



FIVE YEARS AFTER DEVELOPMENT OF THE NATIONAL DISABILITY, HEALTH AND REHABILITATION PLAN FOR UKRAINE: ACHIEVEMENTS AND CHALLENGES

Volodymyr GOLYK, MD, PhD^{1,2,3}, Oksana SYVAK, MD^{2,4}, Klemen GRABLJEVEC, MD, MBA⁵, Piotr TEDERKO, MD, PhD⁶, Christoph GUTENBRUNNER, MD, FRCP⁷ and Boya NUGRAHA, MS, PhD⁷

From the ¹Department of Physical and Rehabilitation Medicine and Sports Medicine, Shupyk National Medical Academy for Postgraduate Education, ²Ukrainian Society of Physical and Rehabilitation Medicine, Kyiv, ³Department of Physical and Rehabilitation Medicine, City Municipal Teaching Hospital Number 4, Dnipro, ⁴Center of Psychological Counselling & Traumatherapy "Open Doors", Kyiv, Ukraine, ⁵Brain Injury Rehabilitation Department, University Rehabilitation Institute, Ljubljana, Slovenia, ⁶Department of Rehabilitation, Faculty of Medicine, Medical University of Warsaw, Warsaw, Poland and ⁷Department of Rehabilitation Medicine, Hannover Medical School, Hannover, Germany

In 2015, technical consultation to support development of the National Disability, Health and Rehabilitation Plan in Ukraine was carried out by the Rehabilitation Advisory Team of the International Society of Physical and Rehabilitation Medicine. Recommendations for actions and projects to improve rehabilitation services within the healthcare system in Ukraine were developed, proposed and implemented. The achievements in the subsequent 5 years include establishing, training and enabling employment at healthcare facilities for new rehabilitation professionals (physical and rehabilitation medicine physicians, physical therapists, occupational therapists), commencing implementation of the International Classification of Functioning, Disability and Health (ICF), and increasing rehabilitation knowledge among Ukrainian communities and decision-makers. The main challenges include inappropriate healthcare legislation for developing modern rehabilitation services, gaps in the clinical environment and quality control for training rehabilitation professionals, and the slow pace of implementation of the ICF. A general facilitator is the ongoing healthcare reform in Ukraine, especially its continuation to secondary and tertiary healthcare levels. Future high-priority activities will include amendments to basic healthcare legislation, and introducing a bio-psycho-social approach for the provision of rehabilitation services at all healthcare levels and all rehabilitation treatment phases, starting with the most debilitating health conditions. It will be important to continue the collaboration with European and international partners.

Key words: rehabilitation system; rehabilitation service; rehabilitation profession; rehabilitation service situation analysis; Ukraine; National Disability, Health and Rehabilitation Plan.

Accepted Jan 18, 2021; Epub ahead of print Feb 2, 2021

J Rehabil Med 2021; 53: jrm00160

Correspondence address: Volodymyr Golyk, Department of Physical and Rehabilitation Medicine and Sports Medicine, Shupyk National Medical Academy for Postgraduate Education, 9 Dorohozhytska Str, 04112, Kyiv, Ukraine. E-mail: volodymyrgolyk@gmail.com

Since Soviet times Ukraine's healthcare system has retained a healthcare model with centralized fun-

LAY ABSTRACT

Ukraine developed a National Disability, Health and Rehabilitation Plan (NDHRP) in 2015. Since then, the recommended actions and projects have been implemented in the country. Some achievements can be seen, including the establishment of new rehabilitation professions (i.e. physical and rehabilitation medicine (PRM) physician and ergotherapist (the Ukrainian terminology for occupational therapist); implementation of the International Classification of Functioning, Disability and Health (ICF); and commencement of implementation of rehabilitation at different levels of healthcare. However, some challenges still need to be addressed, including the introduction of legislation to enable the delivery of effective and safe rehabilitation services, continuing education for rehabilitation professionals, and raising awareness of the ICF implementation, which is based on introducing a bio-psycho-social model into the entire clinical process of rehabilitation. With the support of international partners, including European PRM bodies and other international organizations, the outlook for improvement in the field of rehabilitation in Ukraine is very positive.

ding, financing "for beds at hospitals", paper medical records, and wide practice of out-of-pocket payments (1). A further problem is the systemic mistranslation and misuse of the term "healthcare" as "medical care", starting from the level of legislation, and resulting in misunderstanding of healthcare by many generations of healthcare workers and the general public. At the same time, Ukraine had an inherited rehabilitation system, which was based predominantly on a bio-medical model of disability. Existing rehabilitation legislation in Ukraine still only covers populations with a certified disability (the Ukrainian term "invalidity" is assigned after special assessment by the Medical and Social Examination Commissions (MSECs)). The majority of rehabilitation measures focus on compensation of functional deficits and different kinds of social support provided through so-called invalidity groups. Since 2014 the armed conflict in eastern Ukraine has resulted in numerous injuries among military service personnel and civilians, and thus has greatly increased demands for rehabilitation services. For these reasons,

the existing system of “medical rehabilitation” has collapsed, and the need for development of the National Disability, Health and Rehabilitation Plan (NDHRP) for Ukraine has become undeniable. The Ukrainian government (in particular the Ministry of Health of Ukraine; MoH) decided to implement the principles of the World Health Organization (WHO) Global Disability Action Plan 2014–2021 (GDAP; 2) by initiating a technical consultation to support development of the NDHRP in Ukraine. This was carried out by the Rehabilitation Advisory Team (RAT) of the International Society of Physical and Rehabilitation Medicine (ISPRM) in 2015 (3). The mission was based on the principles of the United Nations (UN) Convention on the Rights of Persons with Disabilities (4) and the World Report on Disability (WRD; 5). The goal-setting was derived from the WHO GDAP’s “Better Health for All People with Disabilities” (2), and the mission used the specially developed Rehabilitation Service Assessment Tool (RSAT; 6).

The main findings from this mission included the absence of essential rehabilitation professionals in the country, a bio-medical approach to rehabilitation delivery, a complete discrepancy in meanings/translations and application of international rehabilitation-related terminology, and a lack of intersectoral coordination between the governing bodies responsible for the provision of rehabilitation services.

NATIONAL DISABILITY, HEALTH AND REHABILITATION PLAN FOR UKRAINE

As a result of systematic analysis and a stakeholder workshop, a set of actions and projects that consider the local workforce and infrastructure was recommended for implementation in Ukraine (3). These recommendations included:

- Establishing a department responsible for all rehabilitation issues within the MoH together with a High Level Inter-ministerial Committee to account for the inter-sectoral nature of rehabilitation services;
- Translating basic rehabilitation terminology and definitions (e.g. “disability”, “functioning”, “occupation”, etc.) within the International Classification of Functioning, Disability and Health (ICF) and ICF-based tools and assessment instruments into correct Ukrainian with local adaptations;
- Establishing procedures for collecting internationally comparable data on the epidemiology of disability, starting from conducting a population-based disability survey, using internationally accepted methods;
- Establishing and developing curricula for new rehabilitation professions in the country, such as physical and rehabilitation medicine (PRM) physician, phy-

sical therapist (PT), occupational therapist (OT) (in Ukrainian, “ergotherapist”; ET), prosthetist-orthotist (P&O), and speech and language therapist (SLT); developing curricula and initiating re-training for existing professionals;

- Step-wise implementation of rehabilitation services, based on multi-professional rehabilitation teams at all healthcare levels, starting from organizing model rehabilitation services in the acute, post-acute and long-term rehabilitation phases.

Other recommendations have not yet been implemented, such as establishing model services to include delivery and integration of assistive devices at hospitals; developing a model for an adequate, motivating and fair payment system for rehabilitation services, based on international experience, a “pay per case” system, taking into account the severity of cases, and a survey of existing rehabilitation facilities.

ACHIEVEMENTS

The full report and executive summary of the technical consultation were officially presented to the MoH by the WHO representative to Ukraine, and further implementation processes were performed by MoH officials with support and facilitation from Ukrainian non-governmental organizations (NGOs), both of rehabilitation professionals and of different rehabilitation stakeholders.

Since the agreement regarding the proposed action and project implementation, some significant achievements have been observed, particularly in the implementation of rehabilitation professions and rehabilitation services, as described below (see also Table I).

Rehabilitation professions

Legal framework. The names of basic rehabilitation professions have been established in the Ukrainian National Classificatory of Professions in order to legitimize the existence of such professionals in Ukraine. These are (since 2016) “Physical and Rehabilitation Medicine Physician”, “Physical Therapist”, “Ergotherapist” (Amendment #5 to National Classificatory, approved by Ministry of Economic Development of Ukraine, Order number 1328, 10 August 2016); and (since 2017) “Physical Therapist’s Assistant” (PTA) and “Ergotherapist’s Assistant” (ETA) (Amendment #6 to National Classificatory, approved by Ministry of Economic Development of Ukraine, Order number 1542, 26 October 2017). The MoH Order number 2331, 13 December 2018 (7) approved Qualification Characteristics (required professional competences,

Table I. Examples of recommendations in the National Disability, Health and Rehabilitation Plan (NDHRP) (after a follow-up paper by Gutenbrunner et al. 2018; 3) and responses

Number	Recommendation (example from Gutenbrunner et al. 2018 (3))	Responses
1	Translation and adaptation of international definitions (e.g. "functioning", "disability") and tools (e.g. the International Classification of Functioning, Disability and Health (ICF) Core Sets) into Ukrainian.	<ul style="list-style-type: none"> MoH Order number 552, 23 March 2018: approved Action plan for implementation of ICF and ICF Children and Youth (ICF-CY) in Ukraine. List of activities to be undertaken includes translation of ICF and ICF-CY into Ukrainian, amendment of Ukrainian legislation for enabling ICF implementation (based on Directive of Cabinet of Ministers of Ukraine number 1008-p, 27 December 2017) (20); 10–19 December 2018 an official representative from the ICF Research Branch in Nottwil, Switzerland, provided 3 back-to-back ICF train-the-trainers workshops and workshop for policy-making stakeholders in Kyiv (77 local trainers were trained) (22).
2	Establishment and implementation of international definitions and curricula of rehabilitation professions and a new accreditation system	<ul style="list-style-type: none"> MoH Orders number 1973, 31 October 2018 and number 446, 22 February 2019 (8), added the name "Physical and Rehabilitation Medicine Physician" to the nomenclature of physician specialties' (9); MoH Order number 2331, 13 December 2018 approved Qualification Characteristics (required professional competencies, educational level, etc.) for all newly established rehabilitation professions (7); MoH Order number 2332, 13 December 2018 amended basic MoH Order number 346, 7 December 1998 (13), enabling the initiation of re-training of existing physicians to PRM physicians and terminating the "Soviet style" training of rehabilitation physicians; MoH Order number 1449, 25 June 2019 amended basic MoH Order number 81, 23 February 2005 (14), on primary specialization of physicians (in Ukraine named "internship"). The Order added internship for "Physical and Rehabilitation Medicine" with duration of 3 years; Since January 2019, re-training has been initiated at Shupyk National Medical Academy for Postgraduate Education and another 4 Ukrainian Universities have since joined the re-training process. As of 30 June 2020 Ukraine has 283 re-trained and certified local PRM physicians; In August 2020, primary specialization (internship) of PRM physicians was initiated at 2 Ukrainian Medical Universities; MoH Order number 2013, 2 November 2018 (12), established separate specializations for PT and OT at the Masters level, enabling training for both as independent professionals; Orders of Cabinet of Ministers of Ukraine number 334, 28 March 2018 (16) and number 354, 10 May 2018 (17), established a Unified State Qualifying Exam (USQE; theoretical knowledge and practical skills examination) for Masters, including specializations on PT and ET; In September 2019, the first cohort of students started training in OT Master curriculum at the National University of Ukraine on Physical Training and Sports, which was created and is currently being assessed by the World Federation of Occupational Therapists (WFOT) against Minimum Standards of Education of Occupational Therapists. The first 17 Ukrainian OTs are expected to graduate in Summer 2021.
3	Health-related rehabilitation services should be implemented at all levels of healthcare (primary, secondary, tertiary) and for all phases of healthcare (acute, post-acute, long-term).	<ul style="list-style-type: none"> Order of Cabinet of Ministers of Ukraine number 65, 5 February 2020 (24), marks the first time in Ukraine to have established 3 packages of medical services for rehabilitation under Programs of Medical Guarantees within healthcare reform at secondary and tertiary healthcare levels; According to the information from National Health Service of Ukraine dashboards (19) 211 healthcare facilities (207 municipal, 4 private) were contracted for Neurorehabilitation, 222 (218 municipal, 4 private) for musculoskeletal and 63 (all municipal) for child rehabilitation programme delivery.

MoH: Ministry of Health of Ukraine; PRM: physical and rehabilitation medicine physician; PT: physical therapist; OT: occupational therapist (in Ukrainian, "ergotherapist"; ET).

educational level, etc.) for all these new rehabilitation professions. The Order established requirements for educational levels (internship or secondary specialization (re-training) for PRM, appropriate Master levels for PT, ET followed specialization; Bachelor or any other lower educational levels for any Assistant) and competencies (knowledge and practical skills).

MoH Order number 446, 22 February 2019 (8) added the name "Physical and Rehabilitation Medicine Physician" to the Nomenclature of physicians' specialties (among 124 other different specialist physicians' specialties) (9). This allowed the possibility of "at-testation" of this new type of physician (a procedure to gain official recognition as a certain certified specialist physician in Ukraine, who, after some years of practice, can apply for higher "physician category" status) and for them to be integrated into the general process of continuous professional development (CPD). The Order also stated that the existing "old style" rehabilitation "Physician of Physiotherapy" and "Physician of Treatment Gymnastics" will secure their previous personal calculation of working years in rehabilitation (necessary for further social insurance issues and pension calculations).

Amendment to basic MoH Order number 385, 28 October 2002 (10) lists the names of working places at healthcare facilities. The amendment created separate therapists' and assistants' lists and added PRM to the physicians' list. This enabled the possibility of employment for PRM/PT/ET/PTA/ETA at hospitals and other healthcare facilities.

Training activities. The Decree of Cabinet of Ministers of Ukraine number 266, 29 April 2015 with amendments (11), as a basic educational regulatory act, states a new list of knowledge areas and appropriate names of general specialties, defining PRM as a physician specialization after graduating from the healthcare specialty "222 Medicine" and established general healthcare specialty "227 Physical Therapy, Ergotherapy". PRM should be taught at postgraduate level. PT and ET are listed as undergraduate specialties in the "Healthcare" knowledge area (for more than 15 years they were located in "Education"). Later in 2018, MoH Order number 2013, 02 November 2018 (12), also approved by the Ministry of Education and Science of Ukraine, fully separated and made independent curricula for PT and ET at the Master's educational level. Hence, together with qualification characteristics

(7) and requirements for employment for PT and ET (10) supported by common agreement of Ukrainian professional communities, the education level for entering both PT and ET professions was set as “Master”. All educational levels below Master (up to Junior Bachelor: traditional education for the majority of nurses in Ukraine) enable employment as PTA/ETA.

Training in physical and rehabilitation medicine. In September 2015 Ukraine, represented by the Ukrainian Society of Physical and Rehabilitation Medicine (USPRM), joined the PRM Section and Board (PRM S&B) of the European Union of Medical Specialists (UEMS PRM S&B) and the European Society of Physical and Rehabilitation Medicine (ESPRM). European faculty members provided series of “Train the trainers” courses (160 h in total) for 26 regular trainers from different Ukrainian Medical Universities in order to build the capacity for creating and starting PRM curricula in the country during 2016–17. Memorandum of cooperation between MoH and UEMS PRM S&B was signed on 17 February 2017 and supported such developments.

MoH Order number 2332, 13 December 2018, amended basic MoH Order number 346, 7 December 1998 (13), on secondary specialization of physicians (a physician acquiring additional independent medical specialty after already having a primary specialization). The Order stopped such specialization of so-called rehabilitation doctors established in the Soviet Union, such as “Physician of Physiotherapy” and “Physician of Treatment Gymnastics”, and enabled starting secondary specialization procedures (re-train to become a PRM physician) for any specialist physicians in Ukraine (among 130 other different types of physicians’ secondary specializations). According to this order, the specialization consists of a 4-month intensive re-training, followed by theoretical knowledge and practical skills examinations, with certification as an officially recognized PRM physician. After certification, the physician must take part in CPD activities to upgrade professional abilities, while practicing as a PRM physician. Since starting secondary specialization trainings in January 2019, the training curriculum has been running at Shupyk National Medical Academy for Postgraduate Education (Kyiv), National Pirogov Memorial Medical University (Vinnytsya) and, currently, at Dnipropetrovsk Medical Academy (Dnipro), Zaporizhzhia Medical Academy for Postgraduate Education (Zaporizhzhia) and Kharkiv Medical Academy for Postgraduate Education (Kharkiv). At 30 June 2020 Ukraine officially had 283 local PRM physicians.

Amendment to basic MoH Order number 81, 23 February 2005 (14), on primary specialization of physicians (in Ukraine named “internship”) added an

internship for “Physical and Rehabilitation Medicine” with a duration of 3 years to the existing 34 primary specializations of physicians. Throughout the history of Ukraine, no primary specialization for physicians has lasted longer than 3 years. The curriculum for the internship was created by 2 Ukrainian Medical Universities based on European Training Requirements for the Specialty of Physical and Rehabilitation Medicine. The internship was started in August 2020 at Shupyk National Medical Academy for Postgraduate Education (Kyiv) and National Pirogov Memorial Medical University (Vinnytsya).

USPRM was also proud to conduct translation of the 3rd edition of the “White Book on Physical and Rehabilitation Medicine in Europe” into Ukrainian. This was completed in December 2019 (15).

Therapists’ training. In 1997, the first curriculum on “Physical Rehabilitation” (predecessor of the specialty Physical therapy) was started at L’viv State University of Physical Culture (L’viv, Western Ukraine). In 1998, the name of the profession “Specialist of Physical Rehabilitation” was established by the Ministry of Social Policy of Ukraine under its list of professionals in the Ukrainian National Classificatory of Professions. Subsequent curricula with the same name were also initiated at other universities in Ukraine, with a significant loss of quality, due predominantly to a lack of practical training in a clinical environment. Since those times, graduates have not been allowed to practice at healthcare facilities. The decree of Cabinet of Ministers of Ukraine number 266, 29 April 2015 with amendments (11), allocated the specialty “Physical Rehabilitation” to “22 Healthcare” area of knowledge (2015), and subsequently renamed it “Physical Therapy, Ergotherapy” (2017). To date, there are 68 universities in Ukraine running Bachelor and Master curricula, entitled “Physical Therapy, Ergotherapy”. The majority are direct, but renamed, successors of “Physical Rehabilitation”. Due to the absence of any professional regulations in this field, no mechanisms for educational quality control or unified country-level examination for such graduates exist. However, 2 Orders of Cabinet of Ministers of Ukraine (16, 17) established the Unified State Qualifying Exam (USQE), a theoretical knowledge and practical skills examination, given as part of the graduation procedure for Masters-level students, including specializations in PT and ET (12). Masters graduates are expected to routinely start passing such an examination countrywide from 2022, and it currently serves as a “Board examination” until professional self-governing is established in the healthcare field (including rehabilitation) in Ukraine.

For capacity building in the field of therapists’ training, several international cooperation projects were

initiated, including “Innovative Rehabilitation Education – Introduction of new master degree programs in Ukraine” (Erasmus+ KA2, 598938-EPP-1-2018-1-LV-EPPKA2-CBHE-JP, 2018-2021, to develop a modern PT Masters’ curriculum and work out USQE contents), and “Developing an Occupational Therapy study program in Ukraine” (Erasmus+ KA2, 609589-EPP-1-2019-1-BE-EPPKA2-CBHE-JP, 2019). A project “Training of Trainers for Ergotherapists in Ukraine”, supported by the NATO Support and Procurement Agency (NSPA), 2019, aimed to finalize the creation and start operation of the first OT Masters curriculum to fully meet the requirements of the World Federation of Occupational Therapists (WFOT) Minimum Standards for Education of Occupational Therapists. The first class of OT Master Students enrolled in September 2019. This project also initiated the long-term collaboration of Ukrainian trainees (regular teachers at the National University on Physical Education and Sports) and Tallinn Health Care College faculty. Simultaneously, since 2018, NSPA has supported this “train-the-trainers” project for training the first generation of ISPO Category II Prosthetists-Orthotists in Ukraine.

Rehabilitation services

Since 2017, Ukraine has been conducting the healthcare reform “money follows the patient”, and, in 2018, the National Health Service (NHS) of Ukraine was created. Since 1 April 2020 the implementation of the Program of Medical Guarantees (PMG) has led to the reform of secondary and tertiary healthcare levels. The PMG includes 3 packages of programmes for medical rehabilitation, including for children from 0 to 3 years old, and for persons with neurological and musculoskeletal conditions (18). The NHS dashboard (19) also states that 211 healthcare facilities (207 municipal, 4 private) were contracted for neurorehabilitation, 222 (218 municipal, 4 private) for rehabilitation in musculoskeletal conditions, and 63 (all municipal) for rehabilitation in the developmental age. Rehabilitation packages included minimum requirements for such services, listed necessary staff (PRM, PT, ET, PTA, ETA etc.), the basic set of equipment, and a statement of necessity for a multidisciplinary rehabilitation team, goal-setting principles, and use of the ICF.

Before establishment of the NHS and the start of healthcare reform, several healthcare facilities had commenced the provisioning of modern multi-professional rehabilitation services in acute and post-acute settings. This has been supported by international parties: Kyiv Regional Hospital (Kyiv) – post-acute neurorehabilitation (Czech Embassy in Ukraine, USAID, since 2017), National Children Teaching Hospital “OHMATDIT” (Kyiv) – acute rehabilitation (Royal Norwegian Embassy in

Kyiv, since 2018), Military Medical Teaching Centre for Occupational Pathology for Personnel of Military Forces of Ukraine (Irpin’, Kyiv region) – post-acute rehabilitation (US Embassy in Ukraine, since 2015), Military Medical Teaching Centre of Western Region (L’viv) – post-acute neurorehabilitation (USAID, multiple international and local NGO, since 2014).

Implementation of the ICF. Since 2016, the first legislative steps for system-wide ICF implementation have been made by the MoH (Special Directive of Acting Minister of Health number 183, 15 December 2016), followed by the Directive of Cabinet of Ministers of Ukraine number 1008-p, 27 December 2017 (20). As a result, the MoH issued Order number 552, 23 March 2018, which approved an action plan for implementation of the ICF and ICF Children and Youth (ICF-CY) in Ukraine. The list of activities to be undertaken includes translation of the ICF and ICF-CY into Ukrainian, amendment of Ukrainian legislation for enabling implementation of the ICF on a sound methodological basis, organizing training for developing a National Trainers team for further circulating ICF knowledge across Ukraine, ICF basic knowledge implementation into both undergraduate and postgraduate education processes for all healthcare professionals and ICF advanced knowledge for all rehabilitation professionals, and personnel from disability assessment facilities, and social security facilities.

Following the above-mentioned MoH Order, Ukrainian translations of the ICF and ICF-CY were performed and approved by MoH Order (number 981, 23 May 2018). Subsequently, they were corrected and approved again by another MoH Order (number 2449, 21 December 2018).

During 10–19 December 2018 an official representative from the ICF Research Branch in Nottwil, Switzerland provided 3 back-to-back ICF train-the-trainers workshops and workshops for policy-making stakeholders in Kyiv. A total of 77 persons from diverse backgrounds (PRM physicians, PTs, an OT, educators, WHO staff, MoH staff and representatives of the Ukrainian Association of Persons with Disabilities “Group for Active Rehabilitation”) participated in 3 workshops. Ten policy-making stakeholders from diverse government ministries participated in a mini-ICF workshop. These workshops were supported by the Swiss Agency for Development and Cooperation, and the International Charitable Foundation “Ukrainian Foundation for Public Health” (22).

Ukrainian translations of ICF and ICF-CY materials recently entered standard WHO approval procedures.

All of the above-mentioned achievements are aimed primarily at enabling the initiation of delivery of multi-professional team-based and ICF-based, goal-oriented

rehabilitation services at hospitals at the earliest possible time in recovery, during the acute rehabilitation phase. Another goal is to enable further provision of post-acute intensive rehabilitation in an in-patient setting, followed by continuing rehabilitation services delivered at out-patient facilities and using community-based and home-based rehabilitation frameworks.

CHALLENGES

Despite significant achievements, Ukraine still faces some challenges in implementing the NDHRP. Typical challenges include legal barriers to provision of rehabilitation services, the need for further training of rehabilitation professionals, implementation of the ICF, and improving the life situation of persons with disability, as described below.

Legal barriers to provision of rehabilitation services

Ukraine currently faces 2 major legislative problems in enabling the delivery of effective and safe rehabilitation services.

The first is an obligation to take a bio-medical approach to all treatments in healthcare, according to the Law of Ukraine “Fundamentals of Ukrainian legislation on Health Care” (23), starting from the definition of “Medical rehabilitation” (Article 355), as the sort of “medical service... including medical and other activities, aiming to restore affected functions of the organism... identification and activation of compensatory abilities of the organism... to enable the person return back normal life, prophylaxis of complications and exacerbations of disease”, followed by a statement about starting points for medical rehabilitation: (i) after the end of acute period of the disease..., (ii) in case of congenital handicaps... and (iii) after determination of the official status of a “person with invalidity”. Principles of healthcare financing (“per capita”, “per case”, “per single medical procedure”) currently implemented by the NHS in Ukraine (24, 25) and making large changes for existing “classical” medical services are wholly inappropriate for rehabilitation services with a “functioning-disability” approach and a “per day of rehabilitation”/“per therapy session” principle of funding.

The second challenge is licensing. The existing licensing system in Ukraine exclusively includes medical professions, as physicians and nurses (26, 27), followed by biomedically-based licensing requirements. Therefore therapists may not be licensed (nor formally employed at healthcare facilities), and no bio-psycho-social approach may be officially implemented via licensing requirements (along with the statement of the necessity of the provision its components at NHS’ PMGs on Medical Rehabilitation).

Need for further training of rehabilitation professionals

The main principles to ensure the quality of training rehabilitation professionals are: the correct rehabilitation education philosophy, training routinely occurring in clinical rehabilitation settings, enabling trainees to have contact with persons with a full range of health conditions. All of these should be unified according to a standard curriculum and culminate in a practically-based examination at the graduation point. The first principle is among the main achievements, while others are still under construction.

Implementation of the ICF in rehabilitation assessment, clinical reporting and quality management

Although implementation of the ICF was initiated 4 years ago at the national legislation level, in 2020 the only major achievement is increasing awareness and knowledge of the ICF and the necessity of rehabilitation assessment. Basic rehabilitation terminology, and ICF terminology, still need to be correctly translated into Ukrainian, approved by the WHO and legally adopted within the field of Ukrainian legal terms (as rehabilitation has an intersectoral nature, several state bodies should be involved, including the Ministry of Justice). The next step must be implementation of ICF-based tools into an electronic healthcare system for mandatory use by providers. There is a need for an official document, containing information on all components of the rehabilitation cycle for the individual (i.e. functional assessment, interventions assignment and delivery, final functional evaluation), named the “individual rehabilitation plan”, to be completed from the beginning of treatment (rehabilitation in the acute setting in case of an acute health condition) and collecting all further information relevant to the rehabilitation process.

Improving the life situation of persons experiencing disability

The existing system of “Medical and Social Examination” enacts the determination of the official status of a “person with invalidity” through the Medical and Social Examination Commissions. It is followed by the provision of social support (e.g. pension and other types of social payments), assistive devices and aids, and different “types of rehabilitation” (from the list of 8 types: medical, medico-social, social, psychological-pedagogical, physical, professional, labour, rehabilitation by physical culture and sports). For 15 years this has been managed by the Ministry of Social Policy according to the Law of Ukraine “About rehabilitation of people with invalidity in Ukraine” (28). The term

“people with invalidity” is a legal denomination of persons with certified disability in Ukraine as a response to the UN Concluding observations on the initial report of Ukraine: Committee on the Rights of Persons with Disabilities (29), replacing the former legal term “invalid”. When referring to a MSEC a person has a number of medical records after the medical service provision. These records traditionally contain almost no information on functioning/disability according to the ICF. MSECs assess functioning of the person using the old framework of the International Classification of Impairments, Disabilities and Handicaps (ICIDH) framework and classifies them into 1 of 3 “groups of invalidity”. The bio-psycho-social approach is not used for the assessment at all. Therefore, personal functioning needs are not effectively addressed.

THE WAY FORWARD

Five years after the ISPRM Technical consultancy on the development of NDHRP in Ukraine, many relevant changes have been adopted by the Ukrainian government, especially in addressing the rehabilitation workforce. Two new rehabilitation professions were established from scratch (PRM physicians and ET) and to date, Ukraine has already either re-trained professionals (PRM) or prepared the first generation of local professionals to meet international requirements (ET). In fact, the main achievement is the most critical: increasing awareness of modern rehabilitation principles and philosophy among multiple stakeholders, especially high-level decision-makers.

Fortunately, official steps toward changes in basic rehabilitation legislation have been enacted. Since 2015, multiple versions of the Law “About rehabilitation system in Ukraine” have been developed and discussed at different platforms with legislation initiative responsibilities: Parliamentary Committees (VIII convocation): 2015–16 (system-wide version of Law), Office of the Commissioner to the President of Ukraine on Servicemen Rehabilitation: 2018–19 (a version of Law for Security and Defence Sector, building a background for system-wide change), and at the end of 2019 until the first quarter of 2020: Parliamentary Deputies of IX convocation (a version of Law for the implementation of health-related rehabilitation, as a front-line urgent need due to ongoing health reform at secondary–tertiary healthcare levels).

On 3 December 2020 the Ukrainian parliament adopted, in the second reading and as a whole, the Law of Ukraine “About rehabilitation in healthcare” (30). The Law was registered on 16 June 2020 and passed the first reading on 3 July 2020. During the Parliamentary discussion before the second reading 816

proposals were processed. On 31 December 2020 the Law came into force, amending the Laws mentioned above (23, 24, 28) and others. After implementation of its provisions via a set of regulatory documents Ukraine will be able to:

- provide rehabilitation services at all healthcare levels during all rehabilitation phases;
- implement multidisciplinary rehabilitation under the leadership of PRM physicians at healthcare facilities;
- start a system-wide ICF implementation upon completing WHO approval of ICF translation into Ukrainian;
- use the unified official document for rehabilitation in healthcare “Individual rehabilitation plan”, based on the ICF model and including all components of the rehabilitation cycle;
- use licensing for “Medical practice with the possibility of providing rehabilitation in healthcare”, based on a bio-psycho-social platform, in contrast to the existing traditional and “Medical practice” only based on the bio-medical platform.

It will be important to continue close and fruitful collaboration with European PRM bodies and international rehabilitation parties, including, but not limited to, the ISPRM in the future. This collaboration should include country-wide implementation of international principles of training for all rehabilitation professionals (both PRM physicians and therapists), and implementation of universal health coverage in terms of rehabilitation, starting from the acute rehabilitation phase and continuing smoothly outside the healthcare sector. Rehabilitation service delivery should be supported by a quality control mechanism and it should be implemented from scratch in Ukraine.

ACKNOWLEDGEMENTS

The authors would like to thank Professor Oleksandr Vladymyrov, FEBPRM, Chair of the Department of Physical and Rehabilitation Medicine and Sports Medicine at Shupyk National Medical Academy for Postgraduate Education and Board Chairman of the Ukrainian PRM Society for strong continuous support for all rehabilitation developments in Ukraine.

The authors have no conflicts of interest to declare.

REFERENCES

1. Health Strategic Advisory Group. National Health Reform Strategy for Ukraine 2015–2020. 2014. [cited 2021 Jan 5]. Available from: https://en.moz.gov.ua/uploads/0/16-strategy_eng.pdf.
2. World Health Organization (WHO). WHO Global Disability Action Plan 2014–2021: better health for all people with disability. Geneva: WHO; 2014. Available from: https://apps.who.int/iris/bitstream/handle/10665/199544/9789241509619_eng.pdf.

3. Gutenbrunner C, Tederko P, Grabljevec K, Nugraha B. Responding to the World Health Organization Global Disability Action Plan in Ukraine: developing a national disability, health and rehabilitation plan. *J Rehabil Med* 2018; 50: 338–341.
4. United Nations (UN). Convention on the Rights of Persons with Disabilities. 2006. New York: UN. Available from: <https://www.un.org/development/desa/disabilities/convention-on-the-rights-of-persons-with-disabilities.html>
5. World Health Organization, The World Bank. World Report on Disability. Geneva: WHO; 2011.
6. Gutenbrunner C, Nugraha B. Principles of assessment of rehabilitation services in health systems: learning from experiences. *J Rehabil Med* 2018; 50: 326–332.
7. Ministry of Health of Ukraine. About changes to the Handbook of qualification characteristics of professions of workers. Issue 78 "Health Care": Order from 13.12.2018 #2231.]. 2018 [cited 2021 Jan 5]. Available from: <https://zakon.rada.gov.ua/rada/show/v2331282-18> (in Ukrainian).
8. Ministry of Health of Ukraine. Some issues of continuous professional development of doctors. Order from 22.02.2019 #446. 2019 [updated 2020 Jun 02; cited 2021 Jan 5]. Available from: <https://zakon.rada.gov.ua/laws/show/z0293-19> (in Ukrainian).
9. Nomenclature of physician medical specialties. [Approved by Order of Ministry of Health of Ukraine from 22.02.2019 #446.]. 2019 [cited 2021 Jan 5]. Available from: <https://zakon.rada.gov.ua/laws/show/z0294-19> (in Ukrainian).
10. Ministry of Health of Ukraine. About approval of the lists of health care institutions, physicians', pharmacists' positions, positions of junior pharmaceutical specialists, positions of health care professionals and positions of health care specialists in health care facilities. Order from 28.10.2002 #385. 2002 [updated 2019 Jul 5; cited 2021 Jan 5]. Available from: <https://zakon.rada.gov.ua/laws/show/z0892-02> (in Ukrainian).
11. Cabinet of Ministers of Ukraine. About approval of the list of knowledge areas and specialties by which higher education applicants are trained. Decree from 29.04.2015 #266. 2015 [updated 2017 Feb 11; cited 2021 Jan 5]. Available from: <https://zakon.rada.gov.ua/laws/show/266-2015-%D0%BF/page#Text> (in Ukrainian).
12. Ministry of Health of Ukraine. On approval of the List of specializations of training of applicants for higher education of Master's degree in specialty 227 "Physical therapy, ergotherapy". Order from 02.11.2018 #2013. 2018 [cited 2021 Jan 5]. Available from: <https://zakon.rada.gov.ua/laws/show/z1335-18> (in Ukrainian).
13. Ministry of Health of Ukraine. About approval of the List of names of cycles of specialization and improvement of doctors and pharmacists in higher medical (pharmaceutical) institutions (faculties) of postgraduate education. Order from 07.12.1998 #346. 1998 [updated 2020 Feb 7; cited 2021 Jan 5]. Available from: <https://zakon.rada.gov.ua/rada/show/v0346282-98> (in Ukrainian).
14. Ministry of Health of Ukraine. About approval of the List of specialties of terms of study at internship of graduates of medical and pharmaceutical higher educational institutions, medical faculties of universities. Order from 23.02.2005 #81. 2005 [updated 2019 Aug 9; cited 2021 Jan 5]. Available from: <https://zakon.rada.gov.ua/laws/show/z0291-05#Text> (in Ukrainian).
15. European Physical and Rehabilitation Medicine Bodies Alliance. White Book on Physical and Rehabilitation Medicine in Europe. *Ukrainian J Phys Rehabil Med* 2018; 2: 6-206. [cited 2021 Jan 5]. Available from: <http://www.whitebook-prm.eu/2019/03/30/ukrainian-white-book-translation/> (in Ukrainian).
16. Cabinet of Ministers of Ukraine. About approval of the Order of carrying out Unified State Qualification Examination for applicants for higher education of Master's degree in specialties of knowledge area "22 Health care". Decree from 28.03.2018 #334. 2018 [updated 2019 Apr16; cited 2021 Jan 5]. Available from: <https://zakon.rada.gov.ua/laws/show/334-2018-%D0%BF> (in Ukrainian).
17. Cabinet of Ministers of Ukraine. About approval of the list of specialties for which Unified State Qualification Examination for applicants for higher education of Master's degree is conducted. Decree from 10.05.2018 #354. 2018 [cited 2021 Jan 5]. Available from: <https://zakon.rada.gov.ua/laws/show/354-2018-%D0%BF> (in Ukrainian).
18. Requirements for medical services to be provided under the Program of Medical Guarantees in 2020. 2019 [cited 2021 Jan 5]. Available from: <https://nszu.gov.ua/likar-2020> (in Ukrainian).
19. Contracts for medical services with the specialized health care institutions. 2020 [cited 2021 Jan 5]. Available from: <https://nszu.gov.ua/e-data/dashboard/pmg-contracts> (in Ukrainian).
20. Cabinet of Ministers of Ukraine. About approval of the Action Plan for Implementation in Ukraine the International Classification of Functioning, Disability and Health and the International Classification of Functioning, Disability and Health. Children and Youth Version. Order from 27.12.2017 #1008-p. 2017 [cited 2021 Jan 5]. Available from: <https://zakon.rada.gov.ua/laws/show/1008-2017-%D1%80> (in Ukrainian).
21. Ministry of Health of Ukraine. About making changes to the translation of International Classification of Functioning, Disability and Health and the International Classification of Functioning, Disability and Health. Children and Youth Version. Order from 21.12.2018 #2249. 2018 [cited 2021 Jan 5]. Available from: https://moz.gov.ua/uploads/2/11374-9898_dn_20181221_2449.pdf (in Ukrainian).
22. Ministry of Health of Ukraine announces recruitment of specialists who want to become ICF trainers. 28.11.2018 [cited 2021 Jan 5]. Available from: <http://moz.gov.ua/article/internship/moz-ukraini-ogoloshue-nabir-dlja-fahivciv-jaki-hochut-stati-trenerami-z-mkf> (in Ukrainian).
23. Fundamentals of Ukrainian legislation on Health Care: Law of Ukraine from 19.11.1992 #2801-XII. 1993 [updated 2020 December 31; cited 2021 Jan 5]. Available from: <https://zakon.rada.gov.ua/laws/show/2801-12> (in Ukrainian).
24. About state financial guarantees of health service of the population: Law of Ukraine from 19.10.2017 #2168-VIII. 2018 [updated 2020 Dec 31; cited 2021 Jan 5]. Available from: <https://zakon.rada.gov.ua/laws/show/2168-19#Text> (in Ukrainian).
25. Cabinet of Ministers of Ukraine. Some issues regarding the implementation of the program of state guarantees of health service of the population in 2020. Decree from 05.02.2020 #65. 2020 [updated 2021 Jan 1; cited 2021 Jan 5]. Available from: <https://zakon.rada.gov.ua/laws/show/65-2020-%D0%BF> (in Ukrainian).
26. About licensing of types of economic activities: Law of Ukraine from 02.03.2015 #222-VIII. 2015 [updated 2020 Oct 25; cited 2021 Jan 5]. Available from: <https://zakon2.rada.gov.ua/laws/show/222-19> (in Ukrainian).
27. Cabinet of Ministers of Ukraine. About approval of Licensing requirements for conducting economic activities in medical practice. Decree from 02.03.2016 #285. 2016 [updated 2019 Mar 20; cited 2021 Jan 5]. Available from: <https://zakon.rada.gov.ua/laws/show/285-2016-%D0%BF> (in Ukrainian).
28. About rehabilitation of people with invalidity in Ukraine: Law of Ukraine from 06.10.2005 #2961-IV. 2005 [updated 2020 December 31; cited 2021 Jan 5]. Available from: <https://zakon.rada.gov.ua/laws/show/2961-15> (in Ukrainian).
29. UN. Committee on the Rights of Persons with Disabilities. Concluding observations on the initial report of Ukraine. 2015 [cited 2021 Jan 5]. Available from: <https://digital-library.un.org/record/811091>.
30. About rehabilitation in health care: Law of Ukraine from 03.12.2020 #1053-IX. 2020 [cited 2021 Jan 5]. Available from: <https://zakon.rada.gov.ua/laws/show/1053-20#Text> (in Ukrainian).