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INTERNATIONAL APPROACHES TO ASSESSING THE CAPACITY OF REHABILITATION FACILITIES: EVOLUTION OF REHABILITATION MODELS, EVIDENCE-BASED PRACTICE, AND INTERDISCIPLINARY COLLABORATION

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ABSTRACT

Introduction. The growing demand for rehabilitation services, driven by demographic changes, chronic conditions, armed conflicts and the need to restore functional abilities, calls for effective approaches to assessing the capacity of rehabilitation facilities. Modern international rehabilitation systems are shifting from a medically-centered model to a functional and patient-centered approach, based on evidence-based practice, interdisciplinary collaboration and outcome assessment.

Aim. To analyze international approaches to assessing the capacity of rehabilitation facilities considering the evolution of rehabilitation models, evidence-based practice, and the role of multidisciplinary teams in ensuring quality rehabilitation services.

Materials and Methods. An analytical review of international scientific literature, regulatory documents, and recommendations of international organizations in rehabilitation and healthcare management was conducted. Publications from international databases and official sources addressing rehabilitation models, quality assessment systems, interdisciplinary care, evidence-based interventions, and organizational approaches were analyzed.

Results. It has been established that international approaches to assessing the capacity of rehabilitation facilities cover staffing, organizational structure, accessibility and continuity of services, interprofessional collaboration, evidence-based methods and functional outcomes. It has been determined that a multidisciplinary team is a key element of effective rehabilitation, ensuring the identification of patient needs, the planning of an individualized programme and the monitoring of its outcomes. The quality of rehabilitation facilities should be assessed not only on the basis of structural indicators, but also on the results of restoring functioning and participation in social life.

Conclusions. International experience demonstrates a shift toward functional, patient-centered and integrated rehabilitation models based on continuity of care, evidence-based practice, interdisciplinary collaboration and measurable functional outcomes. Rehabilitation facility capacity should be assessed through structural, process and outcome indicators. Adaptation of international approaches to the Ukrainian context provides a basis for developing a draft Standard for assessing rehabilitation facility capacity and evaluating their ability to deliver accessible, coordinated, evidence-based and patient-centered care. Further research should focus on piloting and validating the proposed assessment indicators.

Keywords: rehabilitation facilities, functional assessment, international approaches, rehabilitation models, evidence-based practice, multidisciplinary team, draft standard.

INTRODUCTION

The growing demand for rehabilitation services, driven by the rising prevalence of disability, chronic diseases, injuries and other conditions, makes their accessibility, quality and effectiveness a key priority for health systems [1, 2]. The WHO's 'Rehabilitation

2030' initiative emphasizes the need to integrate rehabilitation into health systems, develop human resources, ensure sustainable funding and strengthen the evidence base [3].

Within this context, increasing attention is being given to the assessment of rehabilitation ser-

vices and facilities, particularly their ability to respond to patients with complex rehabilitation needs. Contemporary approaches to rehabilitation assessment increasingly extend beyond traditional clinical outcomes and consider functioning, disability, participation and other patient-relevant outcomes [4]. This shift creates a need for systematic approaches to assessing the organizational and functional capacity of rehabilitation facilities.

For Ukraine, this issue is particularly relevant given the significant need for rehabilitation support resulting from the full-scale war and its consequences for military personnel and the civilian population. The development of an effective rehabilitation system requires an examination of international experience, taking into account the organizational, resource-related and institutional characteristics of the Ukrainian healthcare system, which underlines the relevance of this study.

AIM

The aim of this study is to analyze and summarize international approaches to assessing the capabilities of rehabilitation facilities, taking into account the evolution of rehabilitation models, the principles of evidence-based practice and the role of interdisciplinary collaboration in ensuring high-quality, effective and patient-centered rehabilitation care.

MATERIALS AND METHODS

To substantiate the theoretical and methodological framework of the study, a structured search and analysis of the scientific literature, international guidelines and framework documents, accreditation and international standards, as well as regulatory and legal documents of Ukraine, were conducted. Scientific sources published between 2018 and 2026 were identified through the PubMed and Scopus databases. The search was conducted using combinations of keywords related to rehabilitation, the organization of rehabilitation care, rehabilitation facility capability, the quality and outcomes of rehabilitation, staffing, interdisciplinary collaboration, evidence-based practice, and patient-centered rehabilitation. Relevant sources were included if they addressed the aims and objectives of the study, contained information on organizational, structural, process, or outcome-related characteristics of rehabilitation care, and were available in Ukrainian or English. Sources that were not relevant to the study topic, lacked sufficient relevant information, were duplicates, promotional or commercial in nature, or focused exclusively on specific clinical interventions without an organizational or health-system context were excluded. A total of 50 sources were included in the final analysis. The sources were analyzed using

systematization, comparative, structural-functional, and content analysis. Systematization was used to classify the sources by type, year of publication, study design, and thematic focus; comparative analysis was applied to identify similarities and differences in approaches to the organization of rehabilitation care and the assessment of rehabilitation facility capacity; structural-functional analysis was used to determine the relationships among staffing, infrastructure, organizational, clinical, information, and management components; and content analysis was applied to identify key concepts, requirements, indicators, and criteria related to accessibility, quality, safety, interdisciplinary collaboration, evidence-based practice, and patient-centered rehabilitation. The findings were synthesized to identify the key components and criteria for assessing the capacity of rehabilitation facilities.

DISCUSSIONS

The evolution of rehabilitation models. Over recent decades, international approaches to rehabilitation have evolved from a biomedical model focused on restoring impaired functions to a patient-centered approach aimed at improving functional ability and quality of life. These changes have been driven, in particular, by the rising prevalence of chronic diseases, population ageing, long-term functional limitations, and the consequences of armed conflicts [5, 6].

A fundamental change in rehabilitation policy was the introduction of the International Classification of Functioning, Disability and Health (ICF), which established functioning as a central concept for assessing the consequences of health conditions. The ICF provides a comprehensive framework for assessing body functions, activities, participation, and environmental factors. Accordingly, rehabilitation is increasingly viewed as a strategy for optimizing functioning and reducing disability rather than merely treating diseases [5, 7].

The functional approach has contributed to the development of standardized methods for assessing rehabilitation outcomes, focusing on individual functional goals, changes in activity levels, and a person's participation in daily, social, and professional life. Consequently, functioning and participation have become key criteria for assessing the effectiveness of rehabilitation interventions and the quality of rehabilitation services [4, 7].

An important milestone was the integration of rehabilitation into broader health policy. The WHO's *Rehabilitation 2030* initiative has identified rehabilitation as an integral component of health systems and universal health coverage, emphasizing

its integration at all levels of healthcare, the development of a multidisciplinary workforce, ensuring accessibility, improving financing and data collection, and the use of the ICF, as well as the development of evidence-based practice and international cooperation [3, 8].

This reflects a shift from viewing rehabilitation as a specialized clinical service to understanding it as an integral part of the healthcare system. At the same time, a patient-centered approach that takes into account a person's needs, preferences, life goals, and social context has become a defining feature of modern rehabilitation, while an individualized rehabilitation plan has become a primary tool for aligning rehabilitation interventions with outcomes that are meaningful to the patient [9, 10].

Patient-centered rehabilitation is closely linked to shared decision-making, which involves the active participation of patients and healthcare professionals in setting goals, selecting interventions, and assessing progress. This approach ensures that rehabilitation interventions are aligned with patients' values, expectations, and everyday circumstances and is an important component of high-quality rehabilitation [12, 13].

Rehabilitation models have evolved from a biomedical approach to a functionally oriented model based on the ICF and further toward an integrated, patient-centered model that promotes interdisciplinary collaboration, continuity of care, and a focus on functional outcomes [12,13]. Consequently, the effectiveness of rehabilitation facilities is determined not only by their resources and range of services but also by their ability to provide patient-centered care and achieve meaningful functional outcomes.

Concept of Rehabilitation Facility Capacity. The transformation of rehabilitation models has led to a broader understanding of rehabilitation capacity, which is now viewed not merely as a set of resources but as the capacity of a health system, organization, or rehabilitation team to provide accessible, high-quality services that meet the needs of the population. The WHO identifies two interrelated aspects of this capacity: the human resources component, which encompasses the competencies and professional development of specialists, and the systemic component, which determines the capacity of the system to provide accessible, safe, effective, and high-quality rehabilitation services [14, 15].

A regulatory definition of the rehabilitation capacity of a facility or department was recently introduced into Ukrainian legislation. In accordance with Resolution No. 1808 of the Cabinet of Ministers

of Ukraine dated December 31, 2025, rehabilitation capacity is defined as the number of patients who can receive a high level of rehabilitation care during a 24-hour inpatient rehabilitation cycle, with at least three hours of rehabilitation care provided per day by rehabilitation specialists [16]. Thus, the regulatory definition interprets rehabilitation capacity primarily as a quantitative indicator of the potential daily volume of care.

The regulatory approach in Ukraine is based on the principles set out in the *Procedure for the Organization of Rehabilitation Care in the Healthcare Sector*, approved by Resolution No. 1268 of the Cabinet of Ministers of Ukraine [17]. At the same time, the Ukrainian regulatory definition is narrower than the WHO approach, which encompasses not only the scope of services but also staffing capacity, the qualifications of specialists, and the system's ability to ensure the appropriate quality of rehabilitation care [14,15].

The term *rehabilitation capacity* is also used in military medicine and WHO documents. In this context, it refers to the ability of medical units and teams to provide the required level of rehabilitation care using available personnel, equipment, infrastructure, and other resources in accordance with established standards [18–20].

Taken together, these approaches define **rehabilitation capacity** as a combination of quantitative, qualitative, and organizational dimensions, encompassing a facility's ability to effectively use human, material, technical, organizational, and information resources to provide coordinated, safe, timely, evidence-based, and patient-centered rehabilitation care [14–20].

It is therefore appropriate to define rehabilitation capacity as the ability of a healthcare organization to provide continuous, timely, and high-quality rehabilitation care to specific patient groups in accordance with available resources and current standards.

For conceptual clarity, a distinction should be made between the capacity, capability, effectiveness, and quality of rehabilitation. **Capacity** refers to the potential volume of services and available resources; **capability** refers to a facility's ability to perform the necessary functions; **effectiveness** refers to the results actually achieved; and **quality** refers to the extent to which services meet established standards and patients' needs.

This approach makes it possible to view the capacity of a rehabilitation facility as a multidimensional characteristic encompassing not only resources and staff competencies but also organizational

mechanisms, multidisciplinary collaboration, the use of evidence-based interventions, and outcome monitoring.

Consequently, capacity should be regarded as the basis for assessing a facility's ability to perform rehabilitation functions, while effectiveness and quality should be viewed as characteristics of the actual processes and outcomes of care delivery. This approach provides a basis for developing a system of indicators covering structural, process, and outcome dimensions.

International Systems and Frameworks for Assessing Rehabilitation Services. The international development of rehabilitation systems has led to the

emergence of various approaches to assessing the accessibility, organization, quality and effectiveness of care. Despite differences between countries, modern evaluation systems are based on common principles: the tailoring of care to patients' needs, continuity and a multidisciplinary approach, standardized functional assessment, and the monitoring of quality and outcomes. To identify common features and differences, a comparative analysis was carried out of selected national and international approaches, based on criteria relating to the organization of care, staffing and resource provision, the assessment of processes and outcomes, quality assurance mechanisms, and their applicability in the Ukrainian context (Table 1).

Table 1. Comparison of national and international rehabilitation systems

Country / system; Model and level of rehabilitation	Workforce and infrastructure	Assessment of process and outcomes	Quality assurance and relevance for Ukraine
USA			
Multi-level system: inpatient, post-acute, outpatient and home/ community rehabilitation. Differentiation according to patient needs [21, 22].	Multidisciplinary teams; facility and organizational requirements defined for rehabilitation programmes [21].	Standardized functional assessment using IRF-PAI and CARE Item Set; quality reporting [21, 22].	CMS quality reporting and regulatory mechanisms. Very high relevance for standardized assessment and differentiation of care [21, 22].
UK			
Specialist rehabilitation differentiated into Levels 1–3 according to patient complexity [23, 24].	Multiprofessional teams matched to rehabilitation complexity [23].	RCS-E/UK ROC for complexity and resource assessment; monitoring of rehabilitation activity and outcomes [23, 24].	NHS quality/governance mechanisms. Very high relevance for defining levels and referral pathways [23, 24].
Germany			
Medical and vocational rehabilitation within the social-insurance system; Reha vor Rente [25, 26].	Multidisciplinary rehabilitation teams and accredited facilities [25, 27].	Assessment of structure, process and outcome quality; functional and work-related outcomes [27, 28].	External quality assurance by Deutsche Rentenversicherung. Very high relevance for medical–vocational integration [25–28].
France			
Nationally regulated inpatient, outpatient and specialist rehabilitation [29, 30].	Requirements for rehabilitation institutions and professional organization within the national system [29, 30].	Quality and safety indicators; assessment of appropriateness and continuity of care [29, 30].	External certification by HAS. High relevance for national standards and external evaluation [29, 30].
Poland			
Publicly financed rehabilitation: inpatient, outpatient, day-care and home-based services [31, 32].	Organizational and staffing requirements linked to specific rehabilitation services [31, 32].	Monitoring of access, referral, service provision and clinical/ functional indicators [31, 32].	NFZ regulation and contractual quality mechanisms. Very high relevance for publicly financed and geographically distributed rehabilitation [31, 32].
WHO			
Rehabilitation integrated across primary, community and specialized levels of care [14, 15, 33].	Focus on workforce capacity, competencies, equipment and system resources [14, 15].	Rehabilitation Indicator Menu; ICF-based functioning and system-level indicators [14, 15].	System-level monitoring framework rather than accreditation. Very high relevance as the methodological framework for Ukraine [14, 15, 33].

Country / system; Model and level of rehabilitation	Workforce and infrastructure	Assessment of process and outcomes	Quality assurance and relevance for Ukraine
CARF International			
Standards for inpatient, outpatient, home and community-based rehabilitation [34, 35].	Qualified interdisciplinary teams and programme-specific organizational requirements [34, 35].	Individual goals, functional outcomes, patient-centered processes and continuous improvement [34, 35].	Independent external accreditation. High relevance for facility-level standards and accreditation [34, 35].

The comparison presented in Table 1 demonstrates that, despite differences in funding, organizational structures, and regulatory frameworks, the systems examined share several common principles: tailoring rehabilitation to the complexity of the patient's condition, a multidisciplinary approach, standardized functional assessment, monitoring of processes and outcomes, and quality assurance mechanisms. At the same time, individual models emphasize different components: the American model focuses on functional assessment and quality reporting; the British model on differentiating care according to complexity; the German model on integrating medical and vocational rehabilitation; the French model on state regulation and external certification; the Polish model on integrating different levels of rehabilitation care; and CARF on independent accreditation of facilities.

At the international level, the methodological framework is provided by the WHO approach, which regards rehabilitation as an integral part of the healthcare system and promotes its integration across different levels of care. The use of the ICF and standardized outcome measures, combined with the assessment of accessibility, coverage, timeliness, staffing, and effectiveness, makes it possible to evaluate rehabilitation both at the level of individual services and within the broader context of health system performance [3,7,15].

None of the international models can be directly applied to the Ukrainian context; however, selected elements can be adapted to national legislation, funding mechanisms, organizational structures, and population needs. Of particular relevance to Ukraine are the methodological approaches of the WHO and the ICF, the UK's principles of differentiated care, Germany's experience in integrating medical and vocational rehabilitation, France's regulatory and external evaluation mechanisms, the Polish model for organizing a network of rehabilitation services, and CARF's facility standards and accreditation mechanisms.

International experience therefore supports the development of a comprehensive approach

to assessing Ukrainian rehabilitation facilities that combines structural, process, and outcome indicators. Such a system should take into account not only the facility's resource capacity but also accessibility, continuity of care, patient-centeredness, interdisciplinary collaboration, safety, quality, and functional rehabilitation outcomes.

Structural Indicators of Rehabilitation Facility Capacity. Structural indicators characterize the resources and organizational conditions required to provide rehabilitation care. According to Donabedian's framework, these encompass human, material and technical, infrastructural, organizational and information resources [36, 37].

Staffing is a fundamental component of rehabilitation capacity. It requires a multidisciplinary team tailored to patients' needs, including a physical and rehabilitation medicine physician, physical therapist, occupational therapist, speech and language therapist, psychologist, prosthetist-orthotist, and other specialists [38-40].

It is advisable to assess this not only in terms of staff numbers, but also in terms of qualifications, competencies, professional development and the ability to work in a multidisciplinary setting [14].

Infrastructure and logistical resources must be appropriate to the nature and complexity of the rehabilitation care provided and include accessible and safe premises, specialized equipment, assessment tools, assistive technologies and other necessary resources. In this regard, consideration is given not only to their availability but also to their suitability for patients' needs, their technical condition, safety and accessibility.

Organizational, legal and information mechanisms ensure that the facility operates in accordance with regulatory requirements, that rehabilitation care is coordinated, and that the continuity of the rehabilitation pathway is maintained [17, 38, 41]. Digital systems should ensure the documentation of operations, objectives, interventions and outcomes, communication between team members, and the use of data for quality monitoring [3, 8].

Structural capacity should be assessed by the availability, accessibility, adequacy and appropriate

allocation of resources in accordance with patient needs and established standards. This approach is reflected in the draft “Standard for Assessing the Basic Rehabilitation Capacity of Rehabilitation Centers and Hospitals” (Ukraine, 2026; Renovator project), which covers organizational and legal, infrastructure, personnel, material and technical, managerial and information components. At the same time, structural indicators determine only the prerequisites for care, therefore they should be supplemented by process indicators and functional results.

Process Indicators of Rehabilitation Care. Process indicators describe how available resources are transformed into actual rehabilitation care, reflecting its organization, coordination, continuity, safety and evidence-based approach. In Donabedian's framework, they represent the link between a facility's structural capacity and rehabilitation outcomes [36, 37].

The process is based on a systematic assessment of the patient's functional status and needs in accordance with the principles of the ICF, which enables the identification of rehabilitation issues, the setting of individual goals, the selection of interventions and the monitoring of progress [7]. An individual plan should include measurable goals, planned activities, the professionals responsible, and criteria for assessing progress; it should be developed in consultation with the patient, taking into account their needs, values and social context [9, 10].

Key procedural characteristics include multidisciplinary and interdisciplinary collaboration, joint goal-setting, information sharing and coordinated decision-making [3, 15, 42]. At the same time, rehabilitation care should be based on the best available evidence, professional experience and the patient's individual needs [43]. The READ model can be used as a conceptual framework for systematizing this approach: from needs assessment and goal-setting to the selection and monitoring of the effectiveness of interventions [44].

Key process indicators include the comprehensiveness of the functional assessment, the documentation of rehabilitation goals and plans, adherence to clinical protocols, teamwork, the timeliness of reassessments, monitoring of the intensity of interventions, clinical audit and discharge planning. An important component is the continuity of care between the acute, sub-acute and long-term phases, as well as between inpatient, outpatient and home settings [17, 41]. Discharge planning should provide for further rehabilitation, the use of assistive technologies, and social and vocational reintegration.

Consequently, process indicators cover the sequence from functional assessment and goal-setting

to the implementation of interventions, monitoring, re-assessment, discharge planning and ensuring continuity of care. They make it possible to determine how effectively the facility's structural resources are being transformed into coordinated, evidence-based and patient-centered services; in other words, they characterize its operational capacity.

Functional Outcomes of Rehabilitation. Functional outcomes are a key outcome-oriented aspect of rehabilitation and form the basis for assessing its effectiveness. Unlike the biomedical model, modern rehabilitation is aimed not only at restoring bodily functions, but also at optimizing functioning, reducing disability, and improving a person's activity and participation in everyday, social and professional life [4, 5, 7].

The ICF defines functioning as a multidimensional concept encompassing bodily functions and structures, activities, participation and interaction with environmental factors [7]. Therefore, the assessment of outcomes must take into account not only clinical changes, but also the patient's ability to perform everyday activities, participate in community life and fulfil personal, family and professional roles.

A key component is the standardized assessment of functioning. The FIM and Barthel Index enable the assessment of functional independence and its progression [37, 45], whilst the WHODAS 2.0 provides a broader assessment of functioning and disability, covering cognitive functions, mobility, self-care, daily activities and participation [46]. The choice of instrument should be consistent with the purpose of the assessment, the characteristics of the patients and the level at which it is used – individual, programme-based or organizational [4, 37, 45, 46].

It is advisable to combine standardized measures with the patient's individual goals, as a change in functional score does not always reflect the achievement of personally meaningful outcomes. Therefore, the assessment should take into account functioning, participation, quality of life and the extent to which individual rehabilitation goals have been achieved [9, 10]. For patients with complex and multiple impairments, it is advisable to assess mobility, self-care, communication, cognitive functions, psychological adaptation, social activity and return to education or work.

Functional status should be assessed at all stages of rehabilitation – from the initial assessment through to discharge and, where possible, during the post-discharge period to determine the sustainability of the outcomes. According to the «structure–process–outcome» model [36, 37], structural indicators characterize resources, process indicators characterize

the organization of care, and functional outcomes characterize its impact on the patient's condition.

The key outcomes are changes in standardized functional measures, the achievement of individual goals, the level of independence, social and occupational activity, quality of life, patient satisfaction and the sustainability of outcomes. Systematic monitoring of these indicators makes it possible to assess the effectiveness of the facility and improve the quality of rehabilitation care.

Evidence-based rehabilitation practice. Evidence-based practice is a fundamental component of modern rehabilitation and an important criterion for assessing a facility's potential. It involves combining the best available scientific evidence, professional expertise and the patient's individual needs, values and circumstances [11, 43]. Consequently, clinical decisions must take into account functional status, comorbidities, rehabilitation goals and available resources.

The implementation of evidence-based practice requires organizational mechanisms, including up-to-date clinical guidelines and protocols, standardized algorithms, regular review of rehabilitation methods, staff professional development and clinical audit. The READ model involves the sequential setting of goals, assessment of the patient's needs, selection of evidence-based interventions, determination of their intensity, and continuous monitoring of outcomes [44].

At the institutional level, it is advisable to assess the availability and relevance of protocols, adherence to clinical algorithms, the appropriateness of interventions, the documentation of clinical decisions, the conduct of clinical audits, staff participation in continuing professional development, and the regular updating of local protocols. An important component is the systematic monitoring of functional outcomes, which enables the effectiveness of the approaches used to be assessed and practice to be adjusted [4, 37, 45, 46].

Evidence-based practice must be combined with a patient-centered approach and shared decision-making, as scientific evidence regarding the effectiveness of interventions must be aligned with the patient's goals and preferences [11]. Its consistency also depends on the professional competence of staff and the ability to draw on up-to-date scientific sources.

It is therefore appropriate to regard evidence-based rehabilitation practice as a facility's organizational capacity to systematically implement up-to-date scientific findings, monitor their application and outcomes, and refine clinical approaches. Accordingly, an assessment of a facility's potential should take into

account not only the availability of resources and qualified staff, but also its ability to deliver evidence-based, patient-centered and continuously improving rehabilitation practice.

Team Interaction and Interdisciplinary Collaboration. Effective teamwork is a key component of modern rehabilitation and the capacity of a rehabilitation facility, as patients' complex needs encompass physical, cognitive, psychological, communicative, social and occupational aspects [3, 15]. The WHO recommends the development of multidisciplinary rehabilitation teams, the composition of which should correspond to patients' clinical and functional needs [3, 15]. In Ukraine, such teams may include a physical and rehabilitation medicine physician, physical therapist, occupational therapist, speech and language therapist, psychologist, prosthetist-orthotist, and other specialists [38–40].

It is important to distinguish between multidisciplinary, interdisciplinary and transdisciplinary models. The multidisciplinary model involves the participation of specialists from different disciplines; the interdisciplinary model involves the joint setting of objectives, coordinated planning and decision-making; and the transdisciplinary model involves a deeper integration of competencies and a partial overlap of professional roles [15, 42].

When assessing a facility's capacity, the availability of the necessary specialists is a structural indicator, whilst the quality of their collaboration is a process indicator. Procedural indicators include the regularity of team meetings, joint functional assessment and goal-setting, coordination of interventions, information sharing, documentation of decisions, monitoring of progress and joint planning of discharge. Patient involvement in goal-setting and decision-making ensures that rehabilitation is patient-centered [9–11].

Effective teamwork promotes coordination of interventions, prevents duplication and fragmentation, and ensures continuity of care between inpatient, outpatient and home-based care [13, 17, 41]. It is of particular importance for patients with complex injuries, particularly those sustained as a result of combat, who may require simultaneous medical, rehabilitation, psychological and social support [47, 48].

Therefore, a high level of team capacity is determined not by the number of specialties represented, but by the ability of specialists to coordinate their activities effectively, make joint decisions and work towards achieving patient-centered and measurable functional outcomes.

Accreditation and Quality Management. Accreditation and quality management are key components

in assessing the capacity of a rehabilitation facility, covering patient safety, standardization of processes, monitoring of outcomes, risk management and continuous improvement. Accreditation provides an external assessment of compliance with standards, whilst quality management is an internal process of systematic improvement. In international practice, CARF International applies specialized standards for rehabilitation programmes, JCI applies comprehensive requirements for management, safety and the quality of healthcare, and ISO 7101:2023 sets out requirements for quality management systems in healthcare organizations [34, 49, 50].

An effective quality management system involves setting quality objectives and indicators, regular monitoring, clinical audits, risk management, analysis of deviations, taking patient feedback into account, and implementing corrective actions. Other key components include ensuring patient safety, documenting adverse events, assessing compliance with clinical protocols, ensuring the completeness of functional assessments, promoting teamwork, measuring outcomes and planning discharge.

Quality monitoring should combine structural, process and outcome indicators: resources and organizational conditions, the quality of care provided, and the functional outcomes achieved by patients. This approach makes it possible to assess not only compliance with established requirements, but also the actual effectiveness of rehabilitation [36, 37].

An integrated approach is appropriate for the Ukrainian system: using the WHO and ICF frameworks as a conceptual basis, CARF's experience for specific rehabilitation standards, JCI principles for organizational management and safety, and ISO 7101:2023 for the internal quality management system. Such a model can provide a comprehensive assessment of a facility's potential, covering resources, processes, functional outcomes, patient-centered care, teamwork and continuous improvement.

CONCLUSIONS

An analysis of international approaches has revealed a shift from a biomedical and resource-

oriented model to a functional and patient-centered model of rehabilitation based on continuity of care, evidence-based practice, interdisciplinary collaboration, and measurable functional outcomes.

It is advisable to view a facility's rehabilitation capacity as an integral characteristic of a healthcare organization that reflects its ability to provide continuous, timely, safe, and high-quality rehabilitation care to a defined patient population using available human, material, technical, organizational, and information resources in accordance with current standards of practice. Its assessment should be based on a combination of structural, process, and outcome indicators.

International experience cannot be directly applied to the Ukrainian context; however, the approaches of the WHO and the ICF, as well as the experience of the United Kingdom, Germany, Poland, CARE, JCI, and ISO 7101:2023, can be adapted to take into account national regulatory and organizational characteristics.

The key components of a rehabilitation facility's capacity include qualified staff, effective interdisciplinary collaboration, evidence-based practice, standardized functional assessment, continuity of care, and systematic monitoring of outcomes. Taken together, these components provide the basis for a comprehensive assessment of a facility's capacity to deliver high-quality rehabilitation services.

Building on this framework, this study developed a draft Standard for the Assessment of Basic Rehabilitation Facility Capacity, adapting contemporary international approaches to the Ukrainian context. The proposed draft Standard provides for a comprehensive assessment of the structural, process, and outcome characteristics of rehabilitation facilities and can serve as a methodological basis for evaluating their ability to provide accessible, coordinated, evidence-based, and patient-centered care and achieve measurable functional outcomes. Further research should focus on piloting and validating the proposed indicators and determining the applicability of the draft Standard across different types and levels of rehabilitation facilities.

Article Declarations

Prospects for further research. Further research should focus on the development, scientific justification, and validation of a comprehensive system for assessing the capacity of rehabilitation facilities in accordance with international standards and the principles of evidence-based practice. Particular attention should be paid to defining criteria and indicators that reflect the staffing, organizational, material and technical, and functional capacity of facilities, their capability to ensure effective interdisciplinary collaboration and continuity of the rehabilitation pathway, and their performance in achieving measurable functional outcomes. This will provide a scientific basis for improving the mechanisms for managing, monitoring, and enhancing the quality of rehabilitation care, particularly in light of the growing need for rehabilitation among military personnel.

Study limitations. The limitations of the study are primarily related to the use of two main scientific databases – PubMed/MEDLINE and Scopus – and the specified search and selection criteria for sources. While supplementing the search with official documents from WHO, NATO, CARF, JCI, ISO and regulatory documents of Ukraine, a specialized search in “gray literature” databases and individual professional repositories was not conducted. This may limit the completeness of the identification of individual studies, local reports, institutional documents, or other materials that are not indexed in PubMed/MEDLINE and Scopus. An additional limitation is the language criterion, since the main search for scientific publications was carried out in English and Ukrainian. For official documents, language restrictions did not apply if the document was available in English or Ukrainian on the official website of the relevant institution.

Primary data and materials. The authors of the manuscript confirm that no primary data or materials were used in the study. The paper is a review and is based solely on the analysis and synthesis of findings from published scientific sources. No primary medical records, statistical databases or individual patient data were used.

Research ethics. This study is a review and is based on an analysis of published scientific sources. No primary data, personally identifiable patient information or biological material were used; therefore, approval from the Committee on Ethics in Biomedical Research and the informed consent of participants were not required.

Declaration of AI use. Use of artificial intelligence. Whilst preparing the manuscript, the authors used ChatGPT (OpenAI) solely to generate alternative phrasing, for language editing and to refine the style of presentation. All scientific arguments, analysis of the literature, interpretation of results and final editing of the manuscript were carried out by the authors themselves. The authors have reviewed and edited the generated material and bear full responsibility for the content and accuracy of the publication.

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Conflict of interest. The authors declare that there are no conflicts of interest relating to the preparation, conduct and publication of this study. None of the authors has any financial, commercial or other personal relationships that could influence the interpretation of the results. The study was conducted in accordance with the principles of academic integrity and objectivity. All authors have approved the final version of the manuscript.

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МІЖНАРОДНІ ПІДХОДИ ДО ОЦІНКИ СПРОМОЖНОСТЕЙ РЕАБІЛІТАЦІЙНИХ ЗАКЛАДІВ: ЕВОЛЮЦІЯ МОДЕЛЕЙ РЕАБІЛІТАЦІЇ, ДОКАЗОВА ПРАКТИКА ТА МІЖДИСЦИПЛІНАРНА СПІВПРАЦЯ

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РЕЗЮМЕ

Вступ. Зростання потреб у реабілітаційній допомозі, зумовлене наслідками воєнних конфліктів, збільшенням кількості осіб із порушеннями функціонування, поширенням хронічних захворювань та старінням населення, визначає необхідність удосконалення підходів до оцінки спроможностей реабілітаційних закладів. Сучасні міжнародні системи реабілітації поступово трансформувалися від медико-центрованої моделі до функціонально орієнтованого та пацієнтоцентричного підходу, що базується на доказовій практиці, міждисциплінарній взаємодії та оцінці результатів відновлення.

Мета. Проаналізувати міжнародні підходи до оцінки спроможностей реабілітаційних закладів з урахуванням еволюції моделей реабілітації, принципів доказової практики та ролі мультидисциплінарних команд у забезпеченні якості реабілітаційних послуг.

Матеріали та методи. Проведено аналітичний огляд міжнародної наукової літератури, нормативних документів, рекомендацій міжнародних організацій та сучасних підходів до організації реабілітаційної допомоги. Здійснено узагальнення даних щодо критеріїв оцінки спроможності реабілітаційних закладів, організації командної роботи, управління якістю та результативності реабілітаційних послуг.

Результати. Встановлено, що міжнародні підходи до оцінки спроможності реабілітаційних закладів охоплюють кадрове забезпечення, організаційну структуру, доступність і безперервність послуг, міжпрофесійну взаємодію, доказові методи та функціональні результати. Визначено, що мультидисциплінарна команда є ключовим елементом ефективної реабілітації, забезпечуючи визначення потреб пацієнта, планування індивідуальної програми та контроль її результатів. Якість реабілітаційних закладів має оцінюватися не лише за структурними показниками, а й за результатами відновлення функціонування та участі людини в суспільному житті.

Висновки. Міжнародний досвід засвідчує перехід до функціональної, пацієнтоорієнтованої та інтегрованої моделі реабілітації, що ґрунтується на безперервності допомоги, доказовій практиці, міждисциплінарній співпраці та вимірюваних функціональних результатах. Оцінювання спроможності реабілітаційних закладів доцільно здійснювати за сукупністю структурних, процесних та результативних показників. Адаптація міжнародних підходів до українського контексту створює основу для розроблення проекту Стандарту оцінювання спроможності реабілітаційних закладів та визначення їхньої здатності забезпечувати доступну, скоординовану, доказову й пацієнтоорієнтовану допомогу. Подальші дослідження мають бути спрямовані на апробацію та валідацію запропонованих показників.

Ключові слова: реабілітаційні заклади, оцінка спроможностей, міжнародні підходи, моделі реабілітації, доказова практика, мультидисциплінарна команда, проект стандарту.

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