professions of Ukraine<sup>111</sup>. Accordingly, it is necessary to develop educational programmes, programmes of advanced training courses for the training of PVI rehabilitation teachers, orientation, and mobility instructors (revision in accordance with the IVRS); to consider the issue of entering the professional qualification "orientation and mobility instructor" into the National Classifier of Ukraine "Classifier of Professions".

In accordance with the legislation of Ukraine, a social worker is involved in the provision of rehabilitation care as a part of a multidisciplinary rehabilitation team of a HCS and comprehensive rehabilitation of persons with disabilities. The main tasks of a social worker are: organization of physical support of PVI; ensuring interaction with social protection services for timely organization of environment modification, to whom a person in need of rehabilitation will return after the provision of rehabilitation care in a HCS; organization of provision of technical and other means of rehabilitation after

<sup>109</sup> [https://drive.google.com/file/d/1OtxNvdfk\\_nqW04p\\_bEEUoOu6ZaiQo22G/view?usp=share\\_link](https://drive.google.com/file/d/1OtxNvdfk_nqW04p_bEEUoOu6ZaiQo22G/view?usp=share_link)

<sup>110</sup> [https://drive.google.com/file/d/1CjQgPw9EX7Iwot-ZrMLsYl2ejXOg9J51/view?usp=share\\_link](https://drive.google.com/file/d/1CjQgPw9EX7Iwot-ZrMLsYl2ejXOg9J51/view?usp=share_link)

<sup>111</sup> National Classifier of Ukraine. <https://zakon.rada.gov.ua/rada/show/va327609-10#Text>

the end of inpatient rehabilitation care; social adaptation, integration and reintegration of PVI.

The training of social workers is carried out according to the Standards of Higher Education<sup>112</sup> of the first (Bachelor's) level and the second (Master's) level of the specialty "231 Social Work" of the field of knowledge "23 Social Work".

To determine the preparedness of social workers to carry out rehabilitation measures with PVI, the educational and professional training programmes of social workers of the first and second levels of higher education of higher education institutions in different regions of Ukraine were analyzed. They do not have any mandatory educational component (mandatory subjects) related to the methodology of social work with PVI. In this way, it is possible to determine the unpreparedness of social workers for the physical support of the PVI, assessment and adaptation of the environment in which the PVI are located.

**Table 2.** Generalization of regulatory issues related to human resources potential in the field of PVI rehabilitation in Ukraine

Specialists providing services in accordance with the IVRS	Involvement in the rehabilitation process in accordance with		Availability of human resources potential in Ukraine
	Law on HCS rehabilitation	Law on rehabilitation of people with disabilities	
ophthalmologist	yes	no	yes
optometrist	no	no	yes
vision rehabilitation therapist	no	no	no
PVI rehabilitation specialist	no	no	no
orientation and mobility specialists (O&M)	no	no*	no
daily living skills (DLS) formation specialist	no	no	no
psychologist	yes	yes	yes
professional consultant	no	no	yes
social worker	yes	yes	yes

\* In accordance with the Law<sup>113</sup>, a mobility instructor is involved in the implementation of social rehabilitation measures for people with visual disabilities, but this specialist is not available in the IVRS and the National Classifier of Ukraine.

<sup>112</sup> <https://mon.gov.ua/ua/osvita/visha-osvita/naukovo-metodichna-rada-ministerstva-osviti-i-nauki-ukrayini/zatverdzeni-standarti-vishoyi-osviti>

<sup>113</sup> <https://zakon.rada.gov.ua/laws/show/2961-15#Text>

## Rehabilitation services

**International Vision Rehabilitation Standard.** It was determined that the rehabilitation services provided to PVI should be individualized and aimed at improving the quality of life of people worldwide with irreversible and progressive visual impairments, which involves preventing the loss of visual functions; slowing down the rate of vision loss; improvement or restoration of visual function; maintenance of the current state of vision function; as well as learning, communication, mobility, self-care, participation in daily life, interpersonal interaction, participation in social and public life for PVI<sup>114</sup>.

The IVRS provides a complex of interdisciplinary rehabilitation services, described at different levels of the health care system, with consideration of a person's age. A list of rehabilitation services for adults with visual impairments has been defined: prescription of optical correction devices and training in their use; orientation and mobility training; development of visual perception and compensatory means of perception; learning Braille; provision of telerehabilitation services; organization of self-help groups; training in the use of technical means of rehabilitation; household management training; assessment and adaptation of the home and work environment; training in the use of rehabilitation aids; provision of social and educational services; use of leisure programmes and wellness programmes; psychological counselling; professional counselling; monitoring the use of rehabilitation services.

**Table 3.** Foreign experience of providing rehabilitation services to PVI

No.	Country	Name of rehabilitation facility	Services
1	Germany	Frankfurt Foundation for the Blind and Visually Impaired <sup>115</sup> (Polytechnic Society)	<ul style="list-style-type: none"> <li>■ social and psychological support</li> <li>■ Braille type</li> <li>■ IT basics and electronic aids</li> <li>■ use of rehabilitation aids</li> <li>■ space orientation and mobility</li> <li>■ life skills lessons</li> <li>■ creative design in an art workshop</li> <li>■ consultations on the use of optical correction devices</li> <li>■ evaluation of visual functions</li> <li>■ language integration courses for refugees</li> <li>■ professional reintegration</li> </ul>

<sup>114</sup> International Vision rehabilitation standards. <https://polonazionaleipovisione.it/wp-content/uploads/2022/07/International-Vision-Rehabilitation-Standards.pdf>

<sup>115</sup> <https://sbs-frankfurt.de/publikationen>

No.	Country	Name of rehabilitation facility	Services
2	Albany, California, USA	Territorial service for the Blind <sup>116</sup>	<ul style="list-style-type: none"> <li>■ orientation and mobility</li> <li>■ formation of skills necessary for daily life</li> <li>■ food preparation, in particular shopping</li> <li>■ Braille and communication skills</li> <li>■ computer access technologies</li> <li>■ personal resource management (banking and bill payment and tracking methods)</li> <li>■ preparation for professional rehabilitation</li> <li>■ psychological support</li> <li>■ informational consultations regarding rehabilitation services</li> <li>■ organization of mutual support groups</li> <li>■ fitness classes in a fitness room</li> </ul>
3	London, UK	PrioritEyes <sup>117</sup>	<ul style="list-style-type: none"> <li>■ formation of mobility and independent living skills</li> <li>■ assessment and training in the use of vision correction devices</li> <li>■ independent learning of independent movement</li> <li>■ IT assessment and training for people with visual impairments</li> <li>■ double assessment of sensory skills</li> <li>■ consultations on the availability of information</li> <li>■ training on visual impairment issues</li> <li>■ professional care and case management</li> <li>■ telephone support service</li> </ul>

**Provision of PVI rehabilitation services in Ukraine.** The list of rehabilitation measures in the field of health care for persons with disability of daily living activities is established by the "State Model Plan for the Rehabilitation of Persons with Disability of Daily Living Activities"<sup>118</sup>; they include: physical and rehabilitation medicine, physical therapy, occupational therapy, speech and language therapy, psychological assistance, prosthetics and orthotics and provision of medical devices, in particular rehabilitation aids.

<sup>116</sup> <https://www.dor.ca.gov/Home/OrientationCenterfortheBlind>

<sup>117</sup> <https://www.prioriteyes.co.uk/our-services/prioriteyes-rehabilitation-services/>

<sup>118</sup> <https://www.kmu.gov.ua/npas/deiaki-pytannia-orhanizatsii-reabilitatsii-u-sferi-okho-a1462>

The need to provide rehabilitation care to ophthalmic patients is indicated in the Unified Clinical Protocols for Providing Medical Care at Different Levels (Primary, Secondary, Tertiary) depending on the ophthalmic diagnosis<sup>119</sup>. The main rehabilitation measures covered in the Unified Protocols are divided into mandatory (control of the fulfillment of recommendations in accordance with prescriptions; lifestyle modification; duration of incapacity for work; clinical examination; frequency of follow-up examinations) and desirable (health resort treatment in specialized health resorts for ophthalmic patients). Accordingly, only medical rehabilitation measures are indicated in the Unified Clinical Protocols.

In accordance with the clinical guideline "Comprehensive eye and vision examination: evidence-based clinical guideline"<sup>120</sup>, based on the optometric examination, an ophthalmologist can determine whether a PVI requires additional services, such as treatment and management of an eye disease, vision rehabilitation, vision therapy, and/or optical correction.

Pursuant to the order of the Ministry of Health of Ukraine No. 1422 of 29.12.2016<sup>121</sup>, doctors are allowed to use international clinical protocols in their work, which contributes to improving the quality of medical services.

The list of services provided to persons with disabilities depending on their condition and age is defined in the CMU Resolution "On Approval of the State Model Programme for the Rehabilitation of Persons with Disabilities"<sup>122</sup>. For adults with visual disabilities (from 18 years of age), services are defined in the following areas of rehabilitation: medical, psychological-pedagogical, physical, professional, occupational, physical education-sports, and social. However, this list does not include measures of psychological rehabilitation, which is an important area of rehabilitation for adult PVI. Rehabilitation services for social rehabilitation are presented in a rather limited way (training of basic social skills, social and domestic patronage, occupational therapy) and do not reflect all the necessary measures of social rehabilitation for the PVI.

**Availability of information on the provision of rehabilitation services of PVI in Ukraine.** In Ukraine, no data are collected on the availability of certain rehabilitation services for PVI. The main data are concentrated in institutions – providers of

<sup>119</sup> Unified Clinical Protocols:

[https://www.dec.gov.ua/wp-content/uploads/2019/11/2016\\_49\\_ykpm\\_d\\_katarakta.pdf](https://www.dec.gov.ua/wp-content/uploads/2019/11/2016_49_ykpm_d_katarakta.pdf)

[https://www.dec.gov.ua/wp-content/uploads/2019/11/816dod2\\_1.pdf](https://www.dec.gov.ua/wp-content/uploads/2019/11/816dod2_1.pdf)

<sup>120</sup> [https://www.dec.gov.ua/wp-content/uploads/2019/11/2019\\_09\\_20\\_kn\\_kompl\\_obst\\_okazory.pdf](https://www.dec.gov.ua/wp-content/uploads/2019/11/2019_09_20_kn_kompl_obst_okazory.pdf)

<sup>121</sup> <https://www.dec.gov.ua/wp-content/uploads/2019/11/751metodyka.pdf>

<sup>122</sup> State Model Programme for the Rehabilitation of Persons with Disabilities. <https://zakon.rada.gov.ua/laws/show/1686-2006-%D0%BF#n37>



rehabilitation services. So, on the website of the Ministry of Social Policy<sup>123</sup>, in the section "For persons with disabilities" you can find the following information: rehabilitation of persons with disabilities, which contains general questions about rehabilitation; types and forms of rehabilitation measures for persons with disabilities; the procedure for providing rehabilitation services; state comprehensive information centres (names and locations of centres). In the presence of such information, PVI must contact the comprehensive rehabilitation centres themselves and find out about the availability of the services they need.

**Services for PVI in comprehensive rehabilitation centres of Ukraine.** An analysis of the activities of comprehensive rehabilitation centres<sup>124</sup> in Ukraine for the provision of rehabilitation services to people with visual impairments revealed that their activities are aimed at PVI under the age of 18 or at professional rehabilitation of adults. At the same time, among the professions suggested for the mastering by persons with disabilities, in most centres there are no available ones for the mastering by the blind and persons with reduced vision.

Among the rehabilitation directions, the following ones are also distinguished: social, psychological, medical, psychological-pedagogical, physical and physical education-sports, occupational rehabilitation. Social rehabilitation is aimed at supporting persons with special needs and returning them to a full, active and independent life, even under the conditions of certain limitations due to an acquired disease. At the same time, services that ensure independence, mobility and activity in social life for PVI are missing: spatial orientation and mobility, Braille, mastering information technologies. This approach does not provide either social rehabilitation or comprehensive rehabilitation of persons with disabilities.

**Services in PVI rehabilitation centres (Ukraine).** Currently, the only rehabilitation institution for the blind in Ukraine is MRI "Kyiv Centre for the Blind"<sup>125</sup> provides rehabilitation services in the following areas:

- physical rehabilitation (assessment of physical condition, group and individual classes, Nordic walking);
- psychological rehabilitation (psychodiagnosis, group and individual consultations, psychocorrection, psychological trainings);

<sup>123</sup> <https://www.msp.gov.ua>

<sup>124</sup> Analysis of the activity of comprehensive rehabilitation centers:

<https://inc.kiev.ua/index.php>

<https://www.reabl.lviv.ua>

<https://vcpri.com.ua>

<http://www.vcri.gov.ua/>

<sup>125</sup> [https://kyivaudit.gov.ua/vr/ka/company.nsf/0/](https://kyivaudit.gov.ua/vr/ka/company.nsf/0/A40C72F68490E6CEC22583430050C0B7/$file/%D0%A1%D1%82%D0%B0%D1%82%D1%83%D1%82%D0%9A%D0%A0%D0%A3%D0%9A%D0%A6%D0%9D.pdf)

[A40C72F68490E6CEC22583430050C0B7/\\$file/%D0%A1%D1%82%D0%B0%D1%82%D1%83%D1%82%D0%9A%D0%A0%D0%A3%D0%9A%D0%A6%D0%9D.pdf](https://kyivaudit.gov.ua/vr/ka/company.nsf/0/A40C72F68490E6CEC22583430050C0B7/$file/%D0%A1%D1%82%D0%B0%D1%82%D1%83%D1%82%D0%9A%D0%A0%D0%A3%D0%9A%D0%A6%D0%9D.pdf)

- social and household rehabilitation (mastering of self-care skills, cooking using the rehabilitation equipment available in the institution);
- orientation and mobility (theoretical and practical classes using dummies, orientation in space using a cane for the blind);
- mastering information technologies (mastering computer and sensor technologies, access to information using the rehabilitation equipment and adapted software available in the institution);
- classes on social adaptation for the socialization of persons with profound visual impairments (study of Braille, legal awareness, professional orientation, classes aimed at the development of fine motor skills, development of intellectual abilities);
- cultural and educational activities of rehabilitation direction (visits to museums, theaters, organization of excursions).

An office study did not provide an opportunity to investigate the direct practical experience of providing rehabilitation services; availability of premises and territory for the PVI; rehabilitation aids available in the center; equipment of sites for spatial orientation classes; education of specialists who provide rehabilitation services, in particular in spatial orientation and mobility, because Ukraine does not train such specialists. Governing bodies do not perform monitoring of the quality of provision of rehabilitation services to PVI in MRI, and it was not the purpose of this study.

**Table 4.** Comparative table of the provision of rehabilitation services to PVI according to the IVRS

<b>Social rehabilitation services</b>	<b>IVRS</b>	<b>Germany</b>	<b>USA</b>	<b>UK</b>	<b>Centres for comprehensive rehabilitation of persons with disabilities, Ukraine</b>	<b>MRI "Kyiv Centre for the Blind", Ukraine</b>
socio-psychological support and accompaniment	+	+	+	+	+	+
selection and training in the use of rehabilitation aids	+	+	+	+	-	+

<b>Social rehabilitation services</b>	<b>IVRS</b>	<b>Germany</b>	<b>USA</b>	<b>UK</b>	<b>Centres for comprehensive rehabilitation of persons with disabilities, Ukraine</b>	<b>MRI "Kyiv Centre for the Blind", Ukraine</b>
development of visual perception and compensatory ways of perception	+	-	-	+	-	+
orientation and mobility training	+	+	+	+	-	+
life skills training	+	+	+	+	+	+
Braille training	+	+	+	-	-	+
training in the use of technical rehabilitation aids	+	+	+	+	-	+
assessment and adaptation of the home and work environment	+	+	+	+	-	-
organization of self-help groups	+	-	+	+	-	-
provision of telerehabilitation services	+	+	+	+	-	-
leisure and wellness programmes	+	+	+	+	+	+
professional counselling	+	+	+	-	+	+
additional services	+	+	+	+	+	-

The list of social rehabilitation services provided in Germany, the USA and the UK almost completely corresponds to the IVRS. Services not reflected in the content of rehabilitation programmes are included as separate tasks in other rehabilitation measures.

**Germany:** visual perception and compensatory ways of perception are also developed at life skills training classes; the organization of self-help groups takes place in an organized manner during the implementation of social and psychological support measures; additional services regarding the prescription and training in the use of optical correction devices are offered (self-payment of services), as well as special integration courses for refugees with visual impairments.

**USA:** the development of visual perception and compensatory methods of perception is carried out in classes on the formation of skills necessary for daily life and during training in cooking; among additional services, they offer management of personal resources, which involves training in the implementation of banking operations, familiarization with the methods of paying bills and their tracking; the selection of optical correction devices and learning to use them takes place in health care institutions.

**UK:** Braille training is not a separate service, but is implemented during training in the use of rehabilitation aids; professional counselling is considered as part of the implementation of social and psychological counselling measures; as additional services, selection and training in the use of additional optical means of correction is offered.

**Ukraine:** the list of PVI services offered by the Centres for Comprehensive Rehabilitation of Persons with Disabilities is quite limited and does not correspond to the IVRS. The services provided at the MRI "Kyiv Centre for the Blind" do not include assessment and adaptation of the home and work environment; provision of telerehabilitation services; the organization of self-help groups is carried out in an organized manner during psychological rehabilitation activities.

**Activities of non-governmental organizations in the provision of rehabilitation services to the PVI.** Creation and activity of non-governmental organizations have always been based on the need to unite citizens to solve important social problems. In Ukraine and abroad, there are non-governmental organizations that have some experience in providing rehabilitation services to PVI. The study of their activities will contribute to a deeper understanding of their role and possibilities of their involvement in the PVI rehabilitation process at one or another level of rehabilitation.

There are several non-governmental organizations operating in Ukraine (All-Ukrainian Mission "Serving the Blind", Non-Governmental Union "All-Ukrainian League of Organizations of Visually Impaired People "Modern View", Generation of Successful Action, etc.), which take care of certain issues of PVI rehabilitation. First, it should be stated that they carry out only certain programmes (for example, nowadays, during the war, these organizations have introduced special programmes to help people who have lost their vision as a result of hostilities). In addition, there are no rehabilitation specialists among their staff. This situation does not provide a professional approach, organized, coordinated, systematic and purposeful rehabilitation of PVI. At the same time, under the conditions of limited possibilities for PVI to receive rehabilitation services in Ukraine, non-governmental organizations are institutions that provide at least some of the services.

In this regard, it is suggested to consider the possibility of further supporting the activities of non-governmental organizations in favour of people with visual impairments.

**PVI educational rehabilitation.** Provision of educational services is implemented in the direction of psychological and pedagogical rehabilitation of adults. Education is one of the important means of PVI rehabilitation. Provision of educational services in institutions of professional (vocational and technical) and higher education for children and adolescents involves the creation of an accessible educational environment and provision of psychological and pedagogical support for students with special educational needs<sup>126</sup>. Special educational difficulties and the required level of their support in an educational institution are established by specialists of an inclusive resource centre (IRC) in the process of a comprehensive psychological and pedagogical assessment of development<sup>127</sup>. IRC specialists also determine teaching aids (in accordance with Order of the MES No. 414 dated 23.04.2018)<sup>128</sup> and the specific features of psychological and pedagogical support for students. It should be noted that educational institutions do not provide rehabilitation services in other areas.

**Efficacy of rehabilitation services.** The development or improvement of concepts for the provision of certain services requires the availability of data on the efficacy or inefficacy of the existing ones. In Ukraine, there are no appropriate forms of reporting on the efficacy of rehabilitation services provided to persons with disabilities PVI.

## Rehabilitation aids

**List of aids (WHO).** WHO has developed a list of priority aids (2016)<sup>129</sup>. The list contains 50 aids selected based on the most common needs and potential impact on a human life. This list is considered incomplete by WHO and should be used as a model for developing a national list of priority aids according to national needs and available resources.

<sup>126</sup> Inclusive education organization procedures:

<https://zakon.rada.gov.ua/laws/show/636-2019-%D0%BF#Text>

<https://zakon.rada.gov.ua/laws/show/635-2019-%D0%BF#Text>

<sup>127</sup> <https://zakon.rada.gov.ua/laws/show/765-2021-%D0%BF#n186>

<sup>128</sup> <https://mon.gov.ua/ua/npa/pro-zatverdzhennya-tipovogo-pereliku-specialnih-zasobiv-korekciyi-psihofizichnogo-rozvitku-ditej-z-osoblivimi-osvitnimi-potrebami-yaki-navchayutsya-v-inklyuzivnih-ta-specialnih-klasah-zakladiv-zagalnoyi-serednoyi-osviti>

<sup>129</sup> <https://www.who.int/publications/i/item/priority-assistive-products-list>

Tools offered by WHO to people with visual impairments: an audio player with an option of reading in DAISY format; Braille display; typewriter for printing in Braille; magnifying devices (digital/manual); magnifying optical glass; spectacles (depending on visual pathology); canes for the blind. Among the tools suggested by the WHO, only canes for the blind and an audio player are provided by Ukrainian legislation.

Suggesting rehabilitation aids, the WHO emphasizes that the correct prescription, adjustment, training in use, control and maintenance depends on specially trained specialists. If certain key aspects are missing, rehabilitation aids are often not used, and they can even cause harm.

**Rehabilitation aids in the IVRS.** Great attention is paid in the IVRS<sup>130</sup> not only to the list of rehabilitation aids (there is a separate list for each rehabilitation level), but also to the need for prescription, provision, and training in working with them. An understanding of optical, electronic and non-optical aids for PVI and training is required for their use and is included as a separate module in the training programme for optometrists, rehabilitation therapists and psychologists. Participation in the development and selection of O&M and DLS training aids is part of the Orientation and Mobility (O&M) and Daily Living Skills (DLS) training programme.

**WHO assessment regarding the provision of rehabilitation aids in Ukraine.** In 2001, the WHO Regional Office for Europe evaluated the provision of rehabilitation aids<sup>131</sup>. The MinSocPolicy, MoH, MES, Ministry of Youth and Sports are assigned responsible for the provision.

Positive results were noted: the MinSocPolicy of Ukraine promoted the development of the sector of rehabilitation aids; persons with disabilities have the right to receive them free of charge, as well as the right to choose the aids. Some defects were also revealed:

- in the field of politics, because only persons who have been officially diagnosed with a disability are entitled to be provided with aids funded by the state;
- products – many products are marked as low-quality and not readily available;
- provision of aids – they are provided without maintenance, there is no relationship between rehabilitation services in institutions and the rehabilitation aids themselves;
- personnel – there are a few rehabilitation aids specialists who would meet international standards.

<sup>130</sup> International Vision rehabilitation standards. <https://polonazionaleipovisione.it/wp-content/uploads/2022/07/International-Vision-Rehabilitation-Standards.pdf>

<sup>131</sup> <https://reliefweb.int/report/ukraine/situation-assessment-assistive-technology-ukraine>

In Ukraine, there are currently two valid lists of rehabilitation aids: in the "State Model Programme for the Rehabilitation of Persons with Disabilities"<sup>132</sup> and in the "Procedure for Providing Rehabilitation Aids (Technical and Other Rehabilitation Aids) to Persons with Disabilities, Children with Disabilities and Other Individual Categories of the Population and Payment of Monetary Compensation for the Cost of Such Independently Purchased Aids, Their List"<sup>133</sup>. This approach complicates the provision of rehabilitation services to PVI.

In addition, the list of rehabilitation aids proposed in the documents is limited (tactile canes, mobile phones, voice recorders with voiced buttons and menus, magnifiers (electronic, portable), devices for determining colour with speech output), does not correspond to the IVRS and can be used only to solve individual tasks of social rehabilitation of the PVI.

Currently, Ukraine does not have a list of rehabilitation aids that rehabilitation centres or specialists in the provision of rehabilitation services to adult PVI should have in their arsenal. There is only a Model List of Teaching Aids (special aids for the correction of psychophysical development) for persons with special educational needs who study in educational institutions<sup>134</sup>, which quite clearly prescribes the necessary teaching aids for children with visual impairments. This list should be considered when developing auxiliary means of rehabilitation of adult PVI.

## International Vision Rehabilitation Standard

In 2022, the joint work of the WHO team and the Italian National Centre for Services and Research on Blindness Prevention and Vision Restoration on the development of International Vision Rehabilitation Standards<sup>135</sup> was completed. The previous version of the document (Vision Rehabilitation Standards) was adopted at the International Consensus Conference on Vision Rehabilitation Standards in Rome in 2015<sup>136</sup>; it established rehabilitation standards for each level of service provision.

IVRS was developed based on a six-year international consultative process for the development of this standard. It is based on an analysis of the situations of providing rehabilitation services to the PVI in Europe, Africa, Southeast Asia, the Eastern Mediterranean, the Western Pacific Ocean, and North and South America.

<sup>132</sup> <https://zakon.rada.gov.ua/laws/show/1686-2006-%D0%BF#n37>

<sup>133</sup> <https://zakon.rada.gov.ua/laws/show/321-2012-%D0%BF#Text>

<sup>134</sup> <https://zakon.rada.gov.ua/laws/show/z0582-18#Text>

<sup>135</sup> International Vision rehabilitation standards. <https://polonazionaleipovisione.it/wp-content/uploads/2022/07/International-Vision-Rehabilitation-Standards.pdf>

<sup>136</sup> <https://www.iapb.org/learn/resources/who-international-consensus-conference-on-vision-rehabilitation-standards/>

**The main approaches to vision rehabilitation** are defined in the IVRS:

- rehabilitation should be multidisciplinary and focused on a person, not on a rehabilitation institution;
- the need for cooperation at all levels between specialists involved in the rehabilitation process;
- rehabilitation interventions should be multi-level, taking into account individual goals and individual risks;
- the necessary data are collected at the first level of rehabilitation; at subsequent levels, they are supplemented, statistically analysed, and exchange of information is carried out between levels;
- rehabilitation intervention should be carried out as early as possible;
- the need to use assessment of rehabilitation and support services.

The **rehabilitation model** presented in the IVRS enables the organization of a high-quality rehabilitation process, considering the capabilities of each individual region and the country in general, in particular, subordination, material support, human resources, and the availability of the necessary rehabilitation facilities. In this model, the interaction between medical specialists, specialists in PVI education and rehabilitation is clearly traced.

The **vision rehabilitation system** has a three-level structure, i.e. it stipulates the provision of certain rehabilitation services at each of the main three levels, which enables to provide high-quality services depending on the individual needs of each PVI. In addition, on the first and second levels, "Plus" services are provided, which allows the PVI, as necessary and at their level of rehabilitation, to receive a wider list of services that are not mandatory for everyone. This approach ensures greater availability of the necessary PVI services and their individualization. The IVRS also provides for mutual communication and accountability between specialists at each level of rehabilitation.

The **term of rehabilitation** is not defined in the standard, but attention is paid to the individual needs of each PVI and the need to monitor the provided rehabilitation services.

The **rehabilitation services** for PVI provided by the IVRS are aimed at improving the quality of life of people worldwide with irreversible and progressive visual impairments, which involves preventing the loss of visual functions; slowing down the rate of vision loss; improvement or restoration of visual function; maintenance



of the current state of vision functions, as well as learning, communication, mobility, self-care, participation in daily life, interpersonal interaction, participation in social and civic life by PVI. The services are coordinated by medical organizations, provided in the health care system, education system, in rehabilitation institutions, at home setting at the community level with the involvement of social services and non-governmental organizations.

The **list of rehabilitation services for adult PVI**: prescription, provision and training in the use of additional rehabilitation aids; orientation and mobility training; development of visual perception and compensatory means of perception; learning Braille; provision of telerehabilitation services; organization of self-help groups; training in the use of technical means of rehabilitation; household management training; assessment and adaptation of the home and work environment; training in the use of rehabilitation aids; provision of social and educational services; use of leisure programmes and wellness programmes; psychological counselling; professional counselling; monitoring the use of rehabilitation services.

**Specialists who provide rehabilitation services** must have appropriate certificates that enable them to provide services at one or another level of rehabilitation. In addition, the need to introduce the following topics into the training plan of specialists (optometrists and psychologists) who work with PVI: "Accessibility and environmental changes", "Communicative skills and training of PVI", "Spatial orientation and mobility of PVI", "Psychosocial consequences of visual impairment", "Assessment of aspects of personality that influence the recovery of vision", "Remedies for PVI and their accessibility" is mentioned.

IVRS also provides training programmes for specialists in PVI rehabilitation (optometrist; vision rehabilitation therapist; psychologist; specialists in orientation and mobility (O&M) and daily life skills (DLS).

## Levels of provision of rehabilitation services

Service provision level	Rehabilitation services	Specialists	Services involved in rehabilitation process
Primary level	<ul style="list-style-type: none"> <li>■ provision of non-optical means of rehabilitation and training in their use in day activities</li> <li>■ informing and providing referrals</li> <li>■ tracking of used rehabilitation services</li> </ul>	ophthalmological and medical care workers; rehabilitators, O&M instructors, teachers, and others able to assess needs and provide basic habitation and rehabilitation	ophthalmological and medical institutions, mother and child institutions, schools, social services, community-based rehabilitation institutions and other non-governmental organizations
Basic services "Plus"	<ul style="list-style-type: none"> <li>■ the list of rehabilitation aids and training in their use is expanding</li> <li>■ support for people with disabilities and their families (consultations, support groups)</li> <li>■ telephone/internet communication for consultations</li> </ul>	ophthalmological and medical care workers; rehabilitators, O&M instructors, teachers and others able to assess needs and provide basic habitation and rehabilitation	ophthalmological and medical institutions, mother and child institutions, schools, social services, community-based rehabilitation institutions and other non-governmental organizations
Medium level	<ul style="list-style-type: none"> <li>■ selection and training in the use of rehabilitation aids (there is an approved list for this level)</li> <li>■ learning to use vision with and without correction devices</li> <li>■ teaching daily necessary skills;</li> <li>■ orientation and mobility;</li> <li>■ Braille and changes in the environment</li> <li>■ training using additional technologies (Braille, audio, GPS, etc.)</li> <li>■ psychosocial support</li> <li>■ case management</li> <li>■ telephone/internet communication for consultations</li> <li>■ referral to other levels of rehabilitation</li> </ul>	specialists in the field of ophthalmology, allied health professionals, rehabilitation specialists, O&M instructors, teachers, psychologists, consultants, self-help organizations, social workers	ophthalmological and medical institutions, schools, rehabilitation centres, non-governmental organizations

<b>Service provision level</b>	<b>Rehabilitation services</b>	<b>Specialists</b>	<b>Services involved in rehabilitation process</b>
Additional services "Plus"	<ul style="list-style-type: none"> <li>■ psychological support</li> <li>■ professional counselling</li> <li>■ organization of leisure time</li> <li>■ rehabilitation using neurovisual interventions</li> <li>■ assessment of the home and work environment</li> </ul>	psychologists or trained staff, professional consultants, rehabilitation staff, technical specialists, occupational therapists, medical workers	ophthalmological and medical institutions, schools, rehabilitation centres, non-governmental organizations, home and work environment
Third level	<ul style="list-style-type: none"> <li>■ prescribing and providing optical correction devices</li> <li>■ training in the use of visual skills, in particular optical correction tools in daily activities, in orientation and mobility, during environmental changes</li> <li>■ training using additional technologies (Braille, audio, GPS, etc.)</li> <li>■ psychological support</li> <li>■ professional counselling</li> <li>■ referral to other levels of rehabilitation, to medical specialists, other services and institutions</li> </ul>	specialists in the field of ophthalmology, related medical workers, specialists in rehabilitation, O&M instructors, specialists in the field of education, psychologists or trained staff, professional consultant, rehabilitation staff	specialized ophthalmological and medical centres, district hospitals, rehabilitation centres, schools, workplaces, home environment and non-governmental organizations



# Conclusions

- 1.** Rehabilitation of people with disabilities in Ukraine is carried out in rehabilitation institutions of various types depending on the content of rehabilitation measures. Rehabilitation measures performed at home and in the territorial community are not reflected in the Law "On Rehabilitation of Persons with Disabilities in Ukraine".
- 2.** In Ukraine, PVI rehabilitation is carried out in comprehensive rehabilitation centres for persons with disabilities; there is only one state-owned local rehabilitation institution for the blind; also, non-governmental organizations operate as well.
- 3.** Abroad (USA, UK, Germany), PVI rehabilitation can be carried out in the territorial community, in health care facilities, separate state and private rehabilitation facilities intended directly for PVI operate.
- 4.** The list of necessary specialists to ensure the PVI rehabilitation process is defined in the IVRS.
- 5.** The training of specialists for the provision of rehabilitation services to PVI abroad is carried out pursuant to IVRS according to international and regional standards, followed by mandatory certification in the main areas of rehabilitation.
- 6.** According to the results of the analysis of educational and professional training programmes for occupational therapists, it was established that occupational therapists are not ready to carry out the PVI rehabilitation in accordance with the tasks assigned to them in the Model Provision on the Multidisciplinary Rehabilitation Team.
- 7.** According to the results of the analysis of regulatory documents and training programmes for optometrists, the need to improve their qualifications was established.
- 8.** Vision therapists are not trained in Ukraine, this profession is not included in the National Classifier of Professions.
- 9.** The main human resource potential for the implementation of measures of social rehabilitation of PVI are rehabilitation teachers for PVI and orientation and mobility instructors (international name). Currently, Ukraine does not train such specialists.

The base of training (advanced training or certification) can be Mykhailo Drahomanov Ukrainian State University, which currently trains specialists in the specialty "016.05 Special education. Typhlopedagogy".

**10.** Rehabilitation services, according to the IVRS, provided to PVI should be aimed at improving the quality of life of people worldwide with irreversible and progressive visual impairments.

**11.** The list of social rehabilitation services provided in the Resolution of the CMU "On the Approval of the State Model Programme for the Rehabilitation of Persons with Disabilities" is quite limited, does not reflect all the necessary social rehabilitation measures required by PVI, and also does not correspond to the IVRS, the experience of the USA, Germany and the UK regarding PVI rehabilitation.

**12.** An analysis of the activities of national (MRI "Kyiv Centre for the Blind") and foreign rehabilitation institutions (the USA, Germany, the UK) that provide rehabilitation services for PVI found that specialized institutions, i.e. designed specifically for the rehabilitation of PVI, offer a list of services taking into account the recommendations of the WHO, IVRS. In turn, in comprehensive rehabilitation institutions of Ukraine (foreign experience has not been analysed, as there are special rehabilitation centres for PVI), the services for PVI recommended by WHO and IVRS are not provided at all or are provided partially.

**13.** According to the IVRS, social rehabilitation in the system of comprehensive rehabilitation of PVI should include the following services, which should be considered when developing a rehabilitation model for PVI in Ukraine:

- selection and training in the use of rehabilitation aids;
- teaching life skills;
- assessment and adaptation of the home and work environment;
- orientation and mobility training;
- Braille teaching;
- training in the use of electronic devices and digital technologies;
- organization of wellness and leisure programmes;
- psychological assistance;
- physical rehabilitation services;
- career guidance.

**14.** In the process of planning the list and terms of providing the rehabilitation services necessary for PVI, their individual needs and functional capabilities should be considered.

**15.** In Ukraine, there are no appropriate forms of reporting on the efficacy of rehabilitation services provided to people with disabilities, in particular PVI.

**16.** The activity of both Ukrainian and foreign non-governmental organizations should be considered as the activity of institutions that have some experience in providing rehabilitation services for the PVI. The study of their activities will contribute to the development of effective strategies for the organization and provision of rehabilitation services to the PVI.

**17.** There are two current lists of rehabilitation aids in Ukraine, they should be considered incomplete. There is also no list of rehabilitation aids that should be in the arsenal of rehabilitation centres or specialists who provide rehabilitation services to adult PVI. This approach complicates the provision of rehabilitation services to PVI.

**18.** The list of priority aids developed by the WHO, IVRS should be considered as an example for the development of a national list of priority aids in accordance with national needs and available resources.

**19.** The rehabilitation model proposed in the IVRS provides:

- organization of the PVI social rehabilitation process, taking into account the capabilities of each individual region and the country in general;
- taking into account the PVI individual needs and the dependence of the rehabilitation period on functional capabilities and individual characteristics;
- close relationship and mutual accountability between all participants of the rehabilitation process;
- mandatory certification of specialists who provide rehabilitation services;
- a list of rehabilitation services required for PVI;
- the necessary list of rehabilitation aids;
- use of developed programmes for training specialists in PVI rehabilitation.

This approach to the PVI rehabilitation makes it possible to provide the necessary comprehensive rehabilitation both considering the needs of each PVI and the possibilities of organizing the PVI rehabilitation process in each specific country, which should also be considered during the development of the Ukrainian model of PVI rehabilitation.



