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# ANALYSIS OF THE PROJECT ON IMPROVING THE COMPREHENSIVE MEDICAL REHABILITATION SYSTEM FOR SOCIALLY VULNERABLE INDIVIDUALS

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**Abstract.** Uzbekistan is undergoing a major transition toward a modern rehabilitation and disability support system centered on individual functioning. The study examines the current state of rehabilitation and social services for persons with disabilities and proposes directions for their improvement based on Uzbekistan's national context and relevant international experience. A functioning-based eligibility mechanism is proposed to link difficulties in functioning, assessed using the World Health Organization Disability Assessment Schedule (WHODAS), with specific services and benefits to which persons with disabilities are entitled. The proposed system is based on two core instruments: a unified personal file established for each person with a disability and linked to a personal identification number (PIN), integrating information on health status, functioning, social circumstances, and service history; and a dynamic Individual Rehabilitation (or Service) Plan generated from the personal file and regularly updated in response to changes in functioning, individual needs, or service utilization. This approach provides an integrated system architecture for linking functioning-related difficulties with appropriate support interventions. Rehabilitation is conceptualized as a comprehensive set of support interventions provided by the health, social protection, education, labor market, and employment sectors to optimize the functioning and well-being of persons with disabilities.

**Keywords:** disability, functioning, impairment, activity limitation, participation restriction, rehabilitation, WHODAS, ICF, ISP.

**Аннотация.** В Узбекистане осуществляется масштабный переход к современной системе реабилитации и поддержки лиц с инвалидностью, ориентированной на индивидуальное функционирование человека. В исследовании проанализировано современное состояние реабилитационных и социальных услуг для лиц с инвалидностью и предложены направления их совершенствования с учетом национальных условий Узбекистана и соответствующего международного опыта. Предложен механизм определения права на получение поддержки, основанный на оценке функционирования и предусматривающий взаимосвязь между ограничениями функционирования, определяемыми с использованием Графика оценки инвалидности Всемирной организации здравоохранения (WHODAS), и конкретными услугами и льготами, предоставляемыми лицам с инвалидностью. Предлагаемая система основывается на двух ключевых инструментах: едином персональном файле, формируемом для каждого лица с инвалидностью и связанном с персональным идентификационным номером (PIN), который объединяет сведения о состоянии здоровья, функционировании, социальных характеристиках и истории получения услуг; а также динамическом Индивидуальном плане реабилитации (или предоставления услуг), автоматически формируемом на основе персонального файла и обновляемом в соответствии с изменениями функционального состояния, индивидуальных потребностей или использования услуг. Данный подход позволяет сформировать комплексную архитектуру системы, обеспечивающую взаимосвязь между ограничениями функционирования и соответствующими мерами поддержки. Реабилитация рассматривается как комплекс мер поддержки, предоставляемых секторами здравоохранения, социальной защиты, образования, рынка труда и занятости лицам с инвалидностью с целью оптимизации их функционирования и повышения уровня благополучия.

**Ключевые слова:** инвалидность, функционирование, нарушение функций, ограничение активности, ограничение участия, реабилитация, WHODAS, ICF, ISP.

## INTRODUCTION

Today, there is a broad consensus that disability is a complex phenomenon resulting from the interaction between a person's state of health and the various aspects of their environment. This characterization of disability—biopsychosocial, interactional, and human rights-based—was originally presented as a theoretical foundation for the International Classification of Functioning, Disability and Health (ICF) (WHO, 2001) and is also reflected in the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD, 2006).

Historically, disability was viewed for a long time as a direct consequence of disease, injury, or congenital conditions—a medical approach to disability. From this perspective, disability was treated as an individual attribute, defined by impairments in body structures or functions and addressed primarily through clinical (medical) intervention. This perspective primarily focused on medical aspects of disability, while environmental and social factors affecting functioning outcomes, i.e., disability, received comparatively less attention.

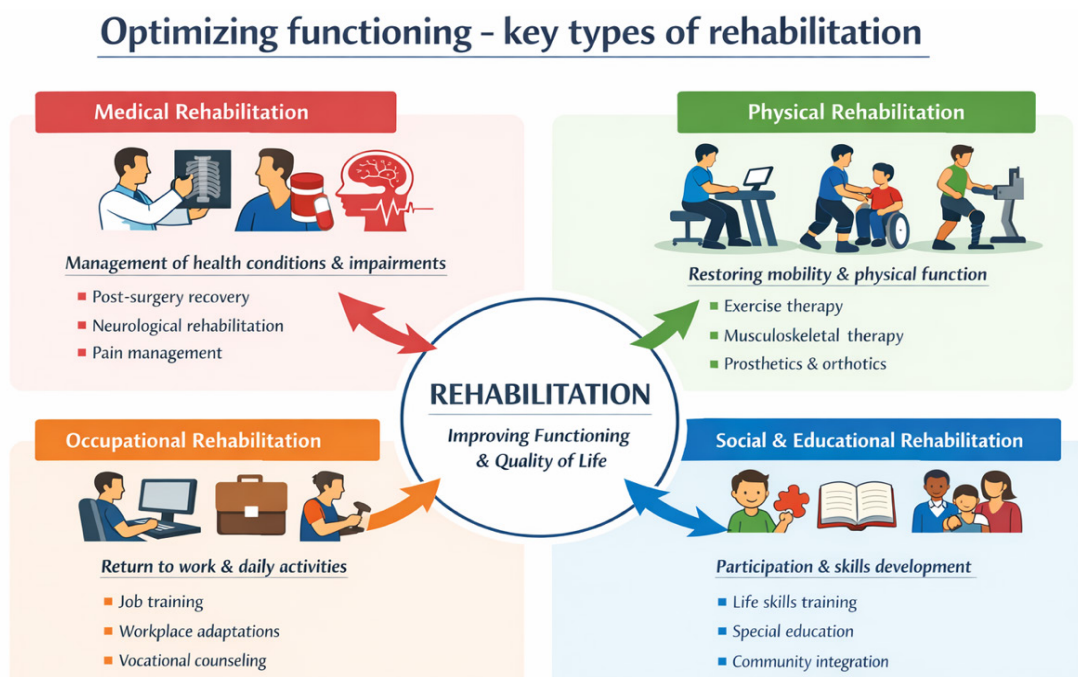
A contrasting perspective emerged in late twentieth-century social science, emphasizing that many of the difficulties associated with disability may arise from external barriers rather than solely from intrinsic body capacity (impairments). This "social model" of disability highlighted the role of barriers to functioning created by inaccessible infrastructure, institutional arrangements, and social norms. While this model drew attention to the importance of environmental conditions, its primary emphasis was on social and environmental dimensions, whereas health systems, rehabilitation planning, individualized assessment, health conditions, and impairments of body functions and structures were addressed to a comparatively lesser extent in determining functioning.

The complementary insights provided by both models contributed to the development of the biopsychosocial model by the World Health Organization (WHO), which recognizes disability as the outcome of interactions among biological, psychological, and social factors. Disability can therefore be comprehensively understood through the combined consideration of clinical indicators and environmental factors; accordingly, it represents a dynamic process shaped by health conditions, personal characteristics, and contextual factors.

This conceptual evolution culminated in the International Classification of Functioning, Disability and Health (ICF), adopted unanimously by the WHO World Health Assembly in 2001. This approach to disability was subsequently incorporated into the CRPD. The ICF thus provides the current international standard for describing disability in public policy, health systems, education, labor, and social protection.

## LITERATURE REVIEW

Disability is complex, and so are interventions designed to optimize functioning. There are many types of rehabilitation interventions (Figure 1), which, depending on the individual case, need to be combined to achieve optimal results.



**Figure 1: Rehabilitation is complex and multidimensional<sup>1</sup>**

<sup>1</sup> World Health Organization (2017) *Rehabilitation 2030: A Call for Action*. Geneva: WHO. Available at: <https://www.who.int/initiatives/rehabilitation-2030>

The figure presents rehabilitation as a holistic, person-centered system that integrates medical, physical, occupational, and social-educational interventions to optimize functioning and improve the quality of life of persons with disabilities. Medical rehabilitation addresses health conditions, while physical rehabilitation restores mobility and functional capacity. Overall, the model highlights that effective rehabilitation requires coordinated, multidisciplinary services delivered across the continuum of care (World Health Organization, 2023; Cieza et al., 2020).

## RESEARCH METHODOLOGY

To illustrate and make the concept of holistic rehabilitation more comprehensible, three hypothetical, generalized cases/examples of service (rehabilitation) plans have been developed:

- A 55-year-old male farmer who has suffered a stroke.
- A 10-year-old boy with moderate autism spectrum disorder (ASD), educated at home.

Each of the hypothetical plans follows a continuum of care comprising the following phases: (1) acute and early post-acute rehabilitation (early mobilization, prevention of complications, initial functional training, and psychological support); (2) post-acute and intensive rehabilitation (comprehensive interdisciplinary programs, goal-oriented therapy, and the introduction of assistive technology); and (3) long-term support services provided at home or at the community level (maintenance, adaptation to changing needs, vocational and social integration, follow-up, and reassessment). Each phase contains a set or range of interventions.

It should be kept in mind that these are hypothetical cases presenting ideal, i.e., optimal, service/rehabilitation pathways and plans. In practice, the implementation of such comprehensive plans may vary depending on available resources and circumstances, and specific services may be provided according to individual needs and existing capacities. The comprehensiveness of any real-life plan would depend on many factors, including: (1) first and foremost, the country's income level. Empirical evidence indicates that a country's GDP per capita is associated with its capacity to invest in health, education, and social protection and, *ceteris paribus*, with the level of development of these sectors. Thus, rehabilitation systems may appropriately differ across countries according to their socioeconomic conditions and available resources. (2) The state of health-sector development, its coverage and affordability, including the state of rehabilitation medicine. (3) The range of programs, generosity, and coverage of social protection. (4) Education services and special educational support available to children with disabilities. (5) The level of administrative and institutional capacity, as well as collaboration and coordination among various sectors. (6) Public provision and financing of rehabilitation services. (7) Political commitment and leadership in promoting human development and inclusion.

Table 1

Hypothetical case one – Rehabilitation and service plan for a 55-year-old farmer, male, who has had a stroke<sup>2</sup>

| <b>Case 1: 55-year-old farmer, male, stroke</b><br>Service (rehabilitation) plan structured across phases: Acute → PostAcute →<br>Community → LongTerm Functioning & Participation.                                                                                                                                                         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Acute phase (hospital, days 0–7)</b><br>Objectives: Stabilize medical status, prevent complications, begin early rehabilitation.                                                                                                                                                                                                         |
| <b>Medical management</b> <ul style="list-style-type: none"> <li>• Stabilize blood pressure, glucose, and oxygenation.</li> <li>• Conduct neuroimaging and define stroke type/extent.</li> <li>• Begin anticoagulation or antiplatelet therapy as appropriate.</li> </ul>                                                                   |
| <b>Early rehabilitation (within 24–48 hours if medically stable)</b> <ul style="list-style-type: none"> <li>• Bed mobility training.</li> <li>• Assisted sitting, standing, and early gait practice.</li> <li>• Passive and active range of motion to prevent contractures.</li> <li>• Swallow assessment and safe feeding plan.</li> </ul> |
| <b>Complication prevention</b> <ul style="list-style-type: none"> <li>• Pressure sore prevention (turning schedule).</li> <li>• Early chest physiotherapy if needed.</li> <li>• Deep vein thrombosis prevention.</li> </ul>                                                                                                                 |

<sup>2</sup> Source: Compiled based on internet search and with help from AI.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Family orientation</b> <ul style="list-style-type: none"> <li>Educate family on expected recovery and importance of early rehab.</li> </ul>                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Early postacute phase (inpatient rehabilitation hospital/center, weeks 1–6)</b><br>Objectives: Restore basic functioning, improve strength/mobility, begin communication and cognitive rehabilitation.                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Physical and occupational therapy</b> <ul style="list-style-type: none"> <li>Gait and balance training (walker/cane as needed).</li> <li>Upper limb functional retraining (reach, grasp, carry).</li> <li>Task-specific training for farm-relevant activities (lifting small objects, carrying buckets, climbing short steps).</li> <li>Activities of daily living (dressing, washing, feeding, toileting).</li> <li>Postural control and core strength for future farming tasks.</li> </ul> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Speech &amp; language therapy</b> <ul style="list-style-type: none"> <li>Rehabilitation of communication (aphasia, dysarthria).</li> <li>Swallowing exercises to restore safe eating.</li> </ul>                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Neurological rehabilitation</b> <ul style="list-style-type: none"> <li>Cognitive training: attention, sequencing, memory.</li> <li>Neglect training if present (visuospatial therapies).</li> <li>Spasticity management (stretching, splints, medications).</li> </ul>                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Assistive technology & equipment                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <ul style="list-style-type: none"> <li>Temporary assistive devices (walker, special utensils).</li> <li>Training in safe transfers and mobility.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                       |
| Psychosocial support                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <ul style="list-style-type: none"> <li>Counseling to support adjustment.</li> <li>Education about stroke risk factor management.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Transitional phase (home adaptations, community level rehabilitation services, weeks 6–12)</b><br>Objectives: Ensure safe return home, support reintegration into daily life, continue functional recovery.                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Home modifications                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <ul style="list-style-type: none"> <li>Safe pathways in the yard (especially important on farms).</li> <li>Handrails on steps.</li> <li>Raised toilet seat or bathroom adaptations.</li> <li>Adaptive methods for household chores.</li> </ul>                                                                                                                                                                                                                                                                                    |
| Rehabilitation services provided at the community level                                                                                                                                                                                                                                                                                                                                                                                                                                         | <ul style="list-style-type: none"> <li>Regular homebased PT/OT sessions.</li> <li>Mobile speech therapy if needed.</li> <li>Training caregivers in safe handling and mobility support.</li> </ul>                                                                                                                                                                                                                                                                                                                                 |
| (Re)learning                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <ul style="list-style-type: none"> <li>Relearning reading and writing tasks needed for farm operations (recordkeeping, market lists, irrigation calendars).</li> <li>Introduction to memory aids (visual schedules, phone reminders).</li> </ul>                                                                                                                                                                                                                                                                                  |
| Occupational rehabilitation                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <ul style="list-style-type: none"> <li>Breaking farming activities into safe subtasks.</li> <li>Energy conservation techniques: pacing, planned rest breaks.</li> <li>Ergonomic adjustments (lighter tools, longer handles, carts instead of carrying loads).</li> </ul>                                                                                                                                                                                                                                                          |
| <b>Social life participation &amp; return to work phase (months 3–12)</b><br>Objectives: Restore social and economic participation, support gradual and safe return to farming.                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Vocational rehabilitation                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <ul style="list-style-type: none"> <li>Functional capacity evaluation based on farm work demands.</li> <li>Develop a graded return to work plan:               <ul style="list-style-type: none"> <li>Week 1–2: light farm tasks (sorting produce, feeding small animals).</li> <li>Week 3–4: supervised walking around the farm; light lifting ≤3–5 kg.</li> <li>Month 2–3: partial field work with breaks.</li> </ul> </li> <li>Collaborate with family to redistribute heavy tasks (plowing, carrying heavy loads).</li> </ul> |
| Psychosocial rehabilitation                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <ul style="list-style-type: none"> <li>Peer support groups for stroke survivors.</li> <li>Counseling to address role changes and stress.</li> <li>Community reintegration: attending markets, social gatherings.</li> </ul>                                                                                                                                                                                                                                                                                                       |
| Sensory rehabilitation                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <ul style="list-style-type: none"> <li>Vision therapy if stroke affects visual scanning (important for field navigation, equipment safety).</li> <li>Hearing assessment and devices if needed.</li> </ul>                                                                                                                                                                                                                                                                                                                         |

|                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Rehabilitation for chronic conditions (NCDs)                                                                                                                                                                                                                                              | <ul style="list-style-type: none"> <li>• Hypertension management (essential to prevent another stroke).</li> <li>• Diabetes or cholesterol management.</li> <li>• Physical activity plan tailored to farmbased movement.</li> </ul> |
| <b>Longterm functioning &amp; independence (year 1–2 and beyond)</b><br>Objectives: Sustain recovery, prevent secondary complications, support lifelong participation.                                                                                                                    |                                                                                                                                                                                                                                     |
| Ongoing therapy (as needed)                                                                                                                                                                                                                                                               | <ul style="list-style-type: none"> <li>• Strength and conditioning program.</li> <li>• Periodic gait and balance reassessment.</li> <li>• Fine motor skill exercises for tool handling.</li> </ul>                                  |
| Periodic vocational review                                                                                                                                                                                                                                                                | <ul style="list-style-type: none"> <li>• Adjust farming tasks as capacity evolves.</li> <li>• Introduce adaptive farm equipment (wheeled carts, powered tools).</li> </ul>                                                          |
| Health maintenance                                                                                                                                                                                                                                                                        | <ul style="list-style-type: none"> <li>• Secondary prevention: BP checks, cholesterol, glucose.</li> <li>• Healthy diet counseling.</li> <li>• Smoking/alcohol cessation support if relevant.</li> </ul>                            |
| <b>Optional addons (If needed)</b>                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                     |
| <ul style="list-style-type: none"> <li>• Transportation assistance for travel to therapy.</li> <li>• Assistive communication apps for persistent speech issues.</li> <li>• Homebased telerehabilitation if remote services are needed.</li> <li>• Caregiver training programs.</li> </ul> |                                                                                                                                                                                                                                     |

Table 2

Hypothetical case three – Rehabilitation and service plan for a 10-year-old boy with moderate autism spectrum disorder (ASD), who is educated at home<sup>3</sup>

|                                                                                                                                                                                              |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>Rehabilitation action plan for a 10yearold child with moderate autism spectrum disorder (ASD), educated at home:</b>                                                                      |  |
| <b>1. Initial Phase: Assessment &amp; Stabilization (Weeks 0–4)</b><br>Objectives: Understand the child's functioning level, learning profile, sensory needs, and dailylife skills.          |  |
| <b>A. Comprehensive Multidisciplinary Assessment:</b> Developmental history review<br>Cognitive assessment, Functioning (ICF) assessment, Educational assessment, Sensory profile assessment |  |
| <b>B. Behavior &amp; safety assessment</b>                                                                                                                                                   |  |
| Daily behavior logging                                                                                                                                                                       |  |
| Safety check                                                                                                                                                                                 |  |
| <b>Early Rehabilitation Phase (Months 1–3)</b><br>Objectives: Build communication, structure the homelearning environment, develop dailyliving skills, reduce sensory distress.              |  |
| <b>A. Speech &amp; Communication Therapy;</b> Expand expressive communication, Improve pragmatic language skills                                                                             |  |
| <b>B. Occupational Therapy (OT);</b> Fine motor training, Self care independence, Sensory integration                                                                                        |  |
| <b>C. Behavior Therapy (ABA or Structured Behavioral Programs)</b>                                                                                                                           |  |
| Positive behavior reinforcement                                                                                                                                                              |  |
| Meltdown reduction strategy                                                                                                                                                                  |  |
| <b>D. Parent/Caregiver Training</b>                                                                                                                                                          |  |
| Modeling communication prompts                                                                                                                                                               |  |
| Consistent routine creation                                                                                                                                                                  |  |
| <b>Academic Rehabilitation &amp; HomeBased Education (Months 3–9)</b><br>Objectives: Ensure the child learns effectively at home using personalized educational methods.                     |  |
| <b>A. Structured HomeEducation Program</b>                                                                                                                                                   |  |
| Individual Learning Plan (ILP)                                                                                                                                                               |  |
| Multisensory learning                                                                                                                                                                        |  |
| <b>B. Specialized Educational Interventions</b>                                                                                                                                              |  |
| Reading interventions                                                                                                                                                                        |  |

3 Source: Compiled based on an internet search and with the assistance of AI.

|                                                                                                 |
|-------------------------------------------------------------------------------------------------|
| Math interventions                                                                              |
| Writing support                                                                                 |
| <b>C. Technology-Assisted Learning</b>                                                          |
| Educational apps                                                                                |
| Safe supervised screen use                                                                      |
| <b>Social Functioning &amp; Community Participation (Months 6–18)</b>                           |
| Objectives: Improve social interaction, communication, emotional regulation, and participation. |
| <b>A. Social Skills Training</b>                                                                |
| Structured play sessions                                                                        |
| Emotion identification                                                                          |
| <b>B. Community Exposure</b>                                                                    |
| Supported community outings                                                                     |
| Participation in structured activities                                                          |
| <b>C. Peer Interaction Support</b>                                                              |
| Virtual social groups (if overwhelmed in-person)                                                |
| <b>Daily Living &amp; Independence (Months 6–24)</b>                                            |
| Objectives: Support growing independence at home and in the community.                          |
| <b>A. Independent Living Skills: Home-chores practice, Food preparation skills</b>              |
| <b>B. Executive Function Training: Planning and Sequencing, Working memory practice</b>         |
| <b>C. Safety Training; Street safety drills, Online safety lessons</b>                          |
| <b>LongTerm Goals &amp; Transition Support (Year 2 and beyond)</b>                              |
| Objectives: Build long-term functioning and prepare for adolescence.                            |
| <b>A. Transition Planning</b>                                                                   |
| Expanding daily responsibilities                                                                |
| Prevocational skills                                                                            |
| <b>B. Periodic Reevaluation</b>                                                                 |
| Annual cognitive and functional assessments                                                     |
| <b>C. Mental Health Support</b>                                                                 |
| Psychological counseling                                                                        |
| <b>Crisis &amp; Behavior Management Plan</b>                                                    |
| Because the child is homeeducated and lacks peer exposure, proactive planning is essential.     |
| Calming corner setup                                                                            |
| Meltdown protocol                                                                               |
| Emergency contacts                                                                              |

All three hypothetical cases illustrate that rehabilitation is a continuum and encompasses a range of services provided by various government sectors. Medical rehabilitation constitutes one important component of this broader system. The integration of other components of rehabilitation can further strengthen the impact of medical rehabilitation on functioning, particularly on activities and participation.

## ANALYSIS AND RESULTS

Each component of rehabilitation encompasses a range of services. These include: Physical therapy: focused on improving mobility, strength, and endurance through targeted exercises and therapeutic modalities. Physical therapists work closely with individuals to develop personalized exercise regimens that address specific impairments. Occupational therapy<sup>4</sup>: aimed at enhancing the ability to perform daily activities. Occupational therapists may suggest adaptive techniques, recommend assistive devices, and provide training in self-care,

<sup>4</sup> Occupational therapy: A definition frequently found on the internet is: "To develop, restore, or improve the required skills, habits, and roles for independent, meaningful, and productive living." In the language of the ICF, medical rehabilitation is focused on restoring body functions (intrinsic body capacity), while occupational rehabilitation is focused on performance: restoring and improving the ability to perform activities and participate. Occupational rehabilitation, however, is also often used in the context of vocational rehabilitation.

work, and leisure activities. Speech and language therapy: for individuals with communication problems, speech therapists provide intervention strategies to improve speech clarity, language comprehension, and alternative communication methods. Psychosocial support: psychological support is an integral part of rehabilitation. Counselors may help individuals cope with the emotional impact of disability. Cognitive Behavioral Therapy (CBT) can be particularly effective in addressing anxiety, depression, or adjustment issues that may arise following the onset of a disability. This therapeutic approach equips individuals with coping strategies and resilience-building techniques. Community engagement and social inclusion: rehabilitation often includes training to enhance social skills, helping individuals navigate interpersonal relationships and community interactions effectively. Vocational training can foster a sense of purpose and belonging. Rehabilitation programs may also partner with local businesses to create employment opportunities.

Table 4 below highlights that Physical and Rehabilitation Medicine (PRM) services provide a comprehensive, multidisciplinary approach to improving patients' functioning and quality of life. These services integrate diagnosis, medical management, rehabilitation planning, prevention of complications, and assistive technologies to support the long-term recovery and independence of persons with disabilities.

Table 4  
Physical & Rehabilitation Medicine (PRM) services<sup>5</sup>

| Service Category                | Key Functions                                                                         | Examples                                                                                                      |
|---------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| <b>Medical Diagnosis</b>        | Identify the causes of functional limitations (e.g., nerve injury, spasticity, pain). | Electrodiagnostic testing (EMG/NCS), musculoskeletal ultrasound, imaging review.                              |
| <b>Medical Management</b>       | Prescribe treatments for complex impairments.                                         | Spasticity management (e.g., botulinum toxin injections), pain medication, prosthetic/orthotic prescriptions. |
| <b>Rehabilitation Planning</b>  | Develop comprehensive, person-centered rehabilitation plans.                          | ICF-based goal setting, team coordination, outcome tracking.                                                  |
| <b>Procedural Interventions</b> | Perform minimally invasive procedures.                                                | Joint/soft-tissue injections, nerve blocks, intrathecal baclofen pump management.                             |
| <b>Secondary Prevention</b>     | Address complications (e.g., contractures, osteoporosis).                             | Pressure sore risk assessment, autonomic dysreflexia management (SCI), DVT prophylaxis.                       |
| <b>Technology Prescription</b>  | Recommend advanced assistive technologies.                                            | Wheelchair seating clinics, bionic limb selection, neurostimulation devices.                                  |

## CONCLUSION AND SUGGESTIONS

Uzbekistan stands at a pivotal stage in the evolution of its disability and rehabilitation system. The country has already taken significant steps toward modernizing assessment, expanding services, and strengthening institutional capacity. The introduction of WHODAS, the expansion of INSON centers, the deployment of mahalla social workers, and the digitalization of social protection provide a strong foundation for the next stage of reform.

This report demonstrates that a functioning-based approach—grounded in the ICF and aligned with the CRPD—offers a coherent, equitable, and efficient framework for disability determination and service planning. International experience indicates that systems built around functioning can contribute to improved outcomes, greater service integration, and more effective resource allocation. Uzbekistan's own WHODAS dataset, covering several interviews, provides evidence that functioning can be measured reliably and used to guide eligibility. Implementing this system can build substantially on existing data, institutions, and digital infrastructure. The key tasks ahead involve harmonizing information systems, standardizing the benefit catalogue, strengthening early rehabilitation within the health system and community-based rehabilitation, and ensuring that WHODAS is administered consistently and face-to-face in all cases.

By adopting a functioning-based eligibility system, Uzbekistan can further strengthen the development of a modern disability and rehabilitation system in the region—a system that promotes independence, participation, and dignity for persons with disabilities while ensuring that public resources are used effectively and equitably. This reform is technically feasible, socially justified, economically sound, and fully aligned with Uzbekistan's long-term development goals.

<sup>5</sup> Author's work

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