

Situation assessment of rehabilitation in Uzbekistan



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Abstract

This report presents the results of the Systematic Assessment of Rehabilitation Services conducted in Uzbekistan in February and March 2023. Commissioned by the Ministry of Health, the assessment was supported by the WHO Regional Office for Europe and the WHO Country Office in Uzbekistan. The aim was to evaluate the state of rehabilitation services and identify priorities for strengthening integration with health and social care systems, including assistive technology. The assessment included document reviews, interviews with key stakeholders, and site visits to health and social care facilities. Findings show increasing political commitment to rehabilitation, but challenges remain in governance, workforce development, financing, and access to services. The report outlines key strategic actions to advance rehabilitation, including the appointment of a national focal point, development of a national strategy, integration of rehabilitation into primary health care, workforce training, and expansion of access to assistive technology. These actions aim to support the Government in creating a more inclusive and responsive health system.

Keywords

REHABILITATION; PERSONS WITH DISABILITIES; UNIVERSAL HEALTH CARE; WORLD HEALTH ORGANIZATION.

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Abbreviations

ADB	Asian Development Bank
AP	assistive product
AT	assistive technology
BBP	basic benefits package
COVID-19	coronavirus disease
DMSS	Department for organizing Medical and Social Services
FDP	family doctor point
GDP	gross domestic product
IRP	individual rehabilitation programme
IT	information technology
ISPO	International Society for Prosthetics and Orthotics
LFK	“treatment physical culture” (abbreviation from Russian “ЛФК: Лечебная Физкультура”)
LLC	Limited Liability Company
MMP	Makhalla medical point
MSEC	Medical-Social Expert Commission
NCDs	noncommunicable diseases
OOP	out-of-pocket
PHC	primary health care
RMM	Rehabilitation Maturity Model
RSSPMC	Republican Specialized Scientific and Practical Medical Centre
SDGs	Sustainable Development Goals
SHIF	State Health Insurance Fund
STARS	Systematic Assessment of Rehabilitation Situation
SWOT	strengths, weaknesses, opportunities and threats
TIPME	Tashkent Institute for Postgraduate Medical Education
TRIC	Template for Rehabilitation Information Collection
UNCRPD	United Nations Convention on the Rights of Persons with Disabilities
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VKK	Medical Consultative Commission
VTEK	Medical Labour Expert Commission

Executive summary

The rehabilitation situation in Uzbekistan¹ is evolving, supported by various donors, development agencies and a strong commitment to investment by the Uzbek Government. Rehabilitation for people with disabilities is advancing, through the country's existing rehabilitation centres, and individual initiatives and pockets of excellence stand as evidence of health system achievements in the rehabilitation field.

While the country retains many Soviet-era legacy systems and terminology in the rehabilitation sector, it is also investing in and using contemporary approaches in rehabilitation treatment interventions.

WHO describes rehabilitation as a set of interventions designed to optimize functioning and reduce disability in individuals with health conditions in interaction with their environment. Rehabilitation encompasses provision of assistive products (APs) and should be available to anyone who needs it. Annex A provides an overview of rehabilitation as background and supporting information to this report.

At the request of the Ministry of Health of Uzbekistan, the WHO Regional Office for Europe and the WHO Country Office in Uzbekistan provided technical assistance for an in-country assessment of rehabilitation from 27 February to 17 March 2023.

The Systematic Assessment of Rehabilitation Situation (STARS) uses standard tools developed by WHO and is structured around the building blocks for health system strengthening, which include leadership and governance, financing, health workforce, health information systems, service delivery, and medicines and technology (see Annex B).

During the STARS assessment, the team engaged over 70 stakeholders in and around Tashkent City and visited 13 rehabilitation service provision sites (additional details are provided in Section 1.2). Key findings and recommendations for the assessment are provided in the subsections of this Executive summary, and conclusions and action points can be found in Chapter 12.

This report reflects the rehabilitation situation in Uzbekistan as of 1 March 2023.

Key findings – strengths

From the level of the President to that of individual practitioners, Uzbekistan has invested in many different aspects of the rehabilitation sector, including dedicated funding, contemporary treatment standards, and engaging with regional partners to advance learning. Noteworthy advances in various areas are outlined below, forming a picture of a forward-looking foundation from which to develop rehabilitation and assistive technology (AT) in Uzbekistan.

Rehabilitation governance

Uzbekistan ratified the United Nations Convention on the Rights of Persons with Disabilities in June 2021 and created an interagency/interdepartmental working group on disability in December 2021. A Presidential Resolution on rehabilitation is being developed, and a list of 18 categories of APs has been approved for individuals with disabilities.

¹ Referred to throughout this report as Uzbekistan.

Rehabilitation financing

Uzbekistan piloted its basic benefits package (BBP) in Syrdarya Region and conducted learning visits to Ukraine and Kyrgyzstan; as a result, the BBP is being revised to include rehabilitation for specific conditions. Currently the BBP provides services free of charge for people with disabilities and covers physiotherapy services at primary health care (PHC) facilities for anyone who needs them. Uzbekistan has a dedicated budget for APs and national programmes for different aspects of rehabilitation.

Rehabilitation human resources and infrastructure

Uzbekistan has a robust nursing workforce; this creates opportunities to engage patronage nurses in an expanded role to offer basic rehabilitation support at community level. For rehabilitation infrastructure, multiple guidance documents detail the minimum standards; in 2023, US\$ 9 million was dedicated to equipping physiotherapy departments.

Rehabilitation information

Data digitization is emerging in Uzbekistan. The social care system is leading these efforts by expanding data management on people with disabilities, as well as electronic referral processes. IT-Med is being developed to digitize and expand the country's health information system, including data on rehabilitation.

Rehabilitation service accessibility and quality

Physiotherapy should be available at all PHC levels, which implicates over 2000 facilities. The social care system under the Ministry of Employment and Poverty Reduction² manages over 50 facilities for people with disabilities and vulnerable populations, all of which provide some level of rehabilitation. Some treatment interventions in Uzbekistan provide models of excellence, receiving commendations for their work (see Section 9.2 for details).

Key findings – challenges

Residual Soviet-era systems and practices can create obstacles to developing the rehabilitation sector in Uzbekistan. Examples include rehabilitation-related terminology and techniques that have not kept pace with contemporary norms, along with the prevalence of passive treatment techniques³ instead of focused attention on functioning. This historical context – together with present-day findings from this assessment – form the background for the key challenges and potential implications presented in the subsections that follow.

² The STARS report captures the rehabilitation situation as of 1 March 2023. The Agency for Social Protection was created as of 1 June 2023 (by Presidential Decree UP 82 – see Annex C for details of the relevant legislation) and this body will assume most of the roles of the Ministry of Employment and Poverty Reduction that have been outlined in this document.

³ Passive treatment implies a lack of participation by the individual receiving the therapeutic intervention.

Governance

1. Rehabilitation and AT coordination in Uzbekistan is neither centralized nor systematic. The Ministry of Employment and Poverty Reduction has a department dedicated to disability and rehabilitation (the Department for organizing Medical and Social Services) but the Ministry of Health has neither a specific department, nor a rehabilitation specialist. Without a dedicated focal point on rehabilitation and AT, different ministerial departments may not be in sync with each other, and external collaboration may suffer due to lack of consistent representation.
2. There is no current strategy or action plan on rehabilitation and AT. While several Presidential resolutions and decrees support rehabilitation and AT (see Annex C), no strategy or action plan exists to support system-level change. Without these strategic planning elements, the sector may not progress at a consistent pace and attempts to address the gaps identified through this assessment may lack cohesion and a clear direction.

Financing

3. Financing for rehabilitation and AT is limited within the BBP. The BBP covers physiotherapy services at PHC level, but rehabilitation is not yet included in other packages of care. The BBP does not cover mobility aids or self-care products, and a disability determination is required to receive APs free of charge. The restricted financing for rehabilitation and APs may create gaps in the continuum of care and negatively affect people's overall health and functioning.
4. No standardized approach exists to consolidate financing information on rehabilitation. Although the State provides funding for AT and rehabilitation across different budget lines and national programmes, there is no clear formula to determine which topics (services, staffing, structures) are included in the equation. Without this, it is difficult to have consistent and replicable measures to reflect trends in rehabilitation financing.

Human resources

5. Rehabilitation workforce terminology is incomplete and not aligned with contemporary standards. The terminology used to describe the rehabilitation workforce is linked to the Ministry of Justice's Nomenclature of types of medical specializations (see Annex D). The list lacks many of the rehabilitation professions (e.g. occupational therapist, speech and language therapist) and uses terms that are not aligned with contemporary standards (treatment physical culture, balneology).
6. The multidisciplinary/interdisciplinary rehabilitation workforce is incomplete. A variety of rehabilitation-related specializations exist for medical doctors and nurses. However, there is no in-country education for occupational therapists, prosthetists or orthotists. Speech and language therapists (logopedists) focus largely on speech development in children. The absence of an interdisciplinary workforce reduces the potential for maximizing treatment outcomes, such as those seen in systems with highly integrated care.
7. Few professional associations exist, and a platform for professional exchange on rehabilitation is missing. There are no professional associations representing the rehabilitation workforce in Uzbekistan, as very few of these independent professions (or professionals) exist. Without a platform for experience-sharing, individuals may remain isolated. Exposure to international professional associations and/or developing an informal platform for exchange can create opportunities for experience- and information-sharing, contribute to improving motivation, and support the overall development of the rehabilitation sector.

8. The physiotherapy curriculum in postgraduate education is outdated. Contemporary rehabilitation emphasizes functioning, while the current postgraduate training for doctors and nurses in this field focuses on what is termed physiotherapy (literally: physical therapy), represented by the application of various thermal and electric modalities. Although these interventions have value at some level, they do not, in themselves, improve function. Unless (or until) the training and education on rehabilitation aligns with contemporary standards, Uzbekistan will not succeed in delivering rehabilitation aligned with current international norms.

Information

9. There is a lack of consistent, consolidated information related to rehabilitation. The lack of uniform and centralized information on (i) the rehabilitation workforce and (ii) the availability and use of rehabilitation services limits the ability to establish a clear baseline from which stakeholders can develop strategic plans. Without updated and publicly available information on rehabilitation, including service mapping, the public will not be aware of opportunities, which creates a barrier to accessing care.
10. Information management on rehabilitation is variable across and within facilities. Currently, mixed practices are employed of electronic and paper-based data collection and management. In addition, there are very few standardized tools used across rehabilitation facilities – especially between the health and social care systems. In the absence of standardized tools, it is difficult to compare or share information at facility level, including information directly related to patient care. This creates barriers to understanding the overall system of service provision, as well as obstacles to communication, referrals and the continuum of care.
11. Limited evidence is available on the use of rehabilitation-related research. Although the Ministry of Innovative Development provides state funding for research, the funding for rehabilitation is limited. Research is essential to determine evidence-based practices; without in-country research on rehabilitation, scientific practices will remain dependent on experts and experiences reported from outside Uzbekistan.

Rehabilitation services

12. Rehabilitation for individuals at community level is limited. Although physiotherapy is provided within PHC settings, the lack of opportunities for primary- and community-level care for individuals that need rehabilitation reduces follow-up support for rehabilitation provided in inpatient settings and limits the opportunity to treat mild functional limitations outside the secondary and tertiary care levels. This creates a gap in the continuum of care and can result in setbacks from initial rehabilitation gains.
13. Understanding of rehabilitation services is inconsistent, and functional outcome measurements are not yet standard practice. Rehabilitation is not yet well understood within health facilities and among referring doctors. Similarly, the lack of data collected on the outcomes of rehabilitation prevents a clear understanding of the effectiveness and utility of rehabilitation in restoring or maintaining function. Without a contemporary understanding of rehabilitation as a health service for anyone who needs it – and without making explicit and emphasizing the correlation with functioning – rehabilitation will remain underdeveloped and underused.

14. Referral mechanisms for follow-up care are informal and facility dependent. Although referrals are generally well developed – as an entry point into the system, initiating health service provision and influencing care coverage under the BBP – there are few standards for referral upon discharge from care facilities. Without a systematic process for follow-up care, it is difficult to monitor long-term outcomes or recovery status.
15. APs are only available in selected facilities and only for people with disabilities. This practice limits access to these services, thus reducing opportunities for people to optimize functioning by using APs. Unless (or until) APs are available to anyone who needs them, people in need of such assistance will remain dependent on others to help with basic activities of daily living.

Key action points

To address some of the challenges that Uzbekistan faces related to rehabilitation and AT, this report outlines key action points, presented according to the building blocks for health system strengthening. These suggestions provide opportunities for future engagement and could help to establish a foundation from which to structure a national rehabilitation strategic plan.

Governance

1. Consolidate leadership, coordination and governance related to rehabilitation and AT

Recommended actions for the Ministry of Health:

- 1.1. formally identifies a rehabilitation focal point, who can coordinate work on rehabilitation and AT within the Ministry, engage in interministerial collaboration, and represent the Ministry in this sector; and
- 1.2. develops a national action plan on rehabilitation and AT (2024–2026) that involves and includes all relevant ministries, departments and stakeholders.
2. Promote and facilitate interministerial cooperation on rehabilitation and AT

Recommended actions for the Government of Uzbekistan:

- 2.1. launches an interministerial working group on rehabilitation (including AT) to address holistically the situation within the country, as referenced in various strategic documents across different sectors.

Financing

3. Further develop and streamline financing mechanisms for rehabilitation and AT

Recommended actions for the Ministry of Finance, Ministry of Health and relevant authorities and stakeholders:

- 3.1. identify specific budget lines to be referenced and included in a formula to calculate government financing for rehabilitation and AT; and
- 3.2. review the existing BBP related to physiotherapy and rehabilitation and AT to determine the necessary adjustments (namely, ensuring coverage at secondary and tertiary levels, expanding the list of conditions covered by the BBP, and considering piloting coverage for basic APs at PHC level).

Human resources

4. Update information on rehabilitation and rehabilitation workforce terminology

Recommended actions for the Ministry of Health, Ministry of Employment and Poverty Reduction, Ministry of Justice and other relevant stakeholders:

- 4.1. review and amend existing rehabilitation-related terminology within the health and care workforce to reflect contemporary international standards; and
- 4.2. integrate these amended terms across all education and training programmes and across all relevant legal documents.

5. Expand and strengthen Uzbekistan's rehabilitation workforce

Recommended actions for the Ministry of Health, Ministry of Higher Education, Science and Innovation, WHO and relevant educational institutions and stakeholders:

- 5.1. consider actions for task-shifting – for example, building the capacity of current nursing staff to develop skills in the areas of physical therapy, occupational therapy and speech and language therapy;
- 5.2. capitalize on opportunities to revise existing curricula (pre-service and postgraduate education) to incorporate contemporary evidence-based practices on rehabilitation; and
- 5.3. explore opportunities to establish in-country education programmes for prosthetics and orthotics (e.g. International Society of Prosthetics and Orthotics (ISPO)-recognized Human Study blended learning programme).

6. Support information-sharing and professional development for the rehabilitation workforce

Recommended actions for the Ministry of Health and relevant stakeholders, together with WHO:

- 6.1. conduct exchange visits between neighbouring countries to observe and share information on best practices in rehabilitation service delivery (including AT), education programmes, and other relevant rehabilitation topics; and
- 6.2. create linkages with relevant international bodies (e.g. ISPO, World Physiotherapy, World Federation of Occupational Therapists) to identify potential synergies and areas of engagement.

Information

7. Increase awareness on contemporary rehabilitation and AT

Recommended actions for the Ministry of Health, Ministry of Employment and Poverty Reduction and other relevant stakeholders:

- 7.1. consolidate information on availability of services (service mapping) and make this updated information available on a public platform to help inform the public about care opportunities; and
- 7.2. take the necessary steps to promote understanding of rehabilitation (namely, that it encompasses more than physiotherapy/physical therapy and massage) and its role as an essential health service for the whole population (not just for disabled people).

8. Develop standards on rehabilitation-related data collection and information management

Recommended actions for the Ministry of Health and other relevant stakeholders:

- 8.1. standardize rehabilitation assessment tools within and across ministries and agencies; and
- 8.2. review WHO's Routine Health Information Systems Toolkit and identify potential indicators that can be used in routine health system reporting templates.

9. Encourage national-level data collection on disability and functioning

Recommended actions for the Ministry of Health and other relevant stakeholders:

- 9.1. take steps to incorporate questions on disability or functioning into the planned 2024 census; and
- 9.2. consider conducting a Model Disability Survey to identify actual rehabilitation needs in the country.

Rehabilitation services

10. Promote timely and effective rehabilitation interventions across the continuum of health care for all populations in need

Recommended actions for the Ministry of Health and other relevant stakeholders:

- 10.1. increase access to rehabilitation at community level through greater engagement of medical teams (known as brigades in Uzbekistan) and/or patronage nurses;
- 10.2. strengthen referral pathways within and between ministries and agencies to reduce or avoid disruption in care after discharge from inpatient settings;
- 10.3. develop linkages and alignment with PHC reform initiatives under way in Uzbekistan to include opportunities for demonstration projects that integrate rehabilitation and AT into the scope of services in PHC;
- 10.4. introduce WHO's Package of Interventions for Rehabilitation (released in mid-2023), or use other relevant sources to strengthen treatment protocols using evidence-based practices; and
- 10.5. develop treatment standards to incorporate the use of functional outcome measures in rehabilitation.

Emergency preparedness and response

11. Integrate rehabilitation considerations and leadership into health emergency planning and management

Recommended actions for the Ministry of Health, Ministry of Emergency Situations and other relevant stakeholders:

11.1. ensure that rehabilitation is included in national and subnational health and emergency disaster preparedness and risk-management policies, strategies and legislation, as part of the health system response, including reflecting on lessons learned from previous relevant situations (such as the coronavirus disease pandemic, various natural disasters, and conflict situations);

11.2. develop rehabilitation services mapping, together with modified referral pathways for emergencies; and

11.3. implement stockpiling of rehabilitation equipment, such as APs, to meet anticipated surges in emergency procurement needs, including identifying supply chains.

1. Background and methodology

1.1. International, regional and national developments in rehabilitation

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

WHO Regional Office for Europe has a five-year programme⁴ to strengthen access to rehabilitation services and assistive products (APs) in the WHO European Region, and has identified eastern Europe, central Asia and the Caucasus as a geopolitical priority – regions which include Uzbekistan.

Within Uzbekistan, the historical and ongoing investments in rehabilitation are largely linked to vulnerable groups and people with disabilities. In June 2021, Uzbekistan ratified the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) and has taken steps to create a national action plan to support the implementation of the UNCRPD.

Specific to health care, in 2020, Uzbekistan introduced medical teams (known as brigades) under the auspices of the Ministry of Health.⁵ These brigades play a vital role in bringing health care closer to the community. The five-person teams are largely staffed by nurses but also include a family doctor. Composition of the brigades is under review to potentially be expanded to include capacity to provide rehabilitation.

Since the mid-2010s there have also been advances within the health system on the treatment of certain conditions using contemporary methods.

- Beginning in late 2014, the Republican Specialized Scientific and Practical Medical Centre (RSSPMC) for Paediatrics of the Ministry of Health began creating the “Uzbek model” of cochlear implantation (see Section 9.2 for details).
- In 2015, the orthopaedic surgeon from the RSSPMC for Traumatology and Orthopaedics travelled to Iowa in the United States of America for training in the Ponseti method for the treatment of clubfoot. This was followed by an in-country seminar in 2017, national training activities and the opening of the Ponseti School in Tashkent in 2021 (see Section 9.2).

Collectively, Uzbekistan's investments and initiatives in health and social care provide a strong foundation from which future development of rehabilitation, including assistive technology (AT), may grow.

⁴ The name of the programme is “Addressing unmet needs for rehabilitation at country level: phase 2”; it is also known as Advancing Rehabilitation 2030 and it runs from October 2022 to September 2027.

⁵ The relevant legislation can be found in Annex C (Presidential Resolution PP 6110; 12 November 2020).

1.2. Methodology

This assessment uses WHO's method and reporting template called the Systematic Assessment of Rehabilitation Situation (STARS) (3). The STARS is not an academic evaluation of rehabilitation, nor is it intended as a detailed analysis. It is a snapshot in time to review the rehabilitation status, identify strengths and gaps, and establish a foundation for creating a national rehabilitation strategic plan.

The STARS' data collection frames rehabilitation around the six health system strengthening building blocks: leadership and governance, information, financing, service delivery, human resources, and medicines and technology. As a subcategory of the medicines and technology building block, the STARS gathers and presents findings on AT.

Data-collection methods include stakeholder interviews, small group meetings related to the health system strengthening building blocks, focus group discussions, and site visits to service providers offering rehabilitation and AT. In addition, a session was conducted to collect and consolidate stakeholder opinion on strengths and weaknesses of rehabilitation and AT with respect to health system strengthening; information from this session is incorporated throughout this report.

Process

In preparation for the in-country assessment, WHO's Template for Rehabilitation Information Collection (TRIC) was shared with the WHO Country Office in Uzbekistan to sensitize key stakeholders on content that would be explored during the STARS. The TRIC questionnaire comprises eight sections, with⁶ over 100 questions(3).

The in-country data collection for the STARS took place from 27 February to 17 March 2023, with most of the process occurring in and around Tashkent. During the three-week period in Uzbekistan, the team visited 13 rehabilitation service provision sites and interacted with over 70 stakeholders. During the same period as the STARS, an additional WHO mission team visited Uzbekistan, focusing on strengthening primary health care (PHC) initiatives. This dual presence provided an opportunity to reinforce the importance of integrating rehabilitation at PHC level.

The STARS schedule can be found in Annex E and contributing stakeholders are listed in Annex F. The final days of the in-country work focused on consolidating and sharing preliminary findings, including scoring the Rehabilitation Maturity Model (RMM), described in Box 1.1 and Chapter 11, and a presentation of the findings. The RMM was reviewed with the Ministry of Health on 16 March and on 17 March key stakeholders attended the preliminary findings presentation.

Box 1.1. The Rehabilitation Maturity Model (RMM)

The RMM is a standard tool used during the STARS process (3), comprising 50 components across seven domains. Each component has illustrative descriptors with accompanying scores that indicate levels of maturity of rehabilitation within the health system. The RMM's purpose is to provide an overview of the performance of different rehabilitation components. This enables comparison across components and domains that can then assist in the identification of priorities and recommendations for strategic planning. Detailed results of the RMM scoring from the STARS in Uzbekistan are provided in Chapter 11 of this report.

Note: STARS - Systematic Assessment of Rehabilitation Situation

⁶ These include six sections focused on the health systems strengthening building blocks, plus additional sections on infrastructure and emergency preparedness.

1.3. Limitations

Ideally, an in-country working group on rehabilitation reviews the TRIC and collates existing information prior to the in-country assessment. Uzbekistan does not have a rehabilitation working group; a consultant worked to collect information on a case-by-case basis from stakeholders. Unfortunately, this information was not consolidated nor translated into English for use in the STARS report.

A second limitation of the in-country visit was that many ministries were in the process of being restructured and it was difficult to engage with ministries other than the Ministry of Health and the Ministry of Employment and Poverty Reduction's Department for organizing Medical and Social Services (DMSS). It is hoped that the review of the draft report may provide opportunities to fill information gaps.

Similarly, it is important to reiterate that the STARS is a snapshot of the rehabilitation situation in Uzbekistan as of 1 March 2023. During the report drafting and review process, there continued to be changes in the country. Most notable is the creation of the Agency for Social Protection on 1 June 2023.⁷ This Agency assumes many of the roles that this report attributes to the Ministry of Employment and Poverty Reduction, the body that provided oversight as of 1 March 2023.

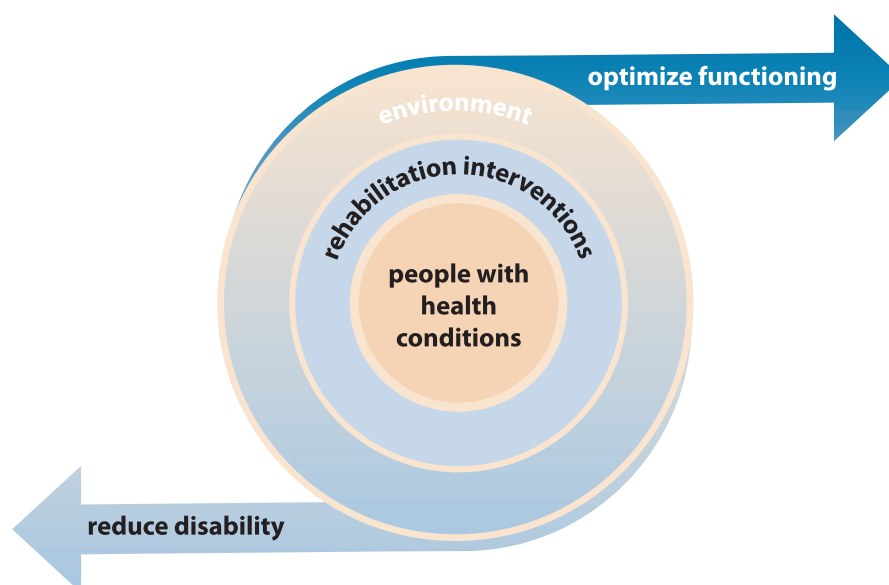
Site visits and interviews for the STARS were conducted primarily in and around Tashkent. Although this is not representative of the entire country, it is believed that some of the best practice models of care are located in the capital and provide a picture of the highest standards in the country.

⁷ The relevant legislation can be found in Annex C (Presidential Decree UP 82; 1 June 2023).

2. Introduction to rehabilitation

WHO describes rehabilitation as a set of interventions designed to optimize functioning and reduce disability in individuals with health conditions in interaction with their environment. Fig. 2.1 represents this visually.

Fig. 2.1. Rehabilitation interventions optimize functioning



Source: Western Pacific Regional Framework on Rehabilitation (4).

The term health condition refers to disease (acute or chronic), disorder, injury or trauma. A health condition may also include other circumstances or factors, such as pregnancy, ageing, stress, congenital anomaly or genetic predisposition.

Rehabilitation interventions are targeted actions to build muscle strength, improve balance, cognitive ability or communication skills. This skill-building can assist people to perform basic activities of daily living, such as moving around, self-care, eating and socializing. Rehabilitation also removes or reduces barriers in society, by modifying people's personal environments (home, school or work) to enable them to move around safely and efficiently.

In many countries, rehabilitation is closely associated with disability and sometimes considered a disability service. However, rehabilitation is a health strategy for the entire population, including people with disability. Rehabilitation is for all people, forming part of the continuum of health care within health systems. It is important that it is integrated into all levels of the health system, including tertiary, secondary, primary and community care settings. Annex A provides additional information on rehabilitation.

3. Health trends and rehabilitation needs in Uzbekistan

3.1. Country context

Uzbekistan declared its independence from the former Soviet Union in 1991. It is a doubly landlocked country, completely surrounded by other landlocked countries; namely, Afghanistan, Kazakhstan, Kyrgyzstan, Tajikistan and Turkmenistan. Uzbekistan is one of the largest countries in central Asia, with a total area of 447 400 km² (5). The country comprises 176 districts that are located across 14 different areas, including the Republic of Karakalpakstan, 12 different regions (*viloyats*), and Tashkent City (see Table 3.1).

Uzbekistan has neighbourhood or local community-level administrative structures called *makhallas*⁸; there are over 9000 of them in Uzbekistan (see Table 3.1). The *makhalla* is the social structure that is the first point of contact for people if they have a problem. Each one has a catchment population of between 2000 and 12 000 people. The *makhalla* structure comprises five people: a chairperson, an assistant to the governor, a representative for the women's committee, one for the youth committee, and a crime prevention/police representative). *Makhallas* have a detailed (electronic) list of all the people in their catchment area and there is a type of informal annual census of these collated *makhalla* data.

According to the Statistics Agency under the President of the Republic of Uzbekistan,⁹ in January 2023 the population of Uzbekistan was 36 024 900, comprising 18 128 600 men and 17 896 300 women (6). Uzbekistan has a youthful age structure, with over 45% of its population aged under 25 years (7) (see Fig. 3.1).

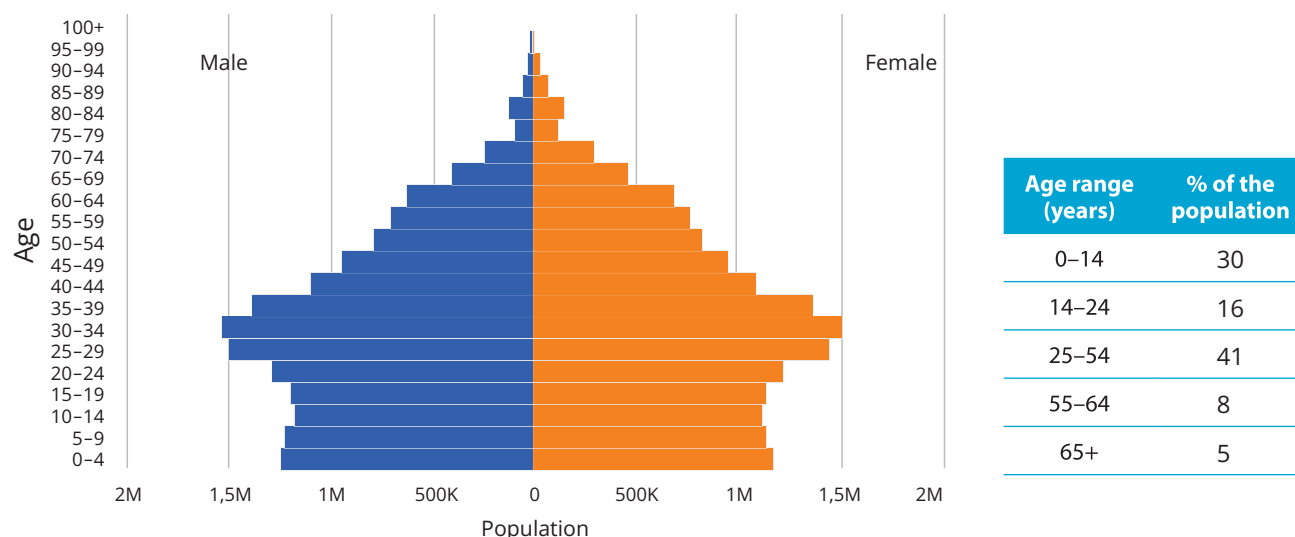
Table 3.1. Administrative areas in Uzbekistan, 2022

Name of the administrative area	Districts	<i>Makhallas</i>
Uzbekistan (whole territory)	176	9 042
Republic of Karakalpakstan	16	405
Andijan region	14	876
Bukhara region	11	540
Fergana region	15	1 028
Jizzakh region	12	285
Kashkardarya region	13	730
Khorezm region	11	497
Navoi region	8	303
Namangan region	13	770
Samarkand region	14	1 089
Surkhandarya region	14	717
Syrdarya region	8	221
Tashkent region	15	1 007
Tashkent City	12	574

Source: data on regions and districts from the Statistics Agency (8); unpublished information on *makhallas* provided by the WHO Country Office in Uzbekistan on 16 June 2023.

⁸ Information about *makhallas* is consolidated from various interviews conducted during the STARS; no *makhallas* were visited during the assessment visits.

⁹ Referred to in this report by the short version of the name, the Statistics Agency.

Fig. 3.1. Population pyramid for Uzbekistan, 2023

Source: The World Factbook (7).

According to the United Nations Development Programme (UNDP), Uzbekistan's Human Development Index value for 2021 was 0.727, which put the country in the high human development classification – positioning it at 101 out of 191 countries and territories (9).

3.2. Sustainable Development Goals (SDGs) in Uzbekistan

The United Nations and its partners in Uzbekistan are working towards achieving the SDGs: 17 interconnected and ambitious goals, which address the major development challenges faced by people in Uzbekistan and around the world. In general, Uzbekistan is on track to meet the SDGs. According to 2022 data from the Sustainable development report, Uzbekistan has met 69.9% of SDGs and is ranked 77 of 163 countries globally (10). A summary of overall trends related to SDGs in Uzbekistan can be found in Fig. 3.2.

Fig. 3.2. SDG trends in Uzbekistan, 2022

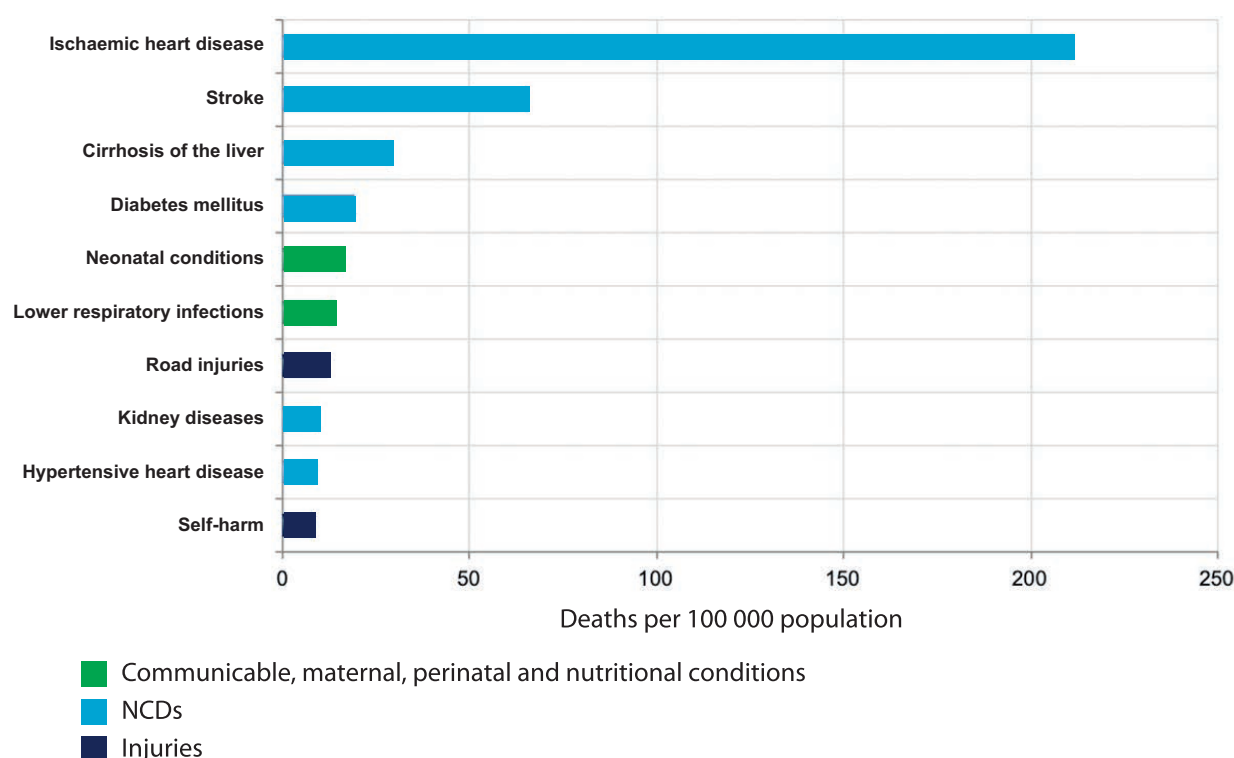
Source: Sustainable Development Solutions Network (10).

3.3. Uzbekistan's context and rehabilitation needs

Although an ageing population is not a key concern for Uzbekistan, other contextual factors and health trends may drive demand for rehabilitation services. These include the steady rise of noncommunicable diseases (NCDs), road traffic incidents and injuries, global or in-country estimates on rehabilitation and AT needs, the number of people with disabilities or functional limitations, and the impact of coronavirus disease (COVID-19).

NCDs and causes of death in Uzbekistan

WHO's Global Health Observatory notes that NCDs accounted for the top four causes of death in Uzbekistan in 2019 (11) (see Fig. 3.3). Similarly, Uzbekistan's Statistics Agency notes that in 2022, NCDs accounted for over 73% of all deaths (55% diseases of the circulatory system, 9.6% respiratory diseases and 8.0% neoplasms) (8). It is noteworthy that road injuries are also in the top 10 causes of death. In 2019, Uzbekistan's road traffic death rate was 11.7 per 100 000 population – nearly 1.6 times the rate for the WHO European Region (7.4 per 100 000) (12).

Fig. 3.3. Top 10 causes of death in Uzbekistan for both sexes and all age groups, 2019

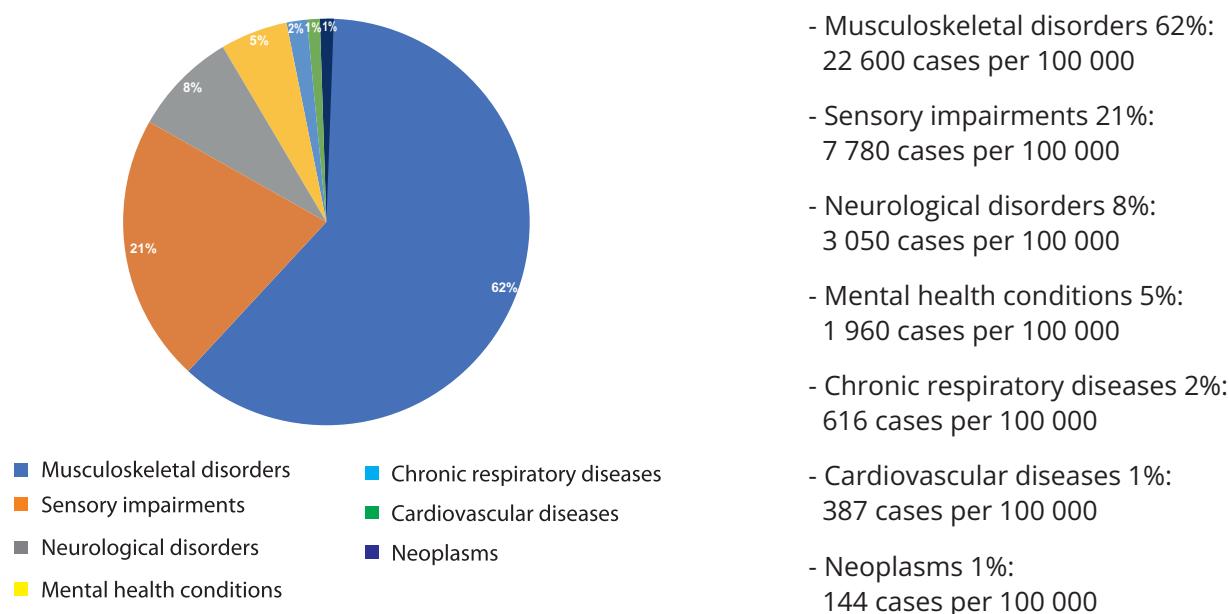
Source: WHO Global Health Observatory (11).

Estimated need for rehabilitation

The first study to produce a global estimate of the need for rehabilitation services was published in *The Lancet* in December 2020 (13). Estimates are based on the global burden of disease and are grouped according to seven main conditions: musculoskeletal disorders, sensory impairments, neurological disorders, mental disorders, chronic respiratory diseases, cardiovascular diseases, and neoplasms. The global and regional estimates, along with figures specific to Uzbekistan are summarized briefly here (13,14).

- Globally, in 2019, one in three people could have benefited from rehabilitation (2.4 billion people living with rehabilitation-responsive conditions).
- In the WHO European Region, in the same year, two in five people could have benefited from rehabilitation (370 million people with conditions amenable to rehabilitation).
- In Uzbekistan, approximately one in four people could have benefited from rehabilitation in 2019 (9 million people with rehabilitation-responsive conditions, including 2.1 million affected by low back pain).

A breakdown and prevalence (per 100 000 population in Uzbekistan) of the seven main conditions, along with a visualization of these estimates can be found in Fig. 3.4).

Fig. 3.4. Prevalence of conditions in Uzbekistan amenable to rehabilitation, 2019

Source: WHO Rehabilitation Need Estimator (14).

Estimated need for APs

The 2022 *Global report on assistive technology* estimates that more than 2.5 billion people require one or more APs – this figure is expected to grow to over 3.5 billion by the year 2050, as the global population ages (15).

In Uzbekistan, every December the DMSS under the Ministry of Employment and Poverty Reduction consolidates a list of APs needed for the coming year, which determines the amount of funding that will be required¹⁰. For 2022, an estimated 25 032 people needing 33 579 products were identified (see Annex G).

Box 3.1. Definitions of Assistive Technology and Assistive Products

WHO definitions (16)

- AT is the application of organized knowledge and skills related to assistive products, including systems and services. AT is a subset of health technology.
- An AP is any external product (including devices, equipment, instruments or software) – specially produced or generally available – the primary purpose of which is to maintain or improve an individual's functioning and independence, and thereby promote their well-being. APs are also used to prevent impairments and secondary health conditions.

International Organization for Standardization definition (17)

An AP is any product (including devices, equipment, instruments and software) – specially produced or generally available – used by or for people with disability for participation; to protect, support, train, measure or substitute for body functions/structures and activities; or to prevent impairments, activity limitations or participation restrictions.

Note: The ISO classification and terminology for APs is updated through the standard life cycle: the 2022 version was available at the time of writing.

¹⁰ This is determined by government legislation – details are provided in Annex C (Cabinet of Ministers Resolution No. 411; 1 July 2021).

People with disabilities

According to the 2011 *World report on disability* (18), about 15% of the world population lives with some form of disability, of whom 2–4% experience significant difficulties in functioning. In December 2022, the number of individuals living with disability in Uzbekistan was 820 620 (see Table 3.2), representing approximately 2.3% of the total population. Additional details on the number, location and category of disability and further information on data collection can be found in Section 8.1.

Table 3.2. Number of people living with disability in Uzbekistan, May 2022

Description	Number
People with disability: Group I	76 875
People with disability: Group II	544 432
People with disability: Group III	61 915
Children with disability (aged under 18 years)	137 398
Total number of people living with disability	820 620

Source: unpublished data provided by the DMSS to the WHO Country Office in Uzbekistan on 18 May 2023.

COVID-19 and rehabilitation

Individuals recovering from COVID-19 may experience health problems beyond symptoms experienced during the acute phase. Limitations resulting from COVID-19 may be seen in physical functioning, as well as reduced cognitive and mental capacities (19), all of which have a significant impact on people's work and social life. The need for rehabilitation services is evident for those with acute symptoms since contracting COVID-19; this group is likely to experience rehabilitation needs far beyond the pandemic.

From 3 January 2020 to 26 April 2023 there were 252 725 confirmed cases of COVID-19 in Uzbekistan, including 1637 deaths reported to WHO. As of 4 March 2023, a total of 75 503 399 vaccine doses had been administered (20). Through discussions with health providers, many commented on the increase in musculoskeletal problems for those who had contracted COVID-19;¹¹ there are clinical indications of notable increases in joint pain.

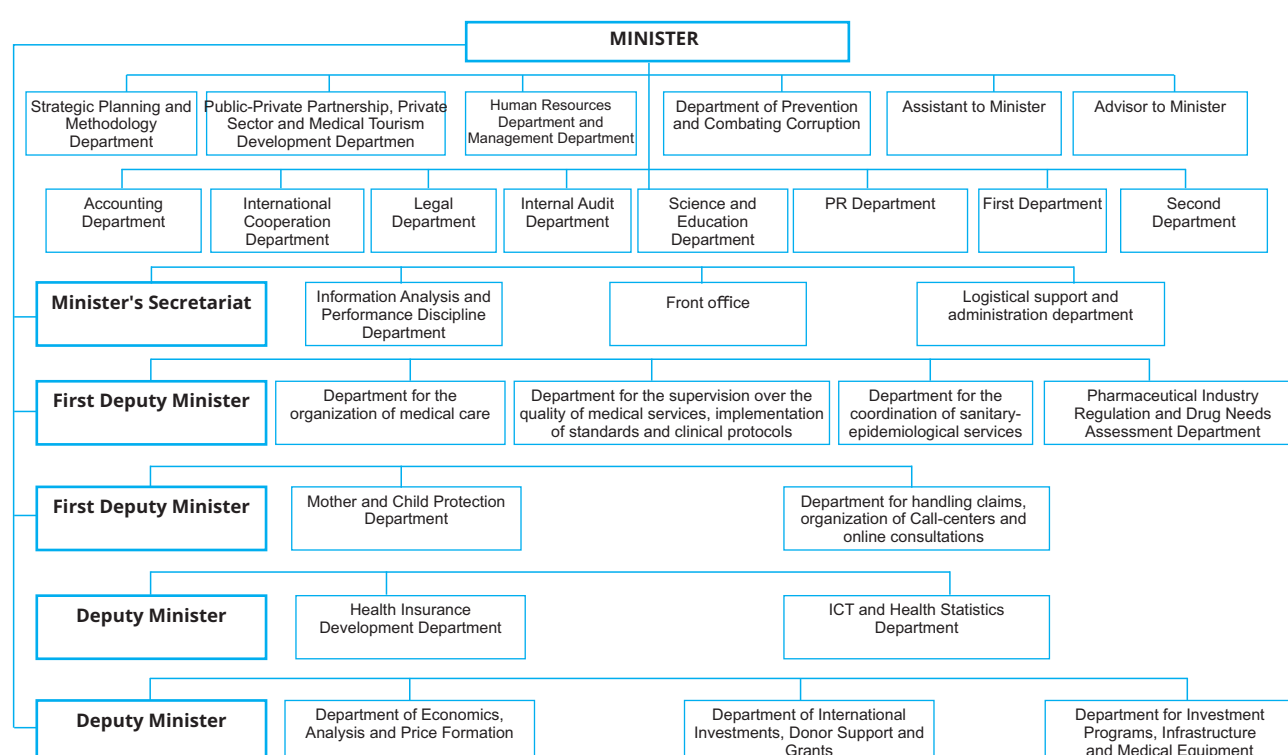
¹¹ It is worth noting that in Uzbekistan there is no recognized post-COVID condition diagnosis; this information comes through anamnesis; the taking of a person's medical history.

4. Overview of Uzbekistan's health system and rehabilitation

4.1. Ministry of Health

As noted previously, from 1 January 2023 Uzbekistan had consolidated ministries and agencies, reducing executive authorities from 61 to 28, and ministries from 25 to 21 by Presidential Decree.¹² A new structure for the Ministry of Health was then implemented on 9 March 2023, depicted in Fig. 4.1. Although there is no chief specialist or specific focal point for rehabilitation within the Ministry of Health, two deputy ministers are engaged in this role: the First Deputy Minister and the Deputy Minister overseeing Mother and Child Protection (circled in the chart shown in Fig. 4.1).

Fig. 4.1. Organizational structure of the Ministry of Health, 1 March 2023



Note: PR – public relations; ICT - Information and Communications Technology.

Source: translated from Presidential Decree No. 156; 6 September 2023 (see Annex C for the relevant legislation).

4.2. Organization of Uzbekistan's health system, facilities and human resources

Some standard global indicators on health facilities and personnel include the numbers of health facilities, beds, doctors and nurses. Information for some of these indicators in Uzbekistan is provided in Table 4.1. The health workforce is further described in Chapter 7, with specific focus on the rehabilitation workforce.

¹² The relevant legislation is detailed in Annex C (Presidential Decree UP 269; 21 December 2022 and Presidential Decree UP 14; 25 January 2023).

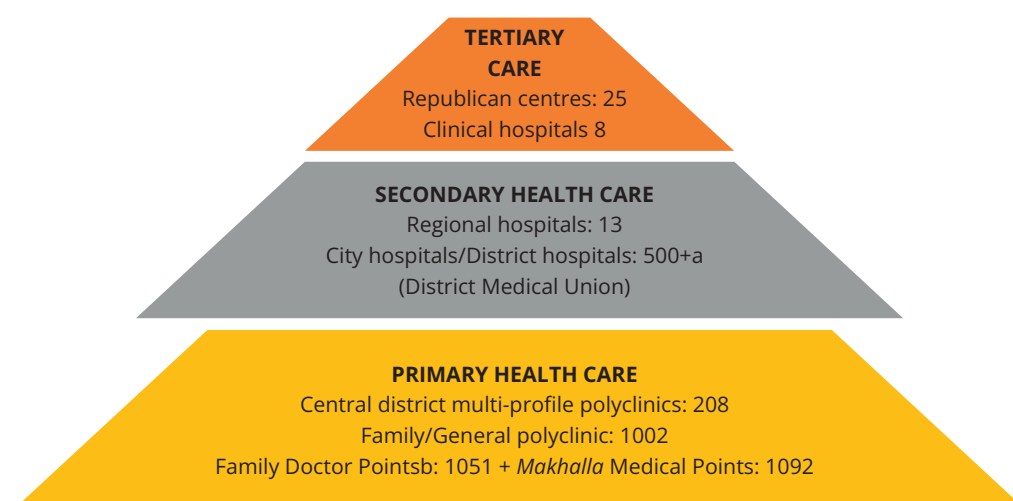
Table 4.1. Overview of health facilities and selected health workforce in Uzbekistan, 2021

Description (number of)	Total
Hospitals	1 281
Hospital beds	165 500 (46.6 per 10 000 population)
Ambulatory polyclinics	6 676
Physicians of all specialties	95 600 (27.1 per 10 000 population)
Nurses	372 500 (105.6 per 10 000 population)

Source: Statistics Agency (21).

Uzbekistan's health system is moving toward bringing health care closer to the population. One method of achieving this is by introducing medical teams, known as medical brigades, which are attached to central district multi-profile polyclinics (see Section 4.2).

A visual representation of the health structure is provided Fig. 4.2 and the different levels are explored in the following subsections. In addition to the structure shown, the private sector manages approximately 7300 licensed clinics and hospitals at various levels of the health system.¹³ The Statistics Agency reported 1281 hospitals operating in the country; however, it is not clear how facilities were classified to arrive at this figure.

Fig. 4.2. Visual representation of Uzbekistan's health system structure, 2023

Note: ^a There are over 580 health facilities providing beds. ^b Family doctor points (first point of contact with the health system). Figures do not include private facilities.

Source: Authors' own compilation based on information received through interviews with the Ministry of Health during the course of the STARS visit in Uzbekistan.

¹³ Unpublished background information on the development of Uzbekistan's health strategy, provided by the Statistics Agency.

PHC

PHC forms an integral part of every country's health system (22). In Uzbekistan, PHC encompasses four types of facilities.¹⁴

The first point of care in the Uzbek health system is the family doctor point (FDP) (see Fig. 4.2); there were approximately 1051 FDPs in the country, each with a catchment area of about 2000 people. Staffing includes one general doctor, two patronage nurses, and may include one medical specialist (e.g. a cardiologist). Each FDP has a physiotherapy room and some related equipment (e.g. for electrophoresis).

The FDP develops and manages an electronic list of people categorized into four groups; groups 1–2 mainly focus on health promotion, while groups 3–4 are monitored by patronage nurses.

- Group 1 comprises healthy people, with one check-up per year.
- Group 2 includes people that have minor health issues, requiring two check-ups per year.
- Group 3 is composed of people with chronic health problems (such as diabetes, hypertension), with check-ups carried out four times a year.
- Group 4 comprises people with severe health problems or those with disabilities, who have a check-up every month.

In addition to the FDPs, there were 1092 *makhalla* medical points (MMPs) (with 400 more added during 2023). The MMPs are essentially a small-scale, simplified facility,¹⁵ with one doctor and two nurses. The MMPs are like a working branch of the FDPs – not independent from¹⁶ The FDPs and MMPs are primarily situated in rural areas and operated by local government, which pays salaries and operating costs, while the Ministry of Health provides equipment and medicines.

The next level up in PHC is the family/general polyclinic, of which there were 1002 in the country.¹⁷ Usually, there are 11 medical specialists¹⁸ working in a family/general polyclinic.

The highest level within the PHC category of care in Uzbekistan is the central district multi-profile family polyclinic, of which there were 208 in the country, all with medical brigades attached to them. Each medical brigade covers 5000 people; the staffing structure comprised the following five (soon to be six) health professionals:

- one family doctor;
- two patronage nurses – about 60 000 nurses work as patronage nurses;
- one nurse practitioner – carrying out pre-screening for doctors (gathering information on weight, height, blood pressure, etc.);
- one midwife – in practice, there are only 0.5 midwives per brigade;¹⁹ and
- one paediatric nurse (to be added in the future).

One priority area within WHO Regional Office for Europe's Advancing Rehabilitation 2030 agenda is to expand provision of high-quality rehabilitation, with a focus on PHC (1).

¹⁴ Information on PHC facilities from an interview on 27 February with the Ministry of Health PHC focal point in Tashkent.

¹⁵ Some MMPs are no larger than a shipping container.

¹⁶ National rehabilitation centres were established through national legislation, extending the system of social support for the elderly and people with disabilities (Presidential Decree UP 6195; 25 March 2021 – see Annex C for details).

¹⁷ For example, Tashkent had 12 districts and 68 family/general polyclinics.

¹⁸ These include: an internal medicine doctor, ophthalmologist, ear, nose and throat specialist, gynaecologist, surgeon, dentist, paediatrician, orthopaedic traumatologist, cardiologist, radiologist, and neuropathologist.

¹⁹ There is a shortage of midwives in Uzbekistan; the position was introduced in 2023.

Secondary and tertiary health care

Within the secondary and tertiary levels of care in Uzbekistan there are five different types of facilities – all of these include beds for individuals to stay overnight. According to the Ministry of Health²⁰ there were 580 health facilities with beds in 2023. Outpatient polyclinics that are affiliated with higher level hospitals are not considered part of the PHC system.

At district level, there is the District Medical Union, with facilities known by the terms city hospitals or district hospitals. Generally, this level of care includes surgery, intensive care, physiotherapy, and so on. There are 227 maternity hospitals/clinics in the country, as well as perinatal hospitals. These are generally located with district hospitals. Auditory screening will be available at all maternity clinics in Uzbekistan by the end of 2023. There are 13 regional hospitals, which exist in all regions, except Tashkent City.

Tertiary-level facilities include the RSSPMCs (the Republican centres) and clinical hospitals. These are umbrella institutions, leading in modern medical diagnostics, research, training and education and the treatment of complex (and advanced stages of) diseases. In total, in June 2023 there were 24 RSSPMCs and 9 clinical hospitals at national level. These facilities were created to provide highly sophisticated and specialized care.

In addition to public facilities, there is an extensive private health care network in Uzbekistan, with 7320 private medical facilities; 5823 of them are ambulatory (outpatient) and 1497 are inpatient facilities (21).

4.3. Ministry of Employment and Poverty Reduction

The Ministry of Employment and Poverty Reduction comprises five main branches/agencies, including: Employment, Women's Committee, Poverty Reduction, Community Development (*makhallas*), and the DMSS.²²

As noted previously, the STARS process occurred during a time of transition between and within many governmental bodies. The name, structure, and role of the DMSS are provisional and subject to change. During the STARS discussions, the DMSS noted that there were 22 staff, working across three main units, in order to:

- improve the performance of medical and social facilities (residential care institutions known as *Sakhovat* and *Muruwat*, sanatoria and rehabilitation centres);
- improve medical services (through the Republican Inspectorate for Medical and Social Expertise and its territorial divisions), ensure oversight of the provision of APs, and improve the situation for older people living alone; and
- provide a barrier-free environment for people with disabilities.

²⁰ Unpublished anecdotal information gathered in person on 27 February 2023.

²¹ This unit was initially housed under the Ministry of Health's Agency for Medical and Social Services; in March 2021 it became the Agency for Development of Medical and Social Services and reported to the Cabinet of Ministers (Annex C provides details of the relevant legislation; Resolution PP 5038; 25 March 2021). In January 2023 it became a department (the DMSS) within the Ministry of Employment and Poverty Reduction; the name DMSS is provisional.

The Community Development Department within the Ministry of Employment and Poverty Reduction also has some potential intersection with rehabilitation services, as the *makhallas* not only function as a source of detailed information about their constituents; they may also play a role in community health, providing support for individuals to access APs or benefit from modifications to their home environment (on a case-by-case basis). Unfortunately, no direct meeting with this department or with any existing *makhalla* was held during the STARS.

4.4. Additional ministries and stakeholders involved in health and rehabilitation

Ministries

The Ministry of Finance is responsible for developing national budgets and for the allocation of funds. The Ministry of Innovative Development is responsible for funding research (see Section 8.5). Two further ministries provide guidance for education: the Ministry of Preschool and School Education, and the Ministry of Higher Education, Science and Innovation. Unfortunately, the WHO Country Office was unable to secure a meeting with relevant education authorities during the STARS.

United Nations agencies

The United Nations Country Team in Uzbekistan comprises 25 United Nations agencies. In September 2020, the United Nations Country Team finalized the next-generation United Nations Sustainable Development Cooperation Framework (2021–2025), which was endorsed and signed by the Government of Uzbekistan (23).

Specific to disability, United Nations Children's Fund (UNICEF), United Nations Population Fund, UNDP and the Office of the United Nations High Commissioner for Human Rights are engaging in a joint programme funded by the United Nations Partnership on the Rights of People with Disabilities, entitled Transformation of Social Service Delivery: Implementing Human Rights-based Approach for Children, Youth and Women with Disabilities in Uzbekistan (2022–2023) (24). UNDP also supported a three-day workshop in Tashkent on disability measurement and social services for people with disabilities (25).

UNICEF is also supporting the Uzbek Government with its education strategy and is the coordinating agency on education (country platform), established in November 2022.²² UNICEF (together with other United Nations agencies) supported a situation analysis of children and adults with disabilities in Uzbekistan in 2019 (26).

²² Information provided by UNICEF during a meeting in Tashkent on 14 March 2023.

Key donors

Some key donors and their main contributions to rehabilitation in Uzbekistan are described here. It is worth noting that this list is illustrative and not intended to provide a comprehensive list of donors or investments in the sector.

Since September 2018, the United States Agency for International Development (USAID) has funded the programme Establishing a Health Information System in Uzbekistan (27), within which the WHO Country Office in Uzbekistan has been providing technical support to the Government to strengthen the country's health information system (and e-Health more generally).

USAID is also continuing to provide funding to WHO in Uzbekistan to strengthen rehabilitation and AT under the project "Addressing unmet needs for rehabilitation at country level: phase 1 and phase 2".

The Asian Development Bank (ADB) is one of Uzbekistan's largest development partners (28), with over US\$ 12 billion invested (of which nearly US\$ 200 million is dedicated to health).²³ Since 2018, the ADB has supported Uzbekistan in upgrading rural family clinics and polyclinics (completing in 2023). There are also projects in the pipeline to upgrade laboratories and perinatal care centres. The ADB is joining World Bank and various governments to support the development of electronic health records, with a view to enabling data entry using electronic tablets and managed by patronage nurses.

²³ Information on the Asian Development Bank is summarized from a meeting with representatives of the Bank during the STARS in Uzbekistan.

5. Rehabilitation governance

An overview of the status of rehabilitation governance components in Uzbekistan is presented in Table 5.1, which highlights existing frameworks alongside remaining gaps.

Table 5.1. Status of key components of rehabilitation governance in Uzbekistan

Key components	Status
Rehabilitation legislation and policies	Uzbekistan has many topic-specific Presidential resolutions and decrees related to rehabilitation and AT (see Section 5.1).
Rehabilitation strategic plan	A rehabilitation strategic plan has not yet been developed.
Leadership and coordination	The interagency/interdepartmental working group on disability was established in December 2021.
Rehabilitation accountability and reporting	There is no country-wide standard on rehabilitation reporting, with inconsistencies across ministries and across health facilities.
Regulatory mechanisms	Rehabilitation in Uzbekistan is underregulated.
AT policies, plans and procurement	Uzbekistan has 18 categories of APs that can be funded by the State for people with a disability determination (see Section 5.3).

In January 2023, Uzbekistan consolidated many ministries and agencies in compliance with national legislation.²⁴ This reduced executive authorities from 61 to 28 and reduced the number of ministries from 25 to 21. As already noted, the STARS in-country visit was conducted during February and March 2023, and many ministries and officials were in transition at that time.

5.1. Rehabilitation governance and regulatory documents

Extensive Uzbek legislation exists, contributing to policy change or directing attention and resources to specific interventions. Key documents identified during the STARS that make specific reference to rehabilitation and/or AT are detailed in Annex C.

In addition to specific resolutions, there are three overarching documents that provide a framework through which rehabilitation and AT may be addressed, described in the subsections that follow.

Development Strategy of New Uzbekistan 2022–2026

The Development Strategy of New Uzbekistan for 2022–2026 (referred to here as the Development Strategy) was approved on 28 January 2022 (29). The Development Strategy contains 100 goals and seven priority areas. Priority Area 4, to pursue just and fair public policies and human capital development, includes five key goals that are relevant to strengthening rehabilitation and AT within the health sector.

- Goal 55: establish medical clusters (*brigades*) in the regions of the country to bring medical services closer to the population and increase their accessibility.

²⁴ The relevant legislation can be found in Annex C (Presidential Decree UP 269; 21 December 2022).

- Goal 56: improve the quality of medical services provided to the population and the efficiency of the use of budget funds, centralize medical services, and introduce health insurance practices.
- Goal 59: improve the quality of services provided to the population in PHC and increase funding for the sector.
- Goal 64: establish PHC services according to the “one step” principle in the regions.
- Goal 66: form an effective system of support for people with disabilities to improve their quality of life/standard of living.

Health strategy for Uzbekistan

Uzbekistan has an approved national strategy, the Concept for the Development of the Healthcare System of the Republic of Uzbekistan 2019–2025 (30).²⁵ In addition, since 2003 a working group (supported by World Bank) has been drafting content to help identify gaps and recommendations for consideration by the Ministry of Health. An unpublished, internal document – “A roadmap for the national health system strategy for Uzbekistan: 40 actions in four key focus areas to transform health system performance in Uzbekistan” – was shared by the WHO Country Office and highlights four focus areas:

- creation of a health-care workforce that meets international standards;
- transformation of health service delivery at the district level;
- transformation of service delivery at the secondary and tertiary levels, in the public and private sectors; and
- modernization of the Ministry of Health, as the overall steward of the health system, ensuring that its activities are transparent, strategic and effective.

National Action Plan for the Implementation of the UNCRPD

As noted previously, Uzbekistan ratified the UNCRPD in June 2021. Subsequently, a National Action Plan for the Implementation of the Convention on the Rights of Persons with Disabilities in the Republic of Uzbekistan until 2025 was developed (31). It contains four main focus areas, which are to:

- improve legislation to ensure and protect the rights and legitimate interests of people with disabilities;
- create accessible infrastructure and all types of services for the participation of people with disabilities in all spheres of society and development and realization by people with disabilities of their potential (including improving medical and social assistance, habilitation and rehabilitation of people with disabilities);²⁶
- raise society awareness of the rights and freedoms of people with disabilities, creating a favorable social environment for the life of people with disabilities; and
- improve the assessment and disability confirmation system, along with social rehabilitation and habilitation.

²⁵ Idem. (Presidential Decree UP 5590; 7 December 2018.)

²⁶ According to Article 26 of the UNCRPD, habilitation refers to rehabilitation in the context of people who were born with congenital health conditions.

5.2. Rehabilitation leadership and coordination

Within the Ministry of Health, there is no chief rehabilitation specialist, nor is there a single dedicated focal point for rehabilitation – this responsibility is shared between two deputy ministers. Within the Ministry of Employment and Poverty Reduction, the DMSS directly addresses rehabilitation and AT.²⁷

The only coordination mechanism related to rehabilitation and AT is the interagency/interdepartmental working group on disability, established in December 2021²⁸ and comprising about 26 participants (14 regional governors, 8–9 ministries and 4 civil society groups). This group spearheaded a disability survey in Syrdarya in February 2023.

5.3. Regulations on rehabilitation and AT

Rehabilitation

Rehabilitation in Uzbekistan is underregulated and professional titles are largely unprotected. Although medical doctors have clear terms applied to advanced training or specializations, this is not the case for individuals trained in pedagogical institutes or nursing colleges. If these individuals receive short courses on massage or physiotherapy, they may be hired for these positions without further credentials.

AT

As of 1 March 2023, there were 18 categories of APs (72 products in total) that may be provided with government funding. The categories are divided into two sections: prosthetic and orthopaedic devices and technical means of rehabilitation. These are summarized in Table 5.2.²⁹ Through discussions during the STARS, it became clear that there was the intention to add nine more categories to this list, totalling 27 categories of products.³⁰

Table 5.2. AP categories approved through Resolution No. 411, 2021

Prosthetic and orthopaedic devices	Technical means of rehabilitation
1. Upper extremity prostheses	1 Hearing aids
2. Lower extremity prostheses	2. Axillary crutches
3. Orthoses	3. Canes
4. Corsets	4. Forearm crutches
5. Breast prostheses	5. White canes (blind)
6. Splints	6. Walkers
7. Elastic compression bandages	7. Urinary bags
8. Orthopaedic shoes	8. Colostomy bags
	9. Wheelchairs (for indoor use)
	10. Wheelchairs (for outdoor use)

Source: authors' own compilation based on government legislation (see Annex C for details: Cabinet of Ministers Resolution 411; 1 July 2021).

²⁷ Prior to January 2023, this Department was an independent body (Agency for Development of Medical and Social Services) reporting directly to Uzbekistan's Cabinet of Ministers.

²⁸ The relevant legislation can be found in Annex C (Presidential Resolution PP 5217; 9 August 2021 and Cabinet of Ministers Resolution 769; 23 December 2021).

²⁹ Idem. (Cabinet of Ministers Resolution 411; 1 July 2021.)

³⁰ The clubfoot brace (foot abduction brace) is not included in the list of assistive products.

No standards have yet been established for APs, and no feedback process exist for individuals to give opinions on products or services. In early 2022, WHO led a mission in Uzbekistan to explore opportunities for AT; during that mission, WHO shared the resource *Assistive product specification and how to use them* (32).

The same Resolution of the Cabinet of Ministers (No. 411; 1 July 2021) notes that “every year, no later than December 20, a list of individuals in need by region is formed in order to determine the amount of funding for the next year”. Details of the legislation can be found in Annex C and the list of products identified for 2022 is provided in Annex G.

5.4. Rehabilitation accountability, reporting and transparency

Accountability for rehabilitation in Uzbekistan is inconsistent between facilities and between ministries. Some health facilities only capture procedures provided. For individuals with disabilities, rehabilitation status and performance are recorded by the Medical-Social Expert Commission (MSEC) upon re-evaluation. Reporting on rehabilitation is not comprehensive; although information is collected and collated, there are many gaps; see Section 8.3. and Section 8.4 for details. A summary of the rehabilitation governance situation in Uzbekistan as of March 2023 is presented in Box 5.1.

Box 5.1. Summary of the rehabilitation governance situation in Uzbekistan, March 2023

- Uzbekistan has many Presidential resolutions and decrees that guide rehabilitation and AT in the country.
- The Ministry of Health has no single dedicated focal point or chief specialist for rehabilitation, while the Ministry of Employment and Poverty Reduction's DMSS oversees actions on rehabilitation and AT for people with disabilities.
- An interagency/interdepartmental working group on disability was established in December 2021; no other coordination mechanisms specifically address rehabilitation and AT.
- Uzbekistan ratified the UNCRPD in June 2021 and developed a national action plan on implementation of the Convention.
- Uzbekistan does not require individual licensing for health professionals.
- Most rehabilitation-related professions are underregulated and unprotected.
- Uzbekistan has an approved list (since 2021) of 18 categories of APs (72 products in total) and intended to expand that list to 27 categories of products in 2023. The clubfoot brace (foot abduction brace) is not included in the list of assistive products.

6. Rehabilitation financing

Key aspects of rehabilitation financing in Uzbekistan are summarized in the Table 6.1.

Table 6.1. Status of rehabilitation financing in Uzbekistan

Key components	Status
Mechanisms for rehabilitation financing	Rehabilitation financing is represented across different Ministry of Health budget lines.
Rehabilitation expenditure	Rehabilitation expenditure figures are not consolidated.
Rehabilitation expenditure as a proportion of total health expenditure	Without consolidation of rehabilitation expenditure, it is difficult to calculate the proportion of total health expenditure.
AP expenditure	Illustrative figures are available for APs with a 2022 budget of US\$ 1.4 million allocated for APs.
Out-of-pocket (OOP) costs for rehabilitation	General OOP costs for health care are at 53%; figures for rehabilitation are not consolidated.

6.1. Government budget for 2023

The consolidated budget expenditure forecast for Uzbekistan for 2023 was estimated at 343 212.6 billion sum (just over US\$ 30 billion). This amount is subdivided into three main categories:

- state budget expenditures to 51 ministries, agencies, centres, or other bodies) totalling 227 866 billion sum (approximately US\$ 19.9 billion);
- expenditures from State Targeted Funds (26 categories) totalling 70 212.9 billion sum (approximately US\$ 6.14 billion); and
- other expenditures amounting to 45 133.1 billion sum (approximately US\$ 3.94 billion).

Uzbekistan's Republican (state) budget forecast for 2023 was about 228 263 billion sum (nearly US\$ 20 billion) allocated across 51 different categories. Table 6.2 provides details on some key budget lines.³¹

Table 6.2. Republican budget allocations for select categories, 2023

No.	Description or name of the budget line	Sum (million)	US\$
Maximum amounts to be allocated from the state budget		228 262 476	19.97 billion
1	Ministry of Preschool and School Education	40 447 654	3.54 billion
2	Ministry of Higher Education, Science and Innovation	6 568 479	574.7 million
3	Ministry of Health (including)	5 566 060.5	487 million
	- cochlear implants	31 815	2.78 million
	- e-health	25 908	2.27 million
	- equipping physiotherapy (equipment)	104 760	9.16 million
	- medical and social interventions for children with spinal muscular atrophy	118 000	10.32 million
	- improving quality of medical and social services for people with disability	12 446	1.09 million
	- Medical equipment for early detection of hearing impairments in newborns	10 200	893 000
4	Ministry of Employment and Poverty reduction	1 386 324	121.3 million
5	National Agency for Social Protection under the President of the Republic of Uzbekistan	1 232 549	107.8 million
6	Republican Centre for Social Adaptation of Children	8 211.8	719 000

Note: Sum to US\$ – 1 sum = 0.00008750 USD (1 US\$ = 11,428.5 sum).

Source: state budget of Uzbekistan (see Annex C for the relevant legislation: ZRU 813; 30 December 2022).

³¹ Annex C details the legislation relevant to the state budget (Law ZRU 813; 30 December 2022, including appendices).

6.2. Health sector budget for 2023

The budget forecast for Uzbekistan's Ministry of Health in 2023 was US\$ 487 million (see Table 6.2).

The State Health Insurance Fund (SHIF)'s expense forecast for 2023 was 3 301 426.3 million sum (about US\$ 289 million). This amount is in addition to the Ministry of Health budget.

Financing for rehabilitation and AT are listed across different budget lines and illustrative figures identified through the STARS are provided in Section 6.5.

6.3. General financing information

In 2021, Uzbekistan's gross domestic product (GDP) was US\$ 69.24 billion; with a per-capita GDP of US\$ 1983 (33). Available data within WHO's Global Health Expenditure Database provide key figures for GDP and health expenditures up to and including for the year 2022; these are summarized in Table 6.3 (34).

Uzbekistan's out-of-pocket (OOP) payments accounted for 65.3% of health spending in 2022. WHO recommends that OOP spending should account for less than 15% of current spending on health to ensure good financial protection (35).

Table 6.3. GDP and health expenditure statistics, 2005–2022

Description	2005	2010	2015	2019	2022
GDP (US\$ per capita)	680	1 753	2 800	1 827	2 301
Health spending (US\$ per capita)	33	93	133	99	169
Priority to health; government health spending as a % of GDP	6.5	8.0	9.6	8.3	7.1
OOP spending	57.6	58.0	48.4	57.7	65.3

Note: GDP - gross domestic product; OOP - out-of-pocket;

Source: WHO Global Health Expenditure Database (34).

6.4. Uzbekistan's basic benefits package (BBP)

The SHIF was created on 1 December 2020³². The SHIF is the single purchaser of all approved health services. It is independent from the Ministry of Health and reports to a Board of Directors. The Ministry of Health determines the overall health-care policy and the SHIF puts it into practice. SHIF's main areas of work include:³³

- introducing a new model for care delivery and reforming PHC;
- introducing a suitable financing mechanism, transitioning to a case-based financing and per-capita financing;³⁴ and
- advancing information technology (IT), working towards digitizing health care.

³² The SHIF was mandated by Presidential Resolution (6110; 12 November 2020 – see Annex C for details of the relevant legislation).

³³ As described during an interview with the SHIF in Tashkent during the STARS (14 March 2023).

³⁴ This would include a capitation rate of UZS 15 000 per visit (about US\$ 1.3) (established during the STARS during discussions on financing PHC).

The SHIF as a single purchaser was implemented as a pilot project in Syrdarya Region from 1 July 2021 to December 2022. Some of the key advantages or positive impacts noted from the pilot include:

- a change in the functioning of the referral mechanism – from 68% of patients seen being self-referred to 85% of patients seen being referred;
- unjustified hospital admission rates dropped from 45% to 20%;
- an increase in day cases in hospitals (by 75%);
- a reduction in waiting times at multidisciplinary polyclinics;
- increased duration of patient–doctor interaction, by introducing pre-doctor examination rooms at polyclinics (prescreening by a nurse);
- creation of an electronic health record system in PHC, along with electronic prescribing; and
- services being accessed for free through the BBP (with referral and if the service is included in the package).

The BBP for the pilot was approved on 7 July 2021. Key elements of the BBP include:

- 17 categories of the population are to receive health-care services free of charge;
- all care at PHC level is covered; this includes 'physiotherapeutic procedures';³⁵
- if a condition requires rehabilitation at specific level, it will be covered (disease/condition-based coverage); and
- it does not include cochlear implants, nor APs.

In addition to the pilot project, a delegation from Uzbekistan visited Ukraine and Kyrgyzstan in 2021 to learn about the benefits packages developed in these countries. As a result, 28 individual packages are currently being revised/developed for the next phase of the roll-out (in Tashkent City). Up to six regions will have BBP coverage by 2024, expanding to the whole country by 2025.

6.5. Financing for rehabilitation and AT

There is no consolidated information on financing for rehabilitation in Uzbekistan. That said, there is evidence of financing for rehabilitation through the BBP (for PHC services, and with physiotherapeutic services also offered at PHC level), through specific budget lines under the state budget (e.g. the Ministry of Health's allocated budget of about US\$ 9 million for physiotherapy equipment in 2023); see Table 6.1, and through national programmes and/or specific Presidential decrees and resolutions (see Annex C).

There are two financing mechanisms for APs: local budget and by special programmes (either national programmes or Presidential decrees/resolutions). Systematic funding through the local budget is scarce. The budget is developed based on the list of needed APs, compiled annually by the DMSS (see Annex G for the AP list for 2022).

³⁵ There is no written list of procedures and, in reality, this tends to depend on the equipment available.

In 2022, the Government reportedly provided an additional 17 billion sum for APs (US\$ 1.48 million).³⁶

In the 2023 budget, the State Targeted Funds (line item №10) “Prosthetics and orthopaedic items; means of technical rehabilitation and wheelchairs” had a forecast expenditure of 550 million sum (about US\$ 47 743). This revenue is from charitable donations and international organizations – not from the state budget.

According to the relevant legislation (Annex C) the Government pledges to increase funding by up to 60% for rehabilitation for people with disabilities (rehabilitation therapy and AP). Box 6.1 summarizes the rehabilitation financing situation in Uzbekistan as of March 2023.

Box 6.1. Summary of the rehabilitation financing situation in Uzbekistan, March 2023

- Uzbekistan's consolidated budget for 2023 was just over US\$ 30 billion; this is divided among the state budget, State Trust Funds and other expenditure.
- In 2022, Uzbekistan's expenditure on health was 7.1% of GDP.
- OOP spending on health is at 53.1%; specific OOP expenditure for rehabilitation and AT was not determined through the STARS.
- A pilot for the SHIF and the BBP took place in Syrdarya region from July 2021 to December 2022.
- In addition to piloting activities, Uzbekistan also visited Ukraine and Kyrgyzstan in 2021 to learn how these countries develop and manage benefits packages.
- 28 condition-based benefits packages are being developed; if rehabilitation is indicated as a treatment intervention, it will be covered by the BBP.
- Further roll-out of the SHIF financing mechanism and the BBP were expected during 2023 in Tashkent City; with six regions to be included by the end of 2024, and whole-country coverage by 2025.
- Physiotherapeutic procedures at PHC level are provided free of charge.
- APs are not covered by the BBP but are free for individuals with a disability determination through Uzbekistan's social protection system.
- It was not established during the STARS whether any specific financing for rehabilitation within health facilities existed.
- There is no consolidated figure rehabilitation and AT financing. These topics are included in budget lines as part of the state budget or State Trust Funds and there are national programmes that also fund rehabilitation and AT.
- In 2023, the Government pledged to increase funding by 60% for rehabilitation for people with disabilities.

Note: GDP - gross domestic product; OOP – out-of-pocket; AT – assistive technology; PHC – primary health care; BBP – basic benefits package; STARS - Systematic Assessment of Rehabilitation Situation

³⁶ Information from an interview with a DMSS representative during the STARS visit in Tashkent.

7. Rehabilitation human resources and infrastructure/ equipment

The current situation of the rehabilitation workforce, infrastructure and equipment described in Table 7.1.

Table 7.1. Status of rehabilitation human resources and infrastructure in Uzbekistan

Key components	Status
Total number of rehabilitation personnel	This is difficult to determine as there is no consolidated information on the rehabilitation workforce.
Number of rehabilitation personnel per 10 000 population	Physiotherapy doctors (558 total) = 0.2 per 10 000.
Distribution of rehabilitation personnel across geographic areas	Unable to determine due to lack of consolidated data.
Licensure and regulations for rehabilitation personnel	Licensure is not required for individuals and rehabilitation professions are largely unregulated.
Rehabilitation infrastructure/equipment	Various orders and decrees exist which make reference to physiotherapy and equipment (see Annex C).

7.1. The health workforce in Uzbekistan

There are over 370 000 nurses in Uzbekistan.³⁷ This cadre of health professionals represents the majority of the health workforce in the country. Medical doctors are the second largest group, with just under 100 000 different specialists.³⁸ The health workforce expands from those trained as nurses or medical doctors – further medical specializations in rehabilitation-related professions stem from these origins.

The nomenclature of types of medical specializations (medical doctors) carrying out medical activities in Uzbekistan is provided in Annex D, as a consolidated summary of a Ministry of Justice Order (No. 3303 of 12 May 2021; see also Annex C for details). At Bachelor degree level, there are nine different medical specializations; family doctor specialization is the foundation for all rehabilitation-related specialties.

Rehabilitation workforce³⁹

As noted above, the rehabilitation workforce largely stems from professionals educated and trained as nurses or medical doctors. In addition, graduates from sports academies or pedagogical institutes contribute to the rehabilitation workforce. Comprehensive data on the existing rehabilitation workforce are not available in one central location.

³⁷ It is not clear how many have been trained in rehabilitation or how many have specialized education in a rehabilitation-related field (e.g. physiotherapy, massage, or “sport culture” (LFK)). LFK stands for “exercise therapy/physical culture” (abbreviated from the term in Russian: *ЛФК: Лечебная Физкультура*), terminology remaining in use from the Soviet era, reflecting the continuing complications around consistently applying and understanding rehabilitation terminology in Uzbekistan.

³⁸ Of this number, there are 558 physiotherapy doctors and 21 rehabilitologists.

³⁹ Though no specific definition is provided, WHO notes, “There are a broad range of health professionals who provide rehabilitation interventions, including physiotherapists, occupational therapists, speech and language therapists, orthotic and prosthetic technicians, and physical medicine and rehabilitation physicians” 36.

The term “rehabilitation” is largely linked to services provided for people with disability and is not yet widely used nor well understood in its application to the health system more generally. The terminology used for the rehabilitation workforce in Uzbekistan is not aligned with contemporary standards and remains rooted in historical terms used in the former Soviet era.

Rehabilitologist and physiotherapevt are terms applied to medical doctors with some level of specialization in rehabilitation or physiotherapy. Physiotherapy aligns with passive, machine-based treatment techniques (such as electrophoresis, ultrasound, short-wave diathermy, electrostimulation) and is generally provided by trained nurses. LFK, defined as “treatment physicalculture” applies exercise for treatment and can loosely be linked with contemporary physical therapy. Defectologists, sordologists, and logopedists are common terms linked with speech and language therapy.

7.2. Rehabilitation workforce education and training

There are multiple educational facilities/training institutions in Uzbekistan that are involved in training rehabilitation-related professionals.

The Ministry of Health sets annual enrollment quotas for education in various specializations – this reflects the number of students that can begin studying in that particular field during that year. Some illustrative examples include:

- in 2022 and 2023, the quota for rehabilitologists was zero
- in 2023, the quota for sports medicine doctors was 3–4.

Pre-service education

Pre-service education refers to education that precedes the obtainment of a diploma or degree.

Medical doctors

There are 11 institutions in Uzbekistan that offer education for medical doctors. Within the six-year pre-service course, content is provided on physiotherapy and exercise. A two-year specialization in rehabilitology began in 2010 and since that time there have been 40 graduates.

In recent years, two new specializations (Valeology and Traditional Medicine) have been introduced.

- A three-year education programme on valeology (promoting/ensuring a healthy lifestyle) was launched in 2020, with the first graduates in 2023. There are eight education facilities offering this: Tashkent Medical Academy will have 27 graduates, with the number in Uzbekistan overall reaching approximately 160 graduates in 2023. They will be able to work at PHC levels.
- A four-year programme on traditional medicine was launched in 2020. The Ministry of Health released a training quota of 25 positions per educational institution (of which there are 9 medical institutions), with the first graduates expected in 2024. The staffing structure for this profession was not clarified.

Nurses

In Uzbekistan, 74 institutions offer a three-year education programme for nurses (28 colleges and 47 technical or vocational schools). After graduation from the programme, eight institutions offer higher education, comprising three further years of additional training at Bachelor or Master level in different specializations, including midwife, surgical nurse, and nurse manager. In addition, there are 1.5 months and two months of training in different nursing specializations.

A four-year Nursing Academy Programme was due to begin in September 2023. After completing three years of basic nursing, students will commence a further four-year course for nurse managers (two years in Uzbekistan and two years abroad). A two-year nursing programme was also expected to begin in 2023.

Social workers

According to the DMSS there are about 2300 social workers in Uzbekistan; the term social worker may loosely mean care provider at home. The DMSS employs 230 providers of care at home and refers to them as social workers.

The National University of Uzbekistan has Department of Social Work offering Bachelor- and Master-level programmes. In the autumn–winter of 2022 in Surkhandarya region, 1000 people were educated in social work through a 36-hour course (two weeks), intended to be cascaded to cover all the regions.⁴⁰

Physical therapists or physiotherapists

Physiotherapy has been taught in Uzbekistan since 1934 (at the National Institute of Physiotherapy and Kurotology). It was taught as a specialization for medical doctors. There is no stand-alone education for physical therapy. All physical therapists/physiotherapists are either medical doctors with advanced training or are nurses with additional training.

Occupational therapists (ergotherapists)

Currently, there is no formal education for occupational therapists/ergotherapists in Uzbekistan and this profession does not yet exist in the country.

Speech and language therapists (logopedists)

Speech and language therapy is represented mainly through logopedists (speech correction specialists). This profession has historical roots as part of early childhood development and education. At the end of 2021 there were 1151 logopedists working in Uzbekistan.⁴¹

Prosthetists and orthotists

In 2018, the International Society for Prosthetics and Orthotics (ISPO) updated their Education Standards for Prosthetic/Orthotic Occupations, introducing key terminology changes (37). The prosthetic and orthotic workforce includes three distinct roles, two involving clinical care and one non-clinical position.

⁴⁰ Information gathered through discussions with management of the Republican Centre for Social Adaptation of Children.

⁴¹ Unpublished information provided from the Statistics Agency to the WHO Country Office in Uzbekistan on 18 May 2023.

Historically, this skill mix has existed to varying degrees, with ISPO Category I and Category II providing direct care to service users and Category III personnel implementing prosthetic and orthotic fabrication procedures.

With the 2018 Education Standards, the three categories are defined as follows (37):

- prosthetist/orthotists (formerly Category I) – clinical role – can do everything, including prescribing;
- associate prosthetists/orthotists (formerly Category II) – clinical role – work under the supervision of prosthetist/orthotist; and
- prosthetic/orthotic technicians (formerly Category III) – non-clinical role – competent in fabrication of prostheses and orthoses.

Currently, there are no internationally recognized prosthetists/orthotists working in Uzbekistan. Many individuals have received short courses or on-the-job training in prosthetics and orthotics (either within Uzbekistan or outside of the country). There is no consolidated registry of this cadre of health professional.

Other professions or training in related activities

Eye and ear care are provided by doctors in the field of ophthalmology and otorhinolaryngology (ear, nose and throat doctors). Tashkent Pediatric Medical Institute trains 30–40 paediatric doctors in this specialty each year. However, audiologists are lacking in Uzbekistan.

Psychologists are medical doctors; there were 12 842 psychologists in Uzbekistan.⁴²

Postgraduate education

Medical doctors

Before 2017, the Tashkent Institute for Postgraduate Medical Education (TIPME) was the only recognized institution providing postgraduate education for medical doctors. There are two levels of postgraduate education: “advanced training”, which is a one-month course (144 hours), and specialization, lasting at least two months (288 hours).

The Centre for the Development of Professional Qualification of Medical Workers, Postgraduate Education has been one of the TIPME training sites since 2021.

It is one of 10 clinical sites where medical doctors can receive postgraduate training and the only one of these that offers specialization. Five types of specialization are achievable (gastroenterology, physiotherapy, sports medicine, dietology and LFK). The course duration is two months, three months, and six months (depending on the Bachelor-level area of focus), resulting in the designation “Specialized training in *[topic]*” being awarded.

⁴² Ibid.

Between September 2022 and February 2023, over 80 medical doctors completed specialized training in rehabilitation-related fields (physiotherapy: 57; sports medicine: 16; LFK: 10). In 2022, about 90–100 people received specialization in physiotherapy.

For the rehabilitation-related professions (physiotherapy, sports medicine and LFK) there are nine different curricula (two-month, three-month, and six-month courses across three topics). The curricula are to be updated every two years and are approved by the Ministry of Health. By September 2023 there should be one curriculum, with a methodology committee working at the TIPME to check its content.

Nurses

Nurses have a separate site for postgraduate education, in Tashkent: the Republican Centre for Training and Specialization of Nursing and Pharmaceutical Workers.

7.3. Licensing and continuing medical education

In Uzbekistan, licensing is not yet required for individuals, and there is no national examination requirement. Continuing medical education is required for doctors, every five years. The requirement is two months of advanced training (288 hours). One month must be in the area of specialization and the second month can be in a related area.

Re-certification of health professionals is critical to ensuring that they have the up-to-date clinical knowledge and skills required to provide high-quality care. Uzbekistan has a continuing professional development system, but no re-certification process for health professionals. After graduation, a professional receives a lifetime authorization to work. There is no process that requires the professional to demonstrate fitness to practice on an ongoing basis once they are in post.

7.4. Professional associations

The only professional association that includes rehabilitation is the National Association of Sports Medicine and Rehabilitation, registered in 2018.

7.5. Remuneration

Remuneration for medical workers begins at a base salary of US\$ 250. There are multiple governmental decrees that address remuneration.⁴³ These include:

- Decree of the President of the Republic of Uzbekistan No. UP-136 of 17 May 2022 “on measures to strengthen material support and motivation of employees of medical institutions”.
- Decree of the Cabinet of Ministers of 9 December 2022 No. 699 “on approval of the regulation on the procedure for monthly additional payments to wages for employees of medical institutions with an academic degree.”

⁴³ See Annex C for details of the relevant legislation

7.6. Rehabilitation infrastructure/equipment

Uzbekistan has multiple legislative documents referencing equipping/updating physiotherapy rooms or departments (or funding allocated for this purpose), including indicators and equipment lists.⁴⁴

Box 7.1 summarizes the rehabilitation human resources and infrastructure/equipment situation in Uzbekistan as of March 2023.

Box 7.1. Summary of the rehabilitation human resources and infrastructure/equipment situation in Uzbekistan, March 2023

- Comprehensive data on the rehabilitation workforce have not been consolidated. However, illustrative figures from various professions are presented in this STARS report.
- The 370 000 nurses in Uzbekistan provide the backbone of the health workforce; no disaggregated data are available on nurses specializing in physiotherapy, LFK and massage.
- There are about 100 000 medical doctors in Uzbekistan; 558 specialize in physiotherapy, 21 are rehabilitologists and nearly 13 000 are psychologists.
- Physical therapy is a specialization of medical doctors and does not exist as a stand-alone profession. Occupational therapy also does not yet exist in Uzbekistan.
- There are over 1100 logopedists in Uzbekistan; the curriculum is located within teacher education (not health sector) and focuses on speech correction in children.
- Prosthetists and orthotists undergo short courses or on-the-job training; there are no ISPO-recognized prosthetics and orthotics professionals in the country.
- Individual licensure is not required, but doctors are required to undergo continuing medical education, updated every five years.
- Before 2017, the TIPME was the only institution offering postgraduate medical education for medical doctors. Currently, many specialist medical facilities can offer specialized or advanced training.
- Remuneration for health-care workers is low.
- There are no rehabilitation-specific professional associations in Uzbekistan.
- Multiple references to standards and lists of equipment exist for physiotherapy; however, inability to retrieve these documents and translate them into English for the STARS prevented access to specific details on the standards or guidelines for physiotherapy infrastructure.

Note: STARS – Systematic Assessment of Rehabilitation Situation; LFK – “treatment physical culture” (abbreviation from Russian “ЛФК: Лечебная Физкультура”); TIPME – Tashkent Institute for Post-graduate Medical Education

⁴⁴ Annex C provides details of the relevant legislation (Presidential Decree UP 215; 25 April 2022, Law ZRU 813; 30 December 2022, Presidential Protocol 74; 17 February 2022, and Ministerial Order 60; 29 June 2016).

8. Rehabilitation information

An overview of the availability and use of data on rehabilitation, disability, and population functioning, along with the extent of digital integration across sectors, is presented in Table 8.1.

Table 8.1. Status of rehabilitation data and information systems in Uzbekistan

Key components	Status
Data on disability, rehabilitation needs and population functioning	The DMSS manages a robust database on people with disabilities.
Data, digitalization and Uzbekistan's health information systems	Digitization of Uzbekistan's health information system is evolving; the social services sector has a more advanced electronic data management system than that of the health sector.
Data on availability/utilization of rehabilitation	IT-Med may have physiotherapy service data in some regions; Social Service Platform has data on rehabilitation and APs provided in their centres (Subection 8.2.3).
Data on outcomes, quality and efficiency of rehabilitation	Attention to rehabilitation treatment outcomes is not systematic within the health sector.
Data-driven decision-making	There is limited evidence of data used in decision-making.
Government funding for rehabilitation research	The Ministry of Innovative Development funds research, but there is limited investment in rehabilitation-related research.

Note: DMSS - Department for organizing Medical and Social Services

8.1. Data on disability, rehabilitation needs and population functioning

Census information

Uzbekistan's last national census was in 1989 and the next planned census is due in 2024. There were no questions on disability or functioning in the 1989 census. During the STARS, no information was collected on the census questionnaire to be used in 2024.

During STARS discussions, it was noted that *makhallas* reportedly have data on all people in their catchment areas; this serves as a type of local census. The type of information collected, whether it is paper-based or electronic, and the method and frequency of data collection were not determined.

Estimated need for rehabilitation and AT in Uzbekistan

Rehabilitation

In Uzbekistan, it is estimated that around 9 million people experience conditions that could benefit from rehabilitation, representing approximately one in four people (29) (see Section 3.3 and Fig. 3.4, which presents details of the prevalence of different conditions that could benefit from rehabilitation).

AT

For AT, at the end of every year, the government branch responsible for medical and social development (the MSEC) collects information on the need for AT, which contributes to the budget determination process⁴⁵. For 2022, just over 25 000 people were identified as needing a total of 33 579 APs; see Annex G for details.

The 2019 situation analysis by UNICEF reveals that many of the devices needed by disabled people in Uzbekistan are not currently available to them (26). Of the total number of people with disabilities, 43.6% need personal APs and medical devices, 21.5% have access to them and only 2.8% have received them from governmental organizations. Importantly, children with disabilities (compared to adults with disabilities) have a significantly greater unmet need for movement and self-care APs, aids for better hearing and communicating, as well as hygiene and sanitation products.

People with disabilities and vulnerable groups

At the end of 2022, the total number of individuals with disabilities in Uzbekistan was 820 620; over 130 000 are children aged under 18 years. For individuals aged 18 years and older, there are three categories of disability (Group I, Group II and Group III); see Table 8.2 for details. Individuals with Group I disability determination have the most severe impairments. It is worth noting that individuals with Group III determination do not receive any monetary benefits, but can receive preferential status (e.g. in terms of health care access and APs without payment).

In addition to these figures, the DMSS asserts that there are approximately 27 000 elderly people living alone and people with disabilities needing care; 9000 of them needing care *Sakhovat* and *Muruwat* residential care institutions and 18 000 people requiring home-based care.⁴⁶

⁴⁵ As specified by Cabinet of Ministers Resolution No. 411 (1 July 2021) (see Annex C for details).

⁴⁶ Unpublished information provided by the DMSS to the WHO Country Office in Uzbekistan on 15 March 2023.

Table 8.2. Number of people living with disability in Uzbekistan, 2022

No	Region	Total	Sex		Category				Age			
			Female	Male	Child	I	II	III	0–17 years	18–29 years	30 years to retired	Retired +
1	Republic of Karakalpakstan	58 124	25 113	33 011	9 224	6 140	41 225	1 535	9 224	4 666	26 896	17 338
2	Andijan	72 052	31 869	40 183	13 072	6 975	44 675	7 330	13 072	6 367	32 279	20 334
3	Bukhara	49 201	21 557	27 644	5 039	3 950	37 087	3 125	5 039	4 055	25 230	14 877
4	Jizzakh	33 749	14 624	19 125	7 033	3 128	21 415	2 173	7 033	3 471	13 470	9 775
5	Kashkardarya	77 656	33 258	44 398	15 439	6 645	50 725	4 847	15 439	7 863	39 031	15 323
6	Navoi	36 640	16 285	20 355	5 530	3 576	25 368	2 166	5 530	2 931	18 475	9 704
7	Namangan	67 122	29 617	37 505	10 048	5 662	45 598	5 814	10 048	6 726	32 228	18 120
8	Samarkand	84 911	37 415	47 496	15 163	9 714	53 302	6 732	15 163	9 400	38 021	22 327
9	Syrdarya	27 002	12 034	14 968	5 030	1 809	19 303	860	5 030	2 288	14 186	5 498
10	Surkhandarya	68 423	25 856	42 567	13 669	6 472	43 480	4 802	13 669	8 843	32 594	13 317
11	Tashkent	60 422	26 987	33 435	9 599	5 268	38 989	6 566	9 599	5 974	31 087	13 762
12	Fergana	78 882	33 676	45 206	13 335	7 088	50 968	7 491	13 335	7 432	37 768	20 347
13	Khorezm	47 738	21 146	26 592	7 999	5 607	32 226	1 906	7 999	5 208	22 411	12 120
14	Tashkent City	58 698	25 645	33 053	7 218	4 841	40 071	6 568	7 218	3 801	23 648	24 031
TOTAL Uzbekistan		820 620	355 082	465 538	137 398	76 875	544 432	61 915	137 398	79 025	387 324	216 873

Source: unpublished data provided by the DMSS on 15 May 2023.

Disability status determination and information management

The national system of disability status determination is working on incorporating the modern disability determination standards. This follows a Presidential Decree that commissions the Government to develop the concept of transitioning to a new disability status determination system.⁴⁷

The system for determining disability status and/or fitness for work is organized according to three main tiers; these are described below and shown in Fig. 8.1.

- The Medical Consultative Commissions (VKs) and Medical Labour Expert Commissions (VTEs) are located at lowest level (central district multi-profile polyclinic). VKs make the determination and electronically⁴⁸ send a form (known as form №88) to the MSEC for review. In addition to in-person assessments, there are 39 conditions (e.g. amputation) that can receive a disability determination without physical assessment of the individual – these include Group I and Group II categorizations. There are also temporary disability determinations that can create pathway for accessing APs. The VKs are the gatekeepers for accessing AT – they have the ability to determine temporary impairment and this gives access to APs without having to go through the MSEC. They can also refer to the MSEC branches, including prescription for products after disability determination.

⁴⁷ The relevant legislation can be found in Annex C (Presidential Decree PP 22; 27 November 2021).

⁴⁸ In discussion with the DMSS, it was noted that as of 1 March 2023, information from VKs to the MSEC is sent electronically. It was anticipated that from 1 August 2023 the system of requests for APs from the MSEC level will also be electronic and no longer paper based.

- At the next level, the MSEC (generally affiliated with the District Medical Union) receives the VKK referral, indicating disability determination. Once the VKK document is approved, the MSEC invites the individual for assessment. The MSEC then creates an individual rehabilitation programme (IRP) – this may include medical rehabilitation, social rehabilitation, or other interventions. The MSEC sends the specific recommendation to the relevant district-level office of the DMSS and the agency office provides the certificate for the product or rehabilitation facility. There are 130 MSEC-level institutions in the country – generally one per district, but some cover two districts. The doctors working within the MSEC facilities need 3.5 months (144 hours) of specialist training in medical and social examination.
- Finally, at the top level, there is also the Republican Inspection for Medical and Social Examination (14 affiliated facilities – one central and one in each province).

Fig. 8.1. Disability status determination in Uzbekistan, 2022

14	Republican Inspection for Medical and Social Examination One central location in Tashkent and one office in each region
130	MSECs (111 adult/19 paediatric facilities) Approximately 500 MSEC doctors Generally affiliated with the District Medical Union
208	208 VKKs Approximately 2500 medical doctors are trained Located at central district multiprofile polyclinics

Source: authors' own compilation based on discussions during the STARS in Uzbekistan.

8.2. Data, digitalization and the health information system

Digital development in Uzbekistan

In October 2020, the Government of Uzbekistan adopted the Digital Uzbekistan 2030 Strategy, which sets out five priority areas for development: digital infrastructure; e-Government; digital economy; national IT sector; and IT education (38).

The Ministry of Digital Technologies was established by Presidential Decree⁴⁹ and has many roles that include, but are not limited to (39):

- ensuring implementation of state programmes on e-Government,
- interdepartmental coordination, monitoring, evaluation and control of the activities of ministries, state authorities, companies and associations in the field of informatization; and
- creating a unified system of formation, storage and use of state information resources and databases, and creating and managing interdepartmental information systems.

⁴⁹ The relevant legislation can be found in Annex C (Presidential Decree UP 269; 21 December 2022).

Digitization within the health system

Information management in the health system has not yet achieved a consistent standard. Many health facilities (especially state hospitals) have their own information management systems that are digitized, while some still use paper-based systems. Various platforms referenced during STARS site visits include Med-Hub, Techno-Med and Med-Refer, among others. Box 8.1 describes the general picture in Uzbekistan in terms of digitizing health information systems. Box 8.2 shows a specific example from the digitized information management system of the National Children's Medical Centre.

Box 8.1. The challenging task of digitization

The health information system in Uzbekistan is highly fragmented, lacks key digital components, relies on fractured data collection and sharing, and lacks clarity in terms of standardization and governance structure. Uzbekistan lacks a comprehensive health information management strategy that would involve the private sector and provide standardized terms and conditions. The sector has not adopted any international standards for digitized health and the medical community still uses paper-based records.

Source: USAID (38).

Box 8.2. Example of an electronic medical record that includes rehabilitation

The National Children's Medical Centre has an electronic medical record and internal referral process across all departments. The rehabilitation examination form is well developed, has a section on "objective status of motor function" (18 categories) as well as three international recognized measurement tools (Functional Independence Measure, Ashworth, and Gross Motor Function Classification System).

Note: This system was explained and demonstrated during the STARS; no evidence was provided of actual use.

In 2021, IT-Med was established⁵⁰ within the Ministry of Health's Department of Digitization, with the aims of digitizing the health-care sector, introducing a single set of information systems, reducing unnecessary procedures in the management process, improving the quality of services provided to the population, and ensuring the efficiency of medical employees, as well as the full implementation of digital transformation programmes adopted.

According to the relevant legislation, IT-Med is assigned the following tasks:

- optimization, rationalization, standardization and automation of processes in the health-care system and organizations;

⁵⁰ Idem. (Presidential Resolution 5000; 23 February 2021.)

- development of technical and economic parameters, concepts and other design and pre-project documentation for projects implemented for the development of information systems in the field of health care and financed at the expense of international financial organizations;
- implementation and monitoring of a single complex of information systems "Electronic Health", as well as ensuring their integration with information systems of other government bodies; and
- implementation of a unified platform of health information systems, which includes information systems and software products implemented in order to expand the digitization of the medical field.

According to IT-Med, an information system for managing human resources (personnel registration information system) was developed and implemented by the Ministry of Health. It is designed to form a unified database of health-care workers and contains data on the total number of employees in various (types of) organizations in the context of different administrative territories. This information system is integrated with the health information system.⁵¹ This system supports medical decision-making, houses patient medical records and monitoring, medical research data from medical devices, employee communication tools and financial and administrative information.

Key information related to IT-Med was provided during a STARS visit meeting (7 March 2023) on information and digitization.

- The country is not yet fully digitized;⁵² currently seven regions (Andijan, Bukhara, Jizzakh, Namangan, Samarkand, Syrdarya, Kashkardarya) and Tashkent City have local area networks in place.
- Digital referrals only occur from PHC going to higher levels (and only in the eight above-mentioned areas). Digital systems are only partially complete at secondary levels and have not yet been implemented at Republican level.
- There are 23 information systems included in IT-Med. Examples of their use include: routine health data (number and type(s) of health professionals, health facility, whether physiotherapy is provided); making appointments; registering treatments given; registering referrals; and collecting data on types of conditions (electronic medical record).
- Software has not yet been developed to use dashboard information; IT-Med has data but does not have capacity for data analysis.
- Jihoz-Med sits within IT-Med; this software package keeps track of all equipment (including physiotherapy equipment) that exists in health facilities; availability, number and the working order/condition.
- Data collected by patronage nurses is currently recorded in paper-based format, but IT-Med (with support from the Asian Development Bank) will shift to digitized information and all patronage nurses will be provided with electronic tablets. This shift will start with content on indicators related to tuberculosis, diabetes and cardiovascular disease.

⁵¹ Unpublished information sent by IT-Med to the WHO Country Office in Uzbekistan on 15 March 2023.

⁵² Work on this is being supported through the Asian Development Bank.

Digitization within the social system

The DMSS has its own information platform, not linked to IT-Med, called *Ijtimoiy xizmat platformasi* (Social Service Platform). The platform includes data on people with disabilities and socially vulnerable groups. There is a well-developed database on people with disabilities, through the disability status determination system (headed by the Republican Inspectorate for Medical and Social Expertise); currently there are about 889 900 people included in the database.

8.3. Data on availability and utilization of rehabilitation

For rehabilitation within the health system, IT-Med reportedly has data on physiotherapy services provided.

In terms of rehabilitation within the social services system, in 2022 a total of 24 777 individuals received rehabilitation in the existing rehabilitation centres, which was 3061 more than in 2021 (21 614 people). The average stay per person was 12 days.

8.4. Data on outcomes, quality and efficiency of rehabilitation

Observations and information collected during the STARS site visits revealed the majority of data are focused on output (number and type of treatments or products provided). This is especially true for services provided at health facilities. Typical data collected by physiotherapy units includes:

- number of patients
- number and type of procedures performed
- which wards patients frequent
- whether treatment is fee based or referred (free).

Although the Ministry of Health has specific legislation in place (in the form of ministerial orders) governing the forms to be used to assess various health-care elements (e.g. diagnostics and treatment of various disease classifications), there is no standard patient evaluation form specifically related to rehabilitation.

For people with disability, rehabilitation efficiency is captured through re-evaluation by the MSEC. In 2022, there were 22 768 elderly people with disabilities who received rehabilitation in facilities, of which 12 343 (54.0%) were re-examined by the MSEC. The results showed that 1410 people (11.4%) had achieved “rehabilitation efficiency” (2.5% full rehabilitation, 8.9% partial rehabilitation). In addition, 162 of the children with disabilities who received rehabilitation in the centres had achieved rehabilitation efficiency (8.1%).⁵³

The Ministry of Health has developed indicators⁵⁴ to assess PHC organizations, to help to identify areas for improvement and ensure they are meeting their goals and objectives, including reducing costs, improving patient outcomes and increasing patient satisfaction. One of the indicators is patronage coverage of people with disabilities (see Table 8.3).

⁵³ Unpublished information sent by the DMSS to the WHO Country Office in Uzbekistan on 17 March 2023.

⁵⁴ These indicators are detailed in Presidential Resolution 215 (25 April 2022); Annex C provides the full list of relevant legislation.

Table 8.3. Illustrative indicator from the Ministry of Health's list of indicators to assess PHC organizations

11	Patronage coverage of patients related to bedridden disabled people living alone	(N) number of patronage visits carried out by these categories during the reporting period	(N/D) *100
		(D) number of individual bedridden disabled people	

Source: based on unpublished data provided by IT-Med on 16 March 2023.

Disability is also referenced in a list of indicators to evaluate the effectiveness of doctors of narrow specialties (see Table 8.4), beginning in August 2022.⁵⁵

Table 8.4. Five criteria to evaluate the effectiveness of doctors with narrow specialties

Criteria for evaluating the effectiveness of doctors of narrow specialties of district (city) multidisciplinary central clinics and family clinics			
	Indicators	Load	Score
26	Fulfillment of the tasks of medical teams	Every confirmed case	10
27	Iatrogeny (the presence of conditions that are harmful to the health of the patient)	Every confirmed case	30
28	Detection of chronic disease at a late stage with obvious complications and/or evident decompensation	Every late-determined case	20
29	Increase in primary disability in a specialized area	Every confirmed case	20
30	Early death of patients in a specialized area	Every confirmed case	20

Source: based on unpublished data provided by IT-Med on 16 March 2023.

8.5. Government funding on rehabilitation research

Financing for research is led by Uzbekistan's Ministry of Innovative Development. According to the 2023 budget (Table 6.1 in Section 6.1), the Ministry was to receive over US\$ 90 million, of which US\$ 65.6 million was to be allocated to the Fund for Financing Science and Innovation Support.⁵⁶

The STARS' team was unable to meet with the Ministry of Innovative Development during the in-country assessment; consolidated data on financing for rehabilitation was not determined.

Box 8.3 summarizes the rehabilitation information situation in Uzbekistan as of March 2023.

⁵⁵ Ibid.

⁵⁶ Annex C details the legislation relevant to the state budget (Law ZRU 813; 30 December 2022, including appendices).

Box 8.3. Summary of the rehabilitation information situation in Uzbekistan, March 2023

- Uzbekistan's 1989 census contained no questions on disability or functioning. The next census is due in 2024; no information was available on content of census questionnaire.
- An estimated 9 million people in Uzbekistan have health conditions that could benefit from rehabilitation (one in four people).
- At the end of 2022, there were over 820 000 people with disability, representing about 2.3% of the population.
- Data management within the health system is in flux and fragmented. Some facilities have their own digital platform, some use paper-based recording systems and the linkages between all levels of care have yet to be developed.
- IT-Med was established in 2021 and is responsible for digitizing Uzbekistan's health information system. The system is still being developed. Only seven regions (plus Tashkent City) have local area networks and referrals are only in place from PHC to higher levels of care (not bi-directional).
- The Republican Inspectorate for Medical and Social Expertise has its own digitized platform and has created digital referrals for people with disabilities to access their benefits.
- The Inspectorate also has consolidated data on utilization of its rehabilitation centres (24 722 people received rehabilitation in 2022). No consolidated data are available on the number of people who received rehabilitation in health-care facilities.
- Data on rehabilitation outcomes are limited. At health facility level, information gathered is based on outputs (counting people and treatments). For people with disabilities who are re-evaluated, the MSEC captures rehabilitation efficiency data.
- Within the health system, a standard patient evaluation form for rehabilitation has not yet been developed.
- The Ministry of Health has developed indicators for PHC facilities, one of which is the patronage nurse coverage of people with disabilities.
- The Ministry of Innovative Development manages government-funded research. In 2023, over US\$ 65 million was allocated to the Fund for Financing Science and Innovation Support; further data specific to rehabilitation and AT were not determined.

Note: PHC – Primary Health Care; MSEC - Medical-Social Expert Commission; AT – Assistive Technology

9. Rehabilitation service accessibility and quality

An overview of the accessibility, distribution and quality of rehabilitation services across levels of care and facilities in Uzbekistan is presented in Table 9.1.

Table 9.1. Status of rehabilitation data and information systems in Uzbekistan

Key components	Status
Percentage of tertiary and secondary hospitals with rehabilitation services	Nearly all tertiary and secondary hospitals have provision for physiotherapy, but this does not reflect contemporary rehabilitation practices.
Percentage of districts/communities covered by rehabilitation services	All PHC facilities should provide physiotherapy services. In addition, the Ministry of Employment and Poverty Reduction manages 12 rehabilitation centres for people with disabilities.
Number of specialist rehabilitation facilities/units	Multiple Republican centres provide rehabilitation.
Number of rehabilitation beds and rate per 10 000 population	Difficult to determine through the STARS.

Note: DMSS - Department for organizing Medical and Social Services

9.1. Overview of rehabilitation service accessibility

Accessibility is facilitated or limited by many factors. These include, but are not limited to, awareness about the service (eligibility for and benefits of care), affordability and availability, distance from home to the service and means of transport to reach it. This section focuses primarily on the availability of services and is organized according to facilities managed by the health sector and those managed by the social services sector.

Rehabilitation at community level

In Uzbekistan there is very little rehabilitation available at community level. Within the social protection system, the DMSS has identified about 18 000 older people living alone for whom there are “social workers” – these are care workers who can visit people's homes up to a few times per week to help with daily chores.

The *makhallas* fall under the Ministry of Employment and Poverty Reduction and they are engaged with community-level health care under the Ministry of Health, through the MMPs, which are a working branch of the FDPs. *Makhallas* can be an effective agent for health promotion and awareness (see Box 9.1). In addition, they serve as a type of safety net and can provide funds for AP or housing modifications (on a case-by-case basis).

Box 9.1. *Makhallas* interventions in Almazar District, Tashkent City

There are 64 *makhallas* in Almazar District, each with a designated space for health promotion. Different scheduled activities take place on different days of the week: Monday is diabetes; Tuesday cardiology, Wednesday reproductive health of women and girls; Thursday health and nutrition, Saturday LFK (walking, exercise, dance). The *makhallas* have an agreement with the Ministry of Sport, whereby on Saturdays (for 12 hours; all day) sports people are available to help encourage exercise.

Source: discussion with the Head of PHC of Almazar District (4 March 2023).

The medical brigades, along with the home-visiting patronage nurses provide an opportunity to extend rehabilitation to the community.

Early identification and intervention

According to UNICEF,⁵⁷ early identification and intervention are not yet standard practice in Uzbekistan and universal screening has yet to be developed.

9.2. Rehabilitation within the health sector

For the purposes of this report, PHC facilities are synonymous with polyclinics and generally provide only outpatient care.

Evidence from site visits during the STARS shows that about 75% of all rehabilitation (meaning physiotherapy) in health facilities uses treatments during which the client is passive (machine-based interventions or massage), with about 25% of services incorporating exercise/LFK. The notion of contemporary rehabilitation and functional outcomes is underdeveloped.

In addition to the existing services, six new regional rehabilitation centres for children are to be established in the future, according to the Concept for the Development of the Healthcare System of the Republic of Uzbekistan (2019–2025) (30).⁵⁸

Rehabilitation for specific conditions

In addition to rehabilitation available within general health facilities, STARS visits revealed some noteworthy initiatives related to progress toward achieving contemporary standards in rehabilitation. There are likely other pockets of excellence throughout the country – note that these examples are illustrative and are not intended to capture and reflect all of the good work happening in Uzbekistan.

⁵⁷ Meeting with UNICEF in Tashkent, 14 March 2023.

⁵⁸ Established by Presidential Decree 5990; 7 December 2018 (see Annex C for the relevant legislation).

Cochlear implants and hearing/ear care rehabilitation standards

In 2012, the RSSPMC for Paediatrics developed an ear, nose and throat department, providing cochlear implants; since then, over 2000 children have benefited from this service. The facility has become world renowned for the comprehensive programme it delivers, described as the “Uzbek Model”. This involves multi-stage care, from identification to pre-surgical preparation, family involvement, surgery and extensive post-surgical follow-up. For hearing screening, there are 227 maternity clinics in the country – by the end of 2023, all should have the capacity to conduct hearing screening (newborns and infants).

Ponseti method to treat clubfoot

The RSSPMC for Traumatology and Orthopaedics is the nucleus for training on and treatment using the Ponseti method for congenital clubfoot malformation. Dr Rustamov is a recognized expert in this field and received his training on the Ponseti method at its origin in Iowa City (United States) in 2015. The Ponseti School opened in Tashkent in March 2021. About 30 orthopaedic doctors have been trained in this method in Uzbekistan; however, not all of them have yet achieved international practice standards.

Private rehabilitation facilities

There are about 4–5 private rehabilitation facilities in Tashkent.⁵⁹ During the STARS, the team visited a private neuro-rehabilitation facility for adults, which opened in 2020. It has 30 beds and 40 staff, and had treated about 450 inpatients since it opened. A unique staffing position at the facility is that of an aphasiologist; the Institute of Pedagogy provides a three-month course on aphasiology. The facility has progressive system to determine treatment impact across 18 domains. As the facility is a commercial entity, they were not prepared to share this tool.

9.3. Rehabilitation within the social sector

The Ministry of Employment and Poverty Reduction currently manages about 59 inpatient facilities in Uzbekistan; these include 12 rehabilitation centres, 35 boarding houses and 11 sanatoria; further details are provided in the subsections that follow. In addition, services at home are provided for older adults living alone and needing care.

Rehabilitation centres

Table 9.2 provides details about the 12 rehabilitation centres managed by the Ministry of Employment and Poverty Reduction. All are inpatient facilities and only for individuals with disabilities. These centres can treat both adults and children and no rehabilitologists are included in the staffing structure.

⁵⁹ Unpublished information shared informally during the site visit to the private neuro-rehabilitation facility in Tashkent

Table 9.2. Rehabilitation centres managed by the social services sector, 2023

	Region	Total beds	Adult beds	Child beds
1	Republic of Karakalpakstan	50	45	5
2	Andijan	100	95	5
3	Bukhara			
4	Jizzakh	50	45	5
5	Kashkardarya	50	45	5
6	Navoi	100	95	5
7	Namangan	50	45	5
8	Samarkand	50	45	5
9	Syrdarya			
10	Surkhandarya	100	95	5
11	Tashkent – Republican Centre	200	190	10
12	Fergana	50	45	5
13	Khorezm	100	95	5
14	Tashkent City			
	TOTAL Uzbekistan	900	840	60

Source: authors' own compilation based on discussions during the STARS assessment in Uzbekistan.

Referrals for rehabilitation are carried out by facilities under the MSEC, in accordance with an IRP. In the absence of a multidisciplinary approach, the IRP is drafted by doctors (who are not specifically trained to write them). According to the UNICEF 2019 situation analysis, only 37.3% of respondents reported having received an IRP, 17.9% reported that they had not received one, and approximately 50% were not aware of the existence of IRPs (26).

Some key facts about the current state of the rehabilitation centres managed by the DMSS are listed here (see also Table 9.1 for bed numbers).

- All rehabilitation centres have robotic exoskeletons (14 in total).
- The Republican centre (located in Tashkent City) has 200 beds, including 10 for children.
- Four regions currently have 100 beds (of which five for children).
- Seven regions currently have 50 beds (of which five for children).
- There are no rehabilitation centres in Bukhara or Syrdarya regions.
- Tashkent City does not have its own rehabilitation centre managed by the social services sector (only private facilities).

Future plans for rehabilitation centres managed by the DMSS include:

- opening rehabilitation centres in Bukhara and Syrdarya regions (each with 100 beds);
- expanding current bed capacity in all centres from 50 beds to 100 beds;
- starting to offer outpatient rehabilitation services in all existing regional centres;
- building a 300-bed National Centre for Rehabilitation and Prosthetics for people with Disabilities, to become the new RSSPMC for Rehabilitation and Expertise; and

- developing and implementing a programme to equip all existing regional centres for rehabilitation and prosthetics with modern rehabilitation equipment.

Box 9.2 provides the perspective of the management team of a national rehabilitation centre on the need to expand rehabilitation services for people with disabilities.

Box 9.2. Expanding rehabilitation services for people with disabilities

We estimate there are about 900 000 people with disabilities and most conditions are related to musculoskeletal disorders. We are to cover 50%, so must care for about 400 000 people. Our current capacity is to provide care for about 20 000 people across the country. We hope to expand coverage of measures of medical and social rehabilitation of people with disabilities by six times the current coverage – reaching up to 120 000 people per year.

Source: discussion with management of the National Centre for Rehabilitation and Prosthetics for People with Disabilities (3 March 2023).

AT

Within Uzbekistan, the rehabilitation centres are called centres for rehabilitation and prosthetics for disabled people. Although often located together, the prosthetics and orthotics factory/workshop is independent from the rehabilitation centre and operates as a Limited Liability Company (LLC). The DMSS purchases APs from them.

In addition to these LLCs, there are other AT providers – it is estimated about 40 prosthetics and orthotics manufacturers are operating in the country. During discussion with AT service users, it was noted that certificates from the DMSS for APs only provide four locations from which to obtain these products.

Uzbekistan has 18 categories of approved APs⁶⁰ (see Table 5.1). In 2023, the DMSS intends to expand this list to 27. An individual must have a disability determination to receive these products free of charge. APs cannot be obtained from hospitals or PHC facilities (except for use within the facility).

In addition to the official AP list (products given free of charge to individuals referred by MSEC facilities), other APs are provided through various special programmes or ad-hoc events. For example, in 2021:

- over 1000 people were provided electric wheelchairs free of charge;
- products were provided for people who are blind or have low vision (1800 talking thermometers; 2000 talking blood pressure monitors, 4000 devices for learning the Braille alphabet); and
- 5000 elderly people and people with disability living alone were issued with smart watches (for two-way emergency communication).

⁶⁰ A foot abduction brace (clubfoot brace) is not yet on the approved list.

Boarding houses

There are 35 boarding houses⁶¹ (also known as nursing homes, residential care homes, or more simply, institutions) – of which seven are for children. These are known as *Sakhovats* (for individual elderly people and people with Group I and Group II disability aged over 18 years), and *Muruvvats* (for children with disability and orphans). These institutions serve about 9500 people and rehabilitation and physiotherapy are reportedly provided in them. Unfortunately, no visits to boarding houses took place during the STARS.

Sanatoria

Through discussions with the DMSS, it was estimated that about 3.5 million people have the need for sanatorium care and the DMSS manages 11 sanatoria that can serve 45 000 to 50 000 people per year. The DMSS plans to add four more sanatoria in 2026 (bringing the total to 15). Rehabilitation is provided within these facilities.

According to state statistics, at the end of 2021, there were 199 sanatoria with 27 300 beds. Trade unions also manage around 30 sanatoria in the country, with about 7000 beds – with an estimated 3552 staff (including 272 medical doctors and 1000 nurses). According to government data, there are 121 961 sanatoria⁶² and a rate of 33.9 sanatoria per 10 000 population (40).

During the STARS, the team visited the private sanatorium “Chinabad Plaza”; a state-of-the-art facility that opened in 2021 and was the first sanatorium to have a five-star rating for medical tourism.

9.4. Rehabilitation in emergency or disaster situations

The Uzbek strategy for achieving the goals of the Sendai Framework for Disaster Risk Reduction 2015–2030 does not contain information specific to rehabilitation. That said, Item 33 of the framework makes specific reference to medical care and post-disaster recovery (41), in terms of:

- increasing the effectiveness of measures to prevent morbidity and mortality among victims of emergency situations; and
- implementation of recovery plans to provide all those in need with psychosocial support services.

9.5. Overview of quality of rehabilitation

This section focuses on quality of rehabilitation, which is represented in this report by four main components: rehabilitation interventions, treatment plans and documentation, multidisciplinary teams and person-centred care, and details pertaining to the continuum of care.

⁶¹ According to official statistics, at the end of 2021 there were 35 boarding houses (28 *Sakhovats* with 7629 beds and 7323 residents; 7 *Muruvvats* with 2160 beds and 2038 residents) (21).

⁶² It is unclear whether this actually means beds.

Rehabilitation interventions

Rehabilitation is defined by WHO as a set of interventions to improve functioning. In Uzbekistan, rehabilitation continues to be dominated by physiotherapy techniques (application of thermal or electric modalities), massage and some remedial exercise. There is little attention to functional outcomes.

Treatment protocols have been developed for every pathology. A detailed review of these protocols was not made during the STARS; however, one nurse with physiotherapy training described “massage” as the protocol for the treatment of clubfoot.

Treatment plans and documentation

Rehabilitation is generally governed by a predetermined number of techniques to be provided, an overall time limit (number of days), or both. Treatment plans are infrequently developed (and rarely used in health facilities). The most common form of documentation is a checklist of treatment techniques delivered, whether the individual has a disability determination, and whether they are an inpatient or outpatient (as applicable).

Multidisciplinary teams and person-centred care

A multidisciplinary team, by contemporary definition, does not exist in Uzbekistan. At present no facility has a full complement of the core rehabilitation team (physical and rehabilitation medicine, physical therapy, occupational therapy, speech and language therapy, prosthetics and orthotics). Person-centred care was seen most frequently within settings offering rehabilitation for people with disabilities and rehabilitation for children (e.g. cochlear implants at the RSSPMC for Paediatrics, the Republican Centre for Social Adaptation of Children and the Republican Children's Psychoneurological Hospital).

Continuum of care

In Uzbekistan, the continuum of care is not well established. Referrals at discharge are underdeveloped and neither systematic nor standardized. The pathway is generally from hospital to home and potentially to a sanatorium for care. Referrals from lower levels of care to higher levels are being established and promoted through the pilot project in Syrdarya, and more of this is expected as part of the further roll-out of the SHIF. In the reverse direction, there is limited to no referral pathway.

The rehabilitation accessibility and quality situation in Uzbekistan as of March 2023 is summarized in Box 9.3.

Box 9.3. Summary of rehabilitation accessibility and quality situation in Uzbekistan, March 2023

- In Uzbekistan, rehabilitation is most commonly understood within a disability context (for those with a disability determination) and is provided within 12 inpatient rehabilitation centres across the country.
- In addition to the 12 rehabilitation centres, the Ministry of Employment and Poverty Reduction also manages 35 boarding houses and 11 sanatoria – all provide some level of rehabilitation.
- Within the health system, physiotherapy should be available at all PHC levels; this would imply up to 2000 facilities in the country offering this service.
- There is evidence of some private rehabilitation facilities emerging, with 4–5 operating in Tashkent City.
- Rehabilitation is not yet provided at community level. There is potential to use makhallas and/or medical brigades to provide basic rehabilitation services.
- The multidisciplinary team – in contemporary terms – does not exist in Uzbekistan, primarily because many of the main rehabilitation professions have yet to be established.
- Early identification of conditions or disabilities in children and the required intervention are not yet established; the exception is the initiative to undertake hearing screening in all maternity hospitals by 2024.
- There is no comprehensive service mapping for rehabilitation (adults or children) within the Uzbek health system.
- During STARS visits, contemporary standards for treating clubfoot using the Ponseti method and holistic care surrounding cochlear implants were observed as “best practice” examples to be replicated in the country and across the European Region.
- There are 18 categories of APs (70+ products in total) available free of charge to people with disability, with plans under way to expand the list to 27 categories.

10. Rehabilitation outcomes and system attributes

10.1. Outcomes

There is no unified database on rehabilitation at the national level. Many stakeholders, both governmental and nongovernmental, each collect some level of data on rehabilitation, but these data are neither synchronized nor complete.

Outcomes of rehabilitation – measuring functioning gains, or slowing functioning loss – are captured by some rehabilitation departments (especially those working with children and people with disabilities) but this practice is not uniform across the health sector. There is no integrated health information system platform to capture functioning data or outcomes of rehabilitation interventions. No information was collected in the STARS on measurement of functional outcomes after the provision of APs.

10.2. Attributes

Equity

Without consolidated details and data analysis on the staffing numbers and qualifications within each of the different rehabilitation settings, it is difficult to assess equity in rehabilitation coverage in the country.

Efficiency

Uzbekistan does not have standard rehabilitation assessment tools or reporting forms used across all facilities. As a result, measuring efficient delivery of rehabilitation is a challenge.

Accountability

Very few mechanisms are in place to ensure accountability for rehabilitation, and there is no evidence of a standardized system to capture rehabilitation outcomes within the routine health information system(s).

Sustainability

The value of rehabilitation in health care to restore or maintain function has not been well established in Uzbekistan. Further attention should be paid to identifying and recognizing the economic benefits of rehabilitation. Integrating physiotherapy within the BBPs (aligned with different conditions) is a positive step towards sustainability in rehabilitation service provision.

11. WHO RMM scoring

The RMM is a standard tool used during the STARS process. There are 50 components across seven domains in the RMM. Each component has illustrative descriptors that indicate levels of maturity of rehabilitation within the health system. The purpose of using the RMM is to provide an overview of the performance of different rehabilitation components (3). This overview enables comparison across components and domains that can then assist in the identification of priorities and recommendations for strategic planning. The international consultant took data from the in-country data collection and aligned this information with the 50 components.

Table 11.1 summarizes the seven domains, the components within each domain, and provides space for scores for each component and the rationale for the score. Rationale/justification is taken directly from the description in the RMM associated with each score.

Table 11.1. The RMM tool

KEY TO SCORES		JUSTIFICATION	
4	Already present, needs no immediate action		The RMM provides standard descriptive content for each maturity level. Overlap exists between levels. Rationale (justification) for the score describes the key attributes that led to the selection of the score.
3	Needs some strengthening		
2	Needs a lot of strengthening		
1	Very limited; needs establishing		
GOVERNANCE		SCORE/JUSTIFICATION	
1	Rehabilitation legislation, policies and plans	2	Policy frameworks encompass aspects of rehabilitation; overall direction is lacking.
2	Leadership, coordination and coalition-building for rehabilitation	1	Platform exists – but only for disability; leadership is ad-hoc; no evidence of overall direction.
3	The capacity and levers for rehabilitation plan implementation	2	Small amounts of resources are mobilized by individual efforts to lobby funds; management process is in flux.
4	Accountability, reporting and transparency for rehabilitation	2	There is a low level of accountability at Republican centres; accountability is absent at PHC level.
5	Regulation of rehabilitation and AT	1	Overall, standards for rehabilitation and AT are absent.
6	AT policies, plans and leadership	1	Some legislation outlines actions on AT; with oversight from the social sector (not the health sector).
7	AT programmes and procurement	1	APs are generally absent from health facilities.
FINANCING		SCORE/JUSTIFICATION	
8	Rehabilitation financing and coverage of the population	2	There is limited integration of rehabilitation into financing mechanisms for health care.
9	Scope of rehabilitation included in financing	1	A very small and limited range of rehabilitation interventions and services are financed.
10	Financing of rehabilitation and OOP costs	1	Unless a person has a disability determination, OOP payment is required for rehabilitation services.
HUMAN RESOURCES AND INFRASTRUCTURE		SCORE/JUSTIFICATION	
11	Rehabilitation workforce availability	1	There are major deficits in the rehabilitation workforce.
12	Rehabilitation workforce training and competencies	1	The standard of rehabilitation training courses is moderate to low (offering only passive treatments).

(Continued)

Table 11.1. Contd.

13	Rehabilitation workforce planning and management	1	Rehabilitation workforce planning practices are extremely limited/almost non-existent.
14	Rehabilitation workforce mobility, motivation and support	1	There are very few professional associations and they are often weak and inactive.
15	Rehabilitation infrastructure and equipment	2	Some rehabilitation equipment is available within certain health facilities.
REHABILITATION HEALTH INFORMATION SYSTEMS		SCORE/JUSTIFICATION	
16	Information about rehabilitation needs, including population functioning and disability	2	Disability questions are reportedly included in the national census.
17	Information about rehabilitation availability and use	1	There are no reports and very limited data available on rehabilitation in health systems.
18	Information on rehabilitation outcomes and quality	1	The health information systems do not generate any data on quality of care and outcomes of rehabilitation.
19	Rehabilitation information used during decision-making	1	No reporting on the status and performance of rehabilitation.
SERVICE – ACCESSIBILITY		SCORE/JUSTIFICATION	
20	Availability of specialized, high-intensity rehabilitation	2	Distribution of this type of rehabilitation across the country is low.
21	Availability of community-delivered rehabilitation	1	There is a very low availability of community-delivered rehabilitation.
22	Availability of rehabilitation integrated into tertiary care	2	There are low numbers of rehabilitation professions, specialties and personnel.
23	Rehabilitation integrated into secondary care	2	Rehabilitation is poorly integrated in medical specialties and there are many gaps.
24	Rehabilitation integrated into primary care	2	There is a low level of distribution of rehabilitation in PHC.
25	Occurrence of informal, self-directed rehabilitation	2	There is a low level of people undertaking informal and self-directed rehabilitation.
26	Availability of rehabilitation across acute, sub-acute and long-term phases of care	1	There is very little access to rehabilitation across the continuum of care.
27	Availability of rehabilitation across mental health, and vision and hearing programmes	2	Rehabilitation interventions, including APs, are poorly integrated.
28	Availability of rehabilitation for target population groups based on need	2	There has been limited development of rehabilitation for specific target population groups.
29	Early identification and referral to appropriate health and rehabilitation programmes for children with developmental difficulties and disabilities	1	There is little to no monitoring of developmental milestones in children and referral practices are weak.
30	Availability of rehabilitation in hospital, clinical settings and the community for children with developmental difficulties and disabilities	2	Within secondary and tertiary care, there is a low level of service availability; a few specialists may exist, but in a limited number of hospitals.
31	Availability of APs, including those for mobility, environment, vision, hearing, communication and cognition	1	There are few or no APs available in health services and at different levels of care.
32	Availability of APs and their service delivery	1	There is a very low level of health personnel expertise on the delivery of APs.

(Continued)

Table 11.1. Contd.

33	Affordability of rehabilitation	2	There is a low level of affordability of rehabilitation and APs.
34	Acceptability of rehabilitation	2	Rehabilitation interventions are inconvenient to access.
SERVICE – QUALITY		SCORE/JUSTIFICATION	
35	Extent to which evidence-based rehabilitation interventions are used	1	Very few evidence-based rehabilitation interventions used.
36	Extent to which rehabilitation interventions are of sufficient specialization and intensity to meet needs	1	There is very low or no specialization among rehabilitation personnel; training opportunities for specialization are scarce.
37	Extent to which rehabilitation interventions empower, educate and motivate people	2	Empowering and educating rehabilitation patients valued at a low level by rehabilitation personnel.
38	Extent to which rehabilitation interventions are underpinned by appropriate assessment, treatment planning, outcome measurement and note-taking practices	2	Levels of quality and consistency are low and variable in the assessment, treatment planning, and note-taking practices of rehabilitation personnel.
39	Extent to which rehabilitation is timely and delivered along a continuum, with effective referral practices	1	The continuum of care for rehabilitation and between rehabilitation and other services is very poor.
40	Extent to which rehabilitation is person centred, flexible, and engages users, family and carers in decision-making	2	There is a low level of person-centred care; it is not widely understood and a small number of individuals practice this in rehabilitation settings.
41	Extent to which health personnel and community members are aware, knowledgeable and seek rehabilitation	1	Knowledge levels are very low among health personnel regarding rehabilitation.
42	Extent to which rehabilitation is safe	1	No established mechanisms exist to support quality assurance.
OUTCOMES AND ATTRIBUTES OF REHABILITATION		SCORE/JUSTIFICATION	
43	Coverage of rehabilitation interventions for population groups that need rehabilitation	1	Rehabilitation is accessible for some of the population that needs it, but there are many gaps.
44	Functioning outcomes of rehabilitation for those who receive rehabilitation services	1	Levels of effective rehabilitation are very low; rehabilitation falls short of achieving functioning gains.
45	Equity of rehabilitation coverage across disadvantaged population groups	1	Inequities in rehabilitation coverage are not understood, assessed or addressed.
46	Allocative and technical efficiency of rehabilitation	1	Allocative and technical efficiency are not well understood or measured.
47	Multilevel accountability for rehabilitation performance	1	There is a low level of accountability for rehabilitation within government agencies.
48	Financial and institutional sustainability of rehabilitation	2	There is a low level of financial sustainability for rehabilitation.
49	Resilience of rehabilitation for crisis and disaster situations	1	There is very little experience or capacity in rehabilitation health care for addressing disaster situations.
50	Population functioning	1	There is no measurement of population functioning.

Source: adapted from WHO (3).

12. Conclusions and action points

12.1. Conclusions

The rehabilitation situation in Uzbekistan is evolving. There are good examples of contemporary treatment techniques offered within the health system (for various conditions) and these are to be commended. However, systematic efforts to strengthen rehabilitation continue to emphasize centres for people with disabilities.

Strengths of rehabilitation governance are reflected through the range of government legislation enacted in the sector; although positive, these may also contribute to a fragmented approach to its development. No single focal point yet exists within the Ministry of Health to encourage cohesion, and there is no coordinating body to harness the high levels of interest, motivation and goodwill that were evidenced during the STARS. Collective engagement is imperative to ensure development of the sector is inclusive, cohesive and at pace within all regions of the country.

Information on rehabilitation financing (rehabilitation services and APs) is directly and indirectly captured across different budget lines. Although specific departments can provide details on rehabilitation financing, there is no systematic method or formula to capture this information consistently over time. Although the BBP reimburses physiotherapy treatments at PHC level, it does not yet offer a similar benefit for those needing care at secondary or tertiary levels. There is no payment or reimbursement for APs without a disability determination.

In Uzbekistan, human resources for rehabilitation stem primarily from medical doctors and nurses who have received advanced or specialist training. Very few job titles within the rehabilitation workforce are protected and the workforce remains greatly underdeveloped, with most of the key professions missing (occupational therapy, speech and language therapy, prosthetics and orthotics).

Although some level of rehabilitation information is collected through standard data-collection forms (e.g. on workforce, use of services), this information is not centralized or made available for public use. Similarly, no updated service mapping exists to help consumers navigate to the rehabilitative care they need. There are emerging practices in collecting outcomes data on rehabilitation, but this is not yet common practice, nor systematized.

Rehabilitation services and their inextricable link to functioning is not yet well understood or appreciated in Uzbekistan. Rehabilitation continues to be seen as a service for people with disabilities and promoted within the social protection system. Elements of rehabilitation are evidenced at all other levels of health care but are largely absent at community level and very little attention is paid to treatment outcomes. Medical brigades are an innovative approach to bringing services closer to the community and the inclusion of aspects of rehabilitation within the brigades is a concept worth exploring.

12.2. Action points

To address some of the challenges that Uzbekistan faces related to rehabilitation and AT, the ways forward listed in the subsections that follow provide opportunities for future engagement and a potential foundation from which to structure a national rehabilitation strategic plan.

Governance

1. Consolidate leadership, coordination and governance related to rehabilitation and AT

It is recommended that the Ministry of Health:

- 1.1. formally identifies a rehabilitation focal point, who can coordinate work on rehabilitation and AT within the Ministry, engage in interministerial collaboration, and represent the Ministry in this sector; and
- 1.2. develops a national action plan on rehabilitation and AT (2024–2026) that involves and includes all relevant ministries, departments and stakeholders.

2. Promote and facilitate interministerial cooperation on rehabilitation and AT

It is recommended that the Government of Uzbekistan:

- 2.1. launches an interministerial working group on rehabilitation (including AT) to address holistically the situation within the country, as referenced in various strategic documents across different sectors.

Financing

3. Further develop and streamline financing mechanisms for rehabilitation and AT

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

- 3.1. identify specific budget lines to be referenced and included in a formula to calculate government financing for rehabilitation and AT; and
- 3.2. review the existing BBP related to physiotherapy and rehabilitation and AT to determine the necessary adjustments (namely, ensuring coverage at secondary and tertiary levels, expanding the list of conditions covered by the BBP, and considering piloting coverage for basic APs at PHC level).

Human resources

4. Update information on rehabilitation and rehabilitation workforce terminology

It is recommended that the Ministry of Health, Ministry of Employment and Poverty Reduction, Ministry of Justice and other relevant stakeholders:

- 4.1. review and amend existing rehabilitation-related terminology within the health and care workforce to reflect contemporary international standards; and
- 4.2. integrate these amended terms across all education and training programmes and across all relevant legal documents.

5. Expand and strengthen Uzbekistan's rehabilitation workforce

It is recommended that the Ministry of Health, Ministry of Higher Education, Science and Innovation, WHO and relevant educational institutions and stakeholders:

- 5.1. consider actions for task-shifting – for example, building the capacity of current nursing staff to develop skills in the areas of physical, occupational, and speech and language therapy;
- 5.2. capitalize on opportunities to revise existing curricula (pre-service and postgraduate education) to incorporate contemporary evidence-based practices on rehabilitation; and
- 5.3. explore opportunities to establish in-country education programmes for prosthetics and orthotics (e.g. ISPO-recognized Human Study blended learning programme (42)).

6. Support information-sharing and professional development for the rehabilitation workforce

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

- 6.1. conduct exchange visits between neighbouring countries to observe and share information on best practices in rehabilitation service delivery (including AT), education programmes, and other relevant rehabilitation topics; and
- 6.2. create linkages with relevant international bodies (e.g. ISPO, World Physiotherapy, World Federation of Occupational Therapists) to identify potential synergies and areas of engagement.

Information

7. Increase awareness on contemporary rehabilitation and AT in Uzbekistan

It is recommended that Ministry of Health, Ministry of Employment and Poverty Reduction and other relevant stakeholders:

- 7.1. consolidate information on availability of services (service mapping) and make this updated information available on a public platform to help inform the public about care opportunities; and
- 7.2. take the necessary steps to promote understanding of rehabilitation (namely, that it encompasses more than physiotherapy/physical therapy and massage) and its role as an essential health service for the whole population (not just for disabled people).

8. Develop standards on rehabilitation-related data collection and information management

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

- 8.1. standardize rehabilitation assessment tools within and across ministries and agencies; and
- 8.2. review WHO's Routine Health Information Systems Toolkit (43) and identify potential indicators that can be used in routine health system reporting templates.

9. Encourage national-level data collection on disability and functioning

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

- 9.1. take steps to incorporate questions on disability or functioning into the planned 2024 census; and
- 9.2. consider conducting a Model Disability Survey to identify actual rehabilitation needs in the country.

Rehabilitation services

10. Promote timely and effective rehabilitation interventions across the continuum of health care for all populations in need

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

- 10.1. increase access to rehabilitation at community level through greater engagement of medical teams (known in Uzbekistan as brigades) and/or patronage nurses;
- 10.2. strengthen referral pathways within and between ministries and agencies to reduce or avoid disruption in care after discharge from inpatient settings;
- 10.3. develop linkages and alignment with PHC reform initiatives under way in Uzbekistan to include opportunities for demonstration projects that integrate rehabilitation and AT into the scope of services in PHC;
- 10.4. introduce WHO's Package of Interventions for Rehabilitation (44), or use other relevant sources to strengthen treatment protocols using evidence-based practices; and
- 10.5. develop treatment standards to incorporate the use of functional outcome measures in rehabilitation.

Emergency preparedness and response

11. Integrate rehabilitation considerations and leadership into health emergency planning and management

It is recommended that the Ministry of Health, Ministry of Emergency Situations and other relevant stakeholders:

- 11.1. ensure that rehabilitation is included in national and subnational health and emergency disaster preparedness and risk-management policies, strategies and legislation, as part of the health system response, including reflecting on lessons learned from previous relevant situations (such as the COVID-19 pandemic, various natural disasters, and conflict situations);
- 11.2. develop rehabilitation services mapping, together with modified referral pathways for emergencies; and
- 11.3. implement stockpiling of rehabilitation equipment such as APs, to meet anticipated surges in emergency procurement needs, including identifying supply chains.

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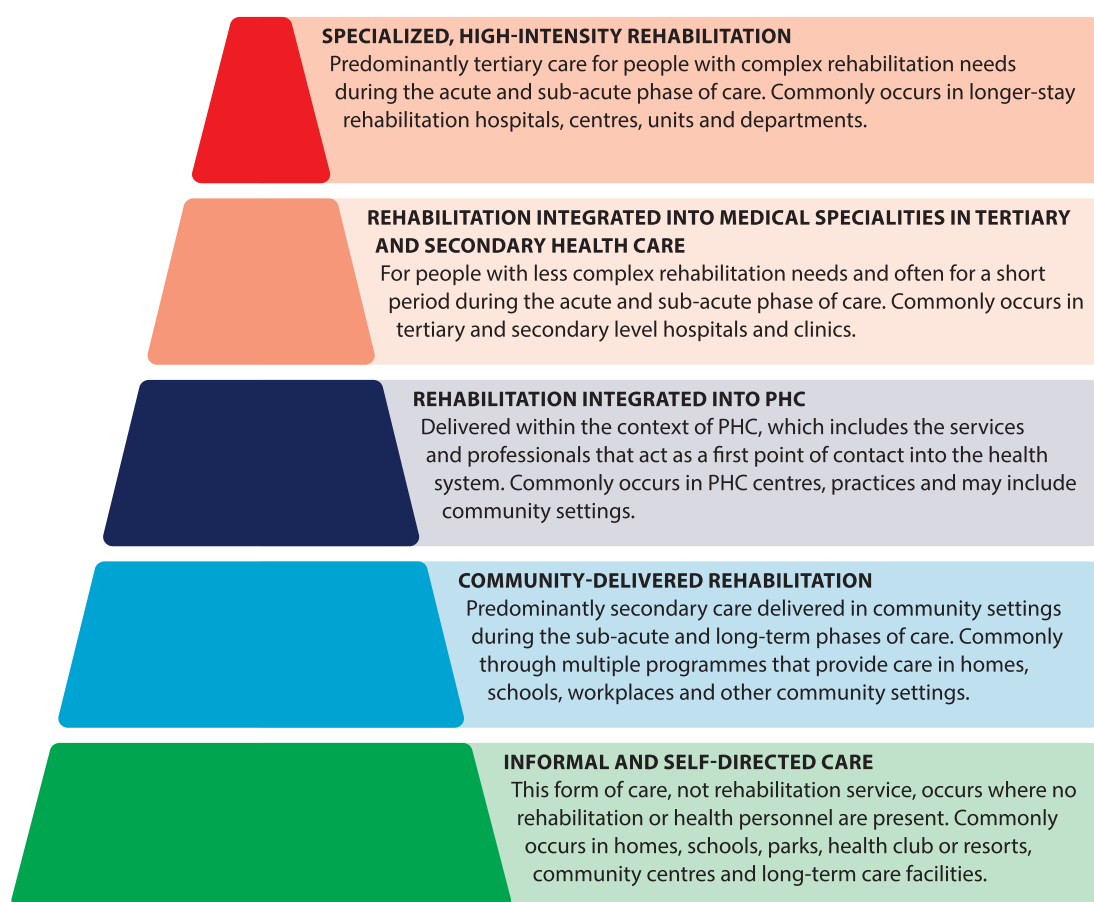
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14. Annexes

Annex A. Overview of rehabilitation

Rehabilitation is a health strategy to be implemented alongside other health strategies, including promotion, prevention, and curative and palliative care (1) (see Fig. A1). It is a fundamental part of health services and integral to the realization of universal health coverage (2). Rehabilitation covers multiple areas of health and functioning, including physical, mental health, vision and hearing. Rehabilitation interventions⁶⁴ primarily focus on improving the functioning of an individual and reducing disability. Rehabilitation is a highly integrated form of health care and most rehabilitation is delivered within the context of other (not rehabilitation specific) health programmes, for example in the orthopaedic, neurology, cardiac, mental health and paediatric fields. Rehabilitation improves people's everyday functioning and increases their inclusion and participation in society; by achieving this, rehabilitation represents an investment in human capital.

Fig. A1. Rehabilitation in health framework



Source: WHO (1).

⁶⁴ Rehabilitation interventions are a form of health interventions. Health interventions are: an act performed for, with or on behalf of a person or population whose purpose is to assess, improve, maintain, promote or modify health, functioning or health conditions. Examples of these acts in the context of rehabilitation include manual therapy, exercise prescription, provision of assistive products (APs), education and modification of the home environment.

Rehabilitation should be available at all levels of health care, from specialist referral centres through to primary and community settings.⁶⁵ Rehabilitation interventions are delivered in health facilities as well as in the community – for example, in homes, schools and workplaces. Rehabilitation is a highly person-centred form of health care and it is goal orientated (that is, tailored to the individual's specific goals/needs), time bound and an active rather than passive process. Rehabilitation is most commonly delivered through a multidisciplinary team comprising various therapy personnel, namely physiotherapists, occupational therapists, speech and language therapists, prosthetists and orthotists and psychologists. By working with specialist rehabilitation medicine doctors and nurses, rehabilitation can also be delivered through appropriately trained community-based rehabilitation personnel and other health personnel. Rehabilitation is for all the population; this includes people with disabilities – as defined by the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD)⁶⁶ – and many other people (3). In this report, as in other WHO documentation, the word rehabilitation also includes habilitation.⁶⁷ People with short-term health conditions also benefit from rehabilitation and it commonly contributes to the prevention of impairments associated with disability. Rehabilitation regularly optimizes surgical outcomes, decreases the length of hospital stay, prevents complications, decreases readmissions and facilitates a return to optimal functioning. Many people with disabilities also benefit from rehabilitation and, in addition to rehabilitation, many people with disabilities require other programmes, such as those that support their social inclusion, participation in education, earning a livelihood, or access to justice. Programmes that include people with disabilities and whose primary aims are education, training, employment or social inclusion should be delivered through non-health ministries and should align with the mandate of that ministry.

References⁶⁸

1. Rehabilitation in health systems: guide for action. Geneva: World Health Organization; 2019 (<https://iris.who.int/handle/10665/325607>). License: CC BY-NC-SA 3.0 IGO.
2. Universal health coverage (UHC) [news release]. World Health Organization; 2021 ([http://www.who.int/news-room/fact-sheets/detail/universal-health-coverage-\(UHC\)](http://www.who.int/news-room/fact-sheets/detail/universal-health-coverage-(UHC))).
3. Centre on Human Rights for People with Disabilities. Convention on the Rights of Persons with Disabilities (unofficial summary) [website]. Strasbourg: Council of Europe; 2020 (<https://www.coe.int/en/web/compass/convention-on-the-rights-of-persons-with-disabilities#:~:text=Article%2026%3A%20Habilitation%20and%20rehabilitation,and%20rehabilitation%20services%20and%20programmes>).

⁶⁵ The Rehabilitation in health framework (Fig. A1) reflects the distribution of rehabilitation required to meet community needs.

⁶⁶ As defined by the UNCRPD, people with disabilities are those who have long-term physical, mental, intellectual or sensory impairments, which, in interaction with various barriers may hinder their full and effective participation in society on an equal basis to others (3). However, rehabilitation is for all the population, for example people with short-term functioning difficulties, as well as for people who do not identify as having a disability or are not legally acknowledged as being disabled by a government process.

⁶⁷ Article 26 of the UNCRPD refers to both rehabilitation and habilitation (3). Habilitation refers to rehabilitation in the context of people who were born with congenital health conditions.

⁶⁸ All references accessed on 9 September 2024.

Annex B. Rehabilitation in health systems: a guide for action

Overview

Rehabilitation in health systems: guide for action (referred to here as the Guide) (1) assists governments to strengthen the health system to provide rehabilitation. This initiative is a result of the initiative *Rehabilitation 2030: call for action* (2) emerging from the February 2017 meeting in Geneva.

The Guide comprises a four-step process that is estimated to take about one year to complete (each country is different). WHO has developed standard data-collection tools; these were first used in 2018. Details of the process are shown in Table B1.

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

The assessment is based around the six building blocks for health systems strengthening. The application to rehabilitation is outlined for each building block (Table B2).

Table B1. The four-phase process

Objective	WHO guidance	Tools	Activity timeline
1. Assess the situation	STARS	TRIC: 8 domains, 97 questions; Ministry of Health self-assessment RMM: 7 domains, 50 questions; consultant-supported scoring	TRIC: Not completed In-country: Feb 27 – Mar 17, 2023 RMM: 16 March 2023 Zero-draft: May 2023 First draft: TBD
2. Develop a rehabilitation Strategic Plan	GRASP	Results from STARS report contribute to development of a Strategic Plan	TBD
3. Establish monitoring, evaluation and review processes	FRAME	FRAME guidance assists in establishing a monitoring framework, including the selection of indicators	To happen simultaneously with Strategic Plan
4. Implement the Strategic Plan	ACTOR	Planning, action and evaluation cycle	After Strategic Plan and Monitoring Framework are in place

Note: ACTOR: Action on Rehabilitation. FRAME: Framework for Rehabilitation Monitoring and Evaluation. GRASP: Guidance for Rehabilitation Planning. RMM: Rehabilitation Maturity Model. STARS: Systematic Assessment of Rehabilitation System. TBD: to be determined. TRIC: Template for Rehabilitation Information Collection.

The WHO health system building blocks are an important framework reflected within the Guide. Across the six building blocks are components that reflect rehabilitation. Table B2 illustrates the health system building blocks and corresponding rehabilitation components. The assessment and measurement of these rehabilitation components is a subject of the tools in the Guide.

Table B2. Health system building blocks and rehabilitation

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

Note: PHC: primary health care. APs: assistive products.

Annex B. References⁶⁹

1.Rehabilitation in health systems: guide for action. Geneva: World Health Organization; 2019 (<https://apps.who.int/iris/handle/10665/325607>).License: CC BY-NC-SA 3.0 IGO

2.Rehabilitation 2030: a call for action [news release]. Geneva: World Health Organization; 6-7 February 2017 (<https://www.who.int/news-room/events/detail/2017/02/06/default-calendar/rehabilitation-2030-a-call-for-action>).

⁶⁹ All references accessed on 9 September 2024

Annex C. Summary of key rehabilitation-related regulatory documents in Uzbekistan

This annex provides an overview of the main regulatory and policy documents governing the rehabilitation sector in Uzbekistan. Table C1 below summarizes the key national orders, decrees, and strategic documents relevant to the organization, financing, and delivery of rehabilitation services.

Table C1. Rehabilitation-related regulatory documents in Uzbekistan

Legislation type	Legislation number	Date	Description and details
Ministry of Health Order	60	29 June 2016	List of Medical Products (Appendix; List no. 2809) O'zbekiston Respublikasi Sog'liqni saqlash vazirining buyrug'i Tibbiy buyumlar ro'yxatini tasdiqlash to'g'risida [Order of the Ministry of Health of Uzbekistan on approval of the list of medical products]. https://lex.uz/docs/-3001352#
Presidential Decree	UP 5590	7 December 2018	Concept for the Development of the Healthcare System of the Republic of Uzbekistan 2019–2025 O'zbekiston Respublikasi Prezidentining Farmoni O'zbekiston Respublikasi sog'liqni saqlash tizimini tubdan takomillashtirish bo'yicha kompleks chora-tadbirlar to'g'risida [Decree of the President of Uzbekistan on comprehensive measures to fundamentally improve the health-care system of Uzbekistan]. https://lex.uz/docs/-4096197
Presidential Resolution	PP 6110	12 November 2020	Medical teams (brigades) established under the Ministry of Health O'zbekiston Respublikasi Prezidentining Farmoni Birlamchi tibbiy-sanitariya yordami muassasalari faoliyatiga mutlaqo yangi mexanizmlarni joriy qilish va sog'liqni saqlash tizimida olib borilayotgan islohotlar samaradorligini yanada oshirish chora-tadbirlari to'g'risida [Decree of the President of Uzbekistan on implementation of fundamentally new mechanisms in the work of PHC institutions and further increasing efficiency of current health reforms]. https://lex.uz/docs/-5100677
Presidential Resolution	PP 5000	23 February 2021	Digitizing health care; electronic data collection; IT MED created under MOH Digitization O'zbekiston Respublikasi Prezidentining Qarori Sog'liqni saqlash sohasida raqamlashtirish ishlarini samarali tashkil etish chora-tadbirlari to'g'risida [Resolution of the President of Uzbekistan on measures to effectively organize digitalization in the health sector]. https://lex.uz/docs/-5303918
Presidential Resolution	PP 5038	25 March 2021	Definition of the activities of the Agency for the Development of Medical and Social Services under the Cabinet of Ministers O'zbekiston Respublikasi Prezidentining Qarori O'zbekiston Respublikasi Tibbiy-ijtimoiy xizmatlarni rivojlantirish agentligi

(Continued)

Table C1. Contd.

Legislation type	Legislation number	Date	Description and details
			faoliyatini tashkil etish to'g'risida [Resolution of the President of Uzbekistan on the organization of the activities of the Agency for the Development of Medical and Social Services of the Republic of Uzbekistan]. https://lex.uz/docs/5342533
Presidential Decree	UP 6195	25 March 2021	Muruvvat/Sahovat; National Rehabilitation Centre to be established in Tashkent under AMSD O'zbekiston Respublikasi Prezidentining Farmoni Keksalar va nogironligi bo'lgan shaxslarni ijtimoiy qo'llab-quvvatlash, "Saxovat" va "Muruvvat" internat uylari tizimini yanada rivojlantirish to'g'risida [Decree of the President of Uzbekistan on further developing the system of social support for the elderly and people with disabilities, "Sakhovat" and "Muruvvat" boarding houses]. https://lex.uz/en/docs/-5342462
Ministry of Justice Order	3303	12 May 2021	Nomenclature of medical specializations O'zbekiston Respublikasi Sog'liqni saqlash vazirining buyrug'i Tibbiy faoliyat amalga oshiriladigan tibbiy ixtisosliklar turlari nomenklaturasini tasdiqlash to'g'risida [Order of the Minister of Justice of Uzbekistan on approval of the nomenclature of types of medical specialties in which medical activities are performed]. https://lex.uz/docs/-5422572
Cabinet of Ministers Resolution	CPKM 411	1 July 2021	List of APs (18 categories are listed) to be covered by the government budget O'zbekiston Respublikasi Vazirlar Mahkamasining qarori Muhtoj shaxslarni protez-ortopediya moslamalari va reabilitatsiya qilishning texnik vositalari bilan ta'minlash tartibi to'g'risidagi nizomni tasdiqlash haqida [Decision of the Cabinet of Ministers of Uzbekistan on approval of the regulation on the procedure for providing people in need with prosthetic and orthopaedic devices and technical means of rehabilitation]. https://lex.uz/uz/docs/-5485696
Presidential Resolution	PP 5217	9 August 2021	Medical/social services for people with disabilities; electric WC, digitization, interagency cooperation O'zbekiston Respublikasi Prezidentining Qarori Nogironligi bo'lgan shaxslarga ko'rsatilayotgan tibbiy-ijtimoiy xizmatlar sifatini yanada yaxshilash chora-tadbirlari to'g'risida [Decision of the President of Uzbekistan on measures to further improve the quality of medical and social services provided to people with disabilities]. https://lex.uz/en/docs/-5569803
Presidential Resolution	PP 22	27 November 2021	Concept development, from medical model toward implementation of International Classification of Functioning, Disability and Health (children's disability determination) and comprehensive information on the organization and role of MSECs O'zbekiston Respublikasi Prezidentining Qarori Tibbiy-ijtimoiy ekspertiza xizmati faoliyati hamda bolalarga nogironlikni belgilash tizimini yanada takomillashtirish chora-tadbirlari to'g'risida [Resolution of the President of Uzbekistan on the activities of the Medical and Social Expertise Service and measures to further improve the system of determining children's disabilities]. https://lex.uz/docs/-5745300

(Continued)

Table C1. Contd.

Legislation type	Legislation number	Date	Description and details
Cabinet of Ministers Resolution	CPKM 769	23 December 2021	Establishing the Interdepartmental Council for the Affairs of Persons with Disabilities (and approval of Charter) O'zbekiston Respublikasi Vazirlar Mahkamasining qarori Nogironligi bo'lgan shaxslar ishlari bo'yicha idoralararo kengash faoliyatini yanada takomillashtirish chora-tadbirlari to'g'risida [Resolution of the Cabinet of Ministers of Uzbekistan on measures to further improve the activities of the Interdepartmental Council for the Affairs of Persons with Disabilities]. https://lex.uz/ru/docs/-5790722
Presidential Protocol	DP 74	17 February 2022	Information on upgrading physiotherapy room (no details on equipment) O'zbekiston Respublikasi Prezidentining Farmoni Nogironligi bo'lgan shaxslarni hamda aholining ijtimoiy himoyaga muhtoj qatlamlarini qo'llab-quvvatlashning qo'shimcha chora-tadbirlari to'g'risida [Decree of the President of Uzbekistan on additional measures to support people with disabilities and categories of the population in need of social protection]. https://lex.uz/ru/docs/-5865484
Presidential Decree	UP 215	25 April 2022	Specifications for equipping physiotherapy units at PHC level O'zbekiston Respublikasi Prezidentining Qarori Birlamchi tibbiy-sanitariya yordamini aholiga yaqinlashtirish va tibbiy xizmatlar samaradorligini oshirish bo'yicha qo'shimcha chora-tadbirlar to'g'risida [Decree of the President of Uzbekistan on additional measures to bring primary medical and sanitary care closer to the population and improve the efficiency of medical services]. https://lex.uz/docs/-5979130
Presidential Decree	UP 136	17 May 2022	Remuneration of personnel O'zbekiston Respublikasi Prezidentining Farmoni Tibbiyot muassasalari xodimlarini moddiy qo'llab-quvvatlash hamda rag'batlantirishni kuchaytirish chora-tadbirlari to'g'risida [Decree of the President of Uzbekistan on measures to strengthen material support and motivation of employees of medical institutions]. https://lex.uz/ru/docs/-6020669
Cabinet of Ministers Resolution	699	9 December 2022	Remuneration of personnel O'zbekiston Respublikasi Vazirlar Mahkamasining qarori Davolash- profilaktika muassasalarining ilmiy darjaga ega bo'lgan xodimlariga har oylik qo'shimcha haq to'lash tartibi to'g'risidagi nizomni tasdiqlash haqida [Resolution of the Cabinet of Ministers of Uzbekistan on approval of the Regulation on the procedure for monthly additional payments to wages for employees of medical institutions with an academic degree]. https://lex.uz/docs/6312007
Presidential Decree	UP 269	21 December 2022	Reducing ministries and executive authorities (effective 1 January 2023) O'zbekiston Respublikasi Prezidentining Farmoni Yangi O'zbekiston ma'muriy islohotlarini amalga oshirish chora-tadbirlari to'g'risida [Decree of the President of Uzbekistan on measures to implement administrative reforms of new Uzbekistan]. https://lex.uz/uz/docs/-6324756

(Continued)

Table C1. Contd.

Legislation type	Legislation number	Date	Description and details
Law of Uzbekistan	ZRU 813	30 December 2022	State budget for 2023 Funding for upgrading physiotherapy equipment – to be used as indicator (budget funding) Outlines budget with rehab details for 2023; includes cochlear, physiotherapy equipment O'zbekiston Respublikasining Qonuni 2023-yil uchun O'zbekiston Respublikasining Davlat budjeti to'g'risida [Law of Uzbekistan about the State budget of Uzbekistan for 2023]. https://lex.uz/en/docs/-6333240 Including appendices 1, 3 & 5 (various budget modalities)
Presidential Decree	UP 14	25 January 2023	Organizational measures to establish the activities of the executive authorities O'zbekiston Respublikasi Prezidentining Farmoni Respublika ijro etuvchi hokimiyat organlari faoliyatini samarali yo'lga qo'yishga doir birinchi navbatdagi tashkiliy chora-tadbirlar to'g'risida [Decree of the President of Uzbekistan on first-priority organizational measures to effectively establish the activities of the executive authorities of Uzbekistan]. https://lex.uz/docs/-6369997?ONDATE=16.02.2024
Presidential Decree	UP 82	1 June 2023	Measures establishing a system of effective control of high-quality social services/assistance (through the Agency for Social Protection) O'zbekiston Respublikasi Prezidentining Farmoni Aholiga sifatli ijtimoiy xizmat va yordam ko'rsatish hamda uning samarali nazorat tizimini yo'lga qo'yish bo'yicha kompleks chora-tadbirlar to'g'risida [Decree of the President of Uzbekistan on a set of measures to provide high-quality social services and assistance to the population, as well as to establish a system of their effective control]. https://lex.uz/docs/-6480342
Presidential Decree	156	06 December 2023	Structure of the Ministry of Health O'zbekiston Respublikasi Prezidentining Farmoni Sog'liqni saqlash vazirligi faoliyatini yanada takomillashtirish chora-tadbirlari to'g'risida [Decree of the President of Uzbekistan on measures to further improve the activities of the Ministry of Health]. https://lex.uz/en/docs/-6597701

Annex D. Nomenclature of types of medical specializations

This annex presents the official nomenclature of medical specializations applied in Uzbekistan, as approved by national legislation⁷⁰. Table D1 below lists the classifications currently in use.

Table D1. Nomenclature of types of medical specializations in Uzbekistan.

NO.	Basic specialty (Bachelor's level)	Main specialty (Master's degree and clinical residency)	Supplemental or advanced specialties
I. Treatment case (Medical doctor/Internal medicine) – 5510100			
1.	1. FAMILY DOCTOR	Obstetrics and gynaecology (5A510101)	3 specializations
2.		Anesthesiology (5A510120)	2 specializations
3.		Therapy (5A510103)	12+ Specializations
			Medical Labor Expertise (VTEK)
			Adolescent medical expertise (VKK)
			Rehabilitation (treatment physical culture, balneology, physiotherapy)
			Treatment physical education
			Sport medicine
4.		Cardiology (5A510105)	Intervention cardiology
5.		Dermatology (5A510108)	Medical cosmetology
6.		Infectious diseases (5A510107)	
7.		Neurology (5A510109)	Medical genetics
8.		Pathological anatomy (5A510124)	
9.		Psychiatry (5A510111)	Child and adolescents
			Court psychiatry examination
			Suicides
			Medical psychotherapy
10.		Medical psychology (5A510116)	
11.		Narcology (5A510119)	
12.		Medical radiology (5A510132)	2 specializations
13.		Neurosurgery (5A510114)	Interventional radiology
14.		General oncology (5A510110)	Chemotherapy and radiation therapy
15.		Otorhinolaryngology (5A510104)	Audiology
			Phoniatrics
16.		Ophthalmology (5A510106)	3 specializations
17.		Court health examination (5A510123)	
18.		Traumatology and orthopaedics (5A510121)	2 specializations

(Continued)

⁷⁰ Ministry of Justice Order 3303; 12 May 2021. Annex C provides details of all relevant legislation.

Table D1. Contd.

NO.	Basic specialty (Bachelor's level)	Main specialty (Master's degree and clinical residency)	Supplemental or advanced specialties
19.		Urology (5A510117)	3 specializations
20.		Phthisiology	
21.		Surgery	7 specializations
22.		Endocrinology (5A510102)	
23.		Emergency health/ambulance (5A510125)	Surgery and therapy
24.		Health management (5A510115)	Valeology
II. PAEDIATRICS – 5510200			
25.	2. GENERAL PAEDIATRICS	Paediatrics (5A510201)	7 specializations
26.		Neonatology (5A510206)	
27.		Child Anesthesiology (5A510203)	
28.		Child surgery (5A510202)	3 specializations
29.		Infectious diseases (5A510107)	
30.		Child/Teen gynaecology	
III. Preventive medicine – 5510300			
31.	3. HYGIENE AND EPIDEMIOLOGY	Laboratory work	
32.		Community hygiene (5A510301)	
33.		Child and adolescent hygiene	
34.		Communal hygiene	
35.		Labour hygiene	
36.		Nutrition (5A510129)	3 specializations
37.		Epidemiology	
38.		Bacteriology	
39.		Virology	
40.		Environment (5A510302)	Health ecology
41.		Morphology (5A510118)	
IV. Dentistry – 5510400			
42.	4. GENERAL DENTISTRY	Dentistry (5A510401)	
43.		Therapeutic dentistry	
44.		Orthopaedic dentistry	
45.		Dental surgeon	
46.		Face surgery	
47.	5. CHILD DENTISTRY	Dentistry (child face surgery) (5A510401)	
48.		Child therapeutic dentistry	
49.		Child dental surgeon	
50.		Orthodontics	
51.		Dental implantology	
52.		Periodontology	

(Continued)

Table D1. Contd.

NO.	Basic specialty (Bachelor's level)	Main specialty (Master's degree and clinical residency)	Supplemental or advanced specialties
V. Medical biology – 5510900			
53.	6. MEDICAL BIOLOGY	Work lab	Clinical laboratory diagnostics
54.		Work lab	Bacteriology and virology
VI. Medical biology – 5510900			
55.	7. BIOMEDICAL ENGINEERING		
VII. Clinical psychology			
56.	8. CLINICAL PSYCHOLOGY		Psychological examination court
57.			Social medicine
VIII. Traditional medicine – 5511100			
58.	9. TRADITIONAL MEDICINE		4 specializations

Note: VKK: Medical Consultative Commission. VTEK Medical Labour Expert Commission.

Annex E. Schedule of in-country meetings, site visits and interviews, 27 February to 17 March 2023

The Table E1 below outlines the meetings, site visits and interviews conducted during the in-country assessment mission held from 27 February to 17 March 2023.

Table E1. Schedule of in-country meetings, site visits and interviews

Date	Activity	Location
26 February	Sue Eitel arrival in Tashkent	Tashkent
Monday 27 February	1. Meeting with WHO representative (officer in charge)	Tashkent
	2. Ministry of Health courtesy visit/in brief	Tashkent
	3. Ministry of Employment and Poverty Reduction, courtesy visit/in brief	Tashkent
	4. Meeting in the PHC department	Tashkent
Tuesday 28 February	5. RSSPMC for Traumatology and Orthopaedics	Tashkent
	6. Republican Clinical Hospital No. 1	Tashkent
	7. Department of Physiotherapy (Center for the Development of Professional Qualification of Medical Workers, Postgraduate Education)	Tashkent
	8. RSSPMC for Cardiology	Tashkent
Wednesday 1 March	9. Republican Centre for Social Adaptation of Children	Tashkent
	10. National Children's Medical Centre	Tashkent
	11. RSSPMC for Traumatology and Orthopaedics	Tashkent
Thursday 2 March	12. RSSPMC for Paediatrics	Tashkent
	13. Tashkent Medical Academy	Tashkent
Friday 3 March	14. National Centre for Rehabilitation and Prosthetics for Persons with Disabilities (1)	Tashkent
	15. National Centre for Rehabilitation and Prosthetics for Persons with Disabilities (2)	Tashkent
	16. Visit to private sanatorium "Chinabad Plaza"	Tashkent
Saturday 4 March	17. Olmazor District Family Polyclinic No. 15	Tashkent
	18. Department of Healthcare Family Polyclinic No. 9	Tashkent
	19. CLINIC "Renova" private neurorehabilitation centre	Tashkent
Monday 6 March	20. Meeting with the key stakeholders on LEADERSHIP AND GOVERNANCE	Tashkent
	21. Meeting with the key stakeholders on FINANCE	Tashkent
Tuesday 7 March	22. Meeting with the key stakeholders on INFORMATION AND DIGITALIZATION	Tashkent
	23. Meeting with the key stakeholders on SERVICE DELIVERY	Tashkent
Thu 9 March	24. Meeting with the key stakeholders on REHABILITATION WORKFORCE	Tashkent
Fri 10 March	25. SWOT workshop	Tashkent
	Arrival of Dr Cathal Morgan and Andrey Cazacu, WHO officer in Regional office for Europe	Tashkent

(Continued)

Table E1. Contd.

Date	Activity	Location
Monday 13 March	26. In brief meeting: Dr Morgan and Dr Cazacu with Assessment Team	Tashkent
	27. Presentation to chief nurses on rehabilitation	Tashkent
Tuesday 14 March	28. Meeting with SHIF	Tashkent
	29. Meeting with UNICEF	Tashkent
	30. Courtesy visit with USAID	Tashkent
	31. Meetings with organizations of people with disabilities	Tashkent
Wednesday 15 March	32. Asian Development Bank	Tashkent
	33. Meeting with PHC Almaty and Barcelona Office colleagues	Tashkent
Wednesday 15 March	34. Ministry of Health RMM review	Tashkent
	35. Ministry of Health Preview of stakeholder PowerPoint presentation	Tashkent
Wednesday 17 March	36. Debriefing meeting with WHO representative	Tashkent
	37. Multistakeholder preliminary findings presentation	Tashkent

Note: RSSPMC: Republican Specialized Scientific and Practical Medical Centre. SHIF: State Health Insurance Fund. SWOT: strengths, weaknesses, opportunities and threats. UNICEF: United Nations Children's Fund. USAID: United States Agency for International Development.

Annex F. Key contacts from meetings and visits

The Table F1 lists the main individuals and institutional representatives who contributed to the assessment through meetings and site visits.

Table F1. Key contacts from meetings and visits

NO.	NAME	ORGANIZATION
Arrival of Sue Eitel in Tashkent – 26 February 2023		
1. Meeting with WHO representative (officer in charge)		
	Dr Bahtygul Karriyeva	Acting WHO representative
	Sue Eitel	WHO European Regional Office, International Consultant on Rehabilitation
	Dildora Sekler	WHO Country Office in Uzbekistan, Public Health Officer, Health Emergencies Programme
	Usmankhodjaeva Adibakhon	National Consultant on Rehabilitation and Assistive Technology, WHO Country Office in Uzbekistan
2. Ministry of Health courtesy visit/in brief		
1.	Basitxanova Elmira	Deputy Minister
2.	Yuldashev Sanjar	Leading Specialist of the Department of Organization of Medical Care
3.	Boymirov Eldor	Head of the Department of Medical Statistics and Determination of Health Prospects
4.	Djumaeva Gulchekhra	Head of the Department of International Indicators and Health Prospects
5.	Yunusova Nigina	Leading Specialist of the Department for Coordination of Activities of Specialized Centres
	Assessment Team:	Sue Eitel, Dildora Sekler, Usmankhodjaeva Adibakhon
3. Ministry of Employment and Poverty Reduction, courtesy visit/in brief		
1.	Inakov Alisher Kazakovich	Head of the DMSS (Ministry of Employment and Poverty Reduction)
2.	Nazarmatov Umarali	Head of the Inspectorate for Medical and Social Expertise
3.	Mirjalilov Nematilla	Deputy Head of the Inspectorate for Medical and Social Expertise
4.	Churenov Kutlimurod	Head of Department
5.	Ermatova Aziza	Chief Specialist
	Assessment Team:	Sue Eitel, Dildora Sekler, Usmankhodjaeva Adibakhon
4. Meeting in the PHC department		
1.	Yuldashev Sanjar	Leading Specialist of the Department of Organization of Medical Care
	Assessment Team:	Sue Eitel, Dildora Sekler, Usmankhodjaeva Adibakhon
5. RSSPMC for Traumatology and Orthopaedics		
1.	Dr Irismetov Murodjon	Director
2.	Dr Saliev Murad	Deputy Director for Science
3.	Dr Kodirov Muhitdin	Chief Doctor
4.	Dr Umarov Fayzulla	Deputy Director for Organization and Methodological Work
5.	Dr Juraev Axrobek	Head of the Department of Paediatric Orthopaedics
6.	Dr Xutanazarov Ilxom	Head of Rehabilitation Department
7.	Dr Askarova Dilfuza	Head of the Department of Physiotherapy
8.	Dr Raxmatullaev Xayrulla	Orthopaedic Traumatologist of the Department of Paediatric Orthopaedics

(Continued)

Table F1. Contd.

NO.	NAME	ORGANIZATION
9.	Dr Rustamov Xushnud	Orthopaedic Traumatologist of the Department of Paediatric Traumatology
	Assessment Team:	Sue Eitel, Dildora Sekler, Usmankhodjaeva Adibakhon
6. Republican Clinical Hospital №1		
1.	Matkarimov Sanjar	Chief Specialist
2.	Anarmetova Umida	Head of the Department of Physiotherapy
	Assessment Team:	Sue Eitel, Dildora Sekler, Usmankhodjaeva Adibakhon
7. Department of Physiotherapy (Center for the Development Of Professional Qualification Of Medical Workers, Postgraduate Education)		
1.	Yuldasheva Gulchexra	Associate Professor of the Department of Physiotherapy
2.	Yuldacheva Lola	Assistant Professor
	Assessment Team:	Sue Eitel, Dildora Sekler, Usmankhodjaeva Adibakhon
8. RSSPMC for Cardiology		
1.	Nizamov Ulugbek	Head Doctor
2.	Mullabaeva Guzal	Head, Surgical Department
3.	Toshpulatov Xamidulla	Head of Organizational Department
4.	Zaynutdinova Feruza	Head of the Department of Physiotherapy
	Assessment Team:	Sue Eitel, Dildora Sekler, Usmankhodjaeva Adibakhon
9. Republican Centre for Social Adaptation of Children		
1.	Dr Alimova Vasila	Director
2.	Dr Muminova Lola	Deputy Director for Science
3.	Dr Kosimov Otabek	Deputy Director for Public Relations
4.	Tashpulatova Feruza	Manager of Consulting service
5.	Dr Xidoyarov Oybek	Leading Specialist
	Assessment Team:	Sue Eitel, Dildora Sekler, Usmankhodjaeva Adibakhon
10. National Children's Medical Centre		
1.	Rim Aleksey	Head of International Department
2.	Yuldashev Muzaffar	Head Doctor
3.	Ryabikin Dmitriy	Rehabilitologist
4.	Xolmatova Dilobar	Physiotherapist
5.	Yuldashev Alisher	Orthopaedist, Paediatrician
	Assessment Team:	Sue Eitel, Dildora Sekler, Usmankhodjaeva Adibakhon
11. RSSPMC for Traumatology and Orthopaedics		
1.	Rustamov Xushnud	Orthopaedic traumatologist of the Department of Paediatric Traumatology
2.	Assessment Team:	Sue Eitel and Dildora Sekler
12. RSSPMC for Paediatrics		
1.	Dr Axmedova Dilorom	Director
2.	Dr Inoyatova Flora	Academician of the Academy of Sciences of Uzbekistan
3.	Dr Abdukayumov Abdumannon	Head Doctor
4.	Dr Najmutdinova Nazima	Deputy of the Cochlear Implantation Department
5.	Dr Mustananimova Naiba	Rehabilitologist, Paediatrician Department
6.	Dr Geller Svetlana	Head of Medical Tourism Development Department
	Assessment Team:	Sue Eitel, Dildora Sekler, Usmankhodjaeva Adibakhon

(Continued)

Table F1. Contd.

NO.	NAME	ORGANIZATION
13. Visit to Tashkent Medical Academy		
1.	Shadmanov Alisher	Rector
2.	Mamadierov Abdibullo	Deputy Chief Physician of the Tashkent Medical Academy Multidisciplinary Clinic
3.	Karimov Marif	Vice-rector
4.	Isroilov Djaxongir	Vice-rector
5.	Jafarov Murod	Chief of International Department
14. National Centre for Rehabilitation and Prosthetics for Persons with Disabilities (1)		
1.	Dr Yuldashev Nurali	Director
2.	Xasanov Rustam	Head Doctor
3.	Dr Botirova Dilafruz	Physiotherapist
Assessment Team:		Sue Eitel, Dildora Sekler, Usmankhodjaeva Adibakhon
15. National Centre for Rehabilitation and Prosthetics for Persons with Disabilities (2)		
1.	Dr Bekmuradov Zaynitddin	Deputy Head Doctor
2.	Dr Mamatxanova Charos	Head of the Department of Neurology
3.	Dr Xamidova Nigora	Neurologist
4.	Dr Yuldasheva Zuxra	Neurologist
5.	Dr Abdukarimova Ugiloy	Neurologist
6.	Dr Xoldorov Xikmatilla	Traumatologist
Assessment Team:		Sue Eitel, Dildora Sekler, Usmankhodjaeva Adibakhon
16. Visit to private sanatorium “Chinabad Plaza”		
1.	Musaeva Dilnoza	Head Doctor
2.	Abdurahimov Zoxid	Chief Specialist of the Sanatorium and Resort Department of the Federation of Trade Unions of Uzbekistan
Assessment Team:		Sue Eitel, Dildora Sekler, Usmankhodjaeva Adibakhon
17. Almazar District Family Polyclinic No. 15		
1.	Mamatkulova Gulnaz	Head Physician of the 15th polyclinic of Almazar district
2.	Muratova Muqaddas	Chief nurses of the Physiotherapy Department
3.	Ashurova Dilnoza	Therapeutic Exercise Nurse
Assessment Team:		Sue Eitel, Dildora Sekler, Usmankhodjaeva Adibakhon
18. Department of Healthcare Family Policlinic No. 9		
1.	Nizamov Azizbek	Head of Almazar District Health Care Department (PHC)
2.	Yuldasheva B.	PHC Doctor
3.	Karimova M	Chief Nurse of the Physiotherapy Department
Assessment Team:		Sue Eitel, Dildora Sekler, Usmankhodjaeva Adibakhon
19. CLINIC “Renova” private neurorehabilitation centre		
1.	Dr Yuldashev Otabek	Director
2.	Dr Baxodirova Madina	Neurologist-physiologist
3.	Dr Nabimonov Saidjon	Neurologist
4.	Dr Baxodirova Munissa	Head Doctor, Neurologist
5.	Dr Sattarova Diana	Reabilitologist
6.	Dr Boisov Suxrob	Physiotherapevt
Assessment Team:		Sue Eitel, Dildora Sekler, Usmankhodjaeva Adibakhon

(Continued)

Table F1. Contd.

NO.	NAME	ORGANIZATION
19. Meeting with the key stakeholders on: LEADERSHIP AND GOVERNANCE		
1.	Djumaeva Gulchekhira	Ministry of Health, Head of the Department of International Indicators and Health Prospects
2.	Xoitboeva Rano	Ministry of Health
3.	Dominova Nazira	Ministry of Health
4.	Yusupova Gulnara	Ministry of Health
5.	Tuxtasinova D.S	Centre for the Development of Medical Education
6.	Nurmatova Shoirira	Head Doctor, Republican Children's Psychoneurological Hospital (named after IK Kurbanov)
7.	Sadirova Muborak	State Health Insurance Fund, Department of Methodology
8.	Mirdjalilov Nematulla	Ministry of Employment and Poverty Reduction
9.	Juraev Kutpiluru	Ministry of Employment and Poverty Reduction
10.	Boymirov Eldor	Ministry of Health, Head of the Department of Medical Statistics and Determination of Health Prospects
Assessment Team:		Sue Eitel, Dildora Sekler, Usmankhodjaeva Adibakhon
21. Meeting with the key stakeholders on: FINANCE		
1.	Djumaeva Gulchekhira	Head of the Department of International Indicators and Health Prospects
2.	Xoitboeva Rano	Ministry of Health
3.	Dominova Nazira	Ministry of Health
4.	Yusupova Gulnara	Ministry of Health
5.	Nurmatova Shoirira,	Head Doctor, Republican Children's Psychoneurological Hospital (named after IK Kurbanov)
6.	Sadirova Muborak	SHIF, Department of Methodology
Assessment Team:		Sue Eitel, Dildora Sekler, Usmankhodjaeva Adibakhon
22. Meeting with the key stakeholders on: INFORMATION AND DIGITALIZATION		
1.	Raximova AR	WHO/IT-Med
2.	Nurmatova Shoirira	Head Doctor, Republican Children's Psychoneurological Hospital (named after IK Kurbanov)
3.	Mirdjalilov Nematulla	Ministry of Employment and Poverty Reduction
Assessment Team:		Sue Eitel, Dildora Sekler, Usmankhodjaeva Adibakhon
23. Meeting with the key stakeholders on: REHABILITATION and AT SERVICE		
1.	Nurmatova Shoirira	Head Doctor, Republican Children's Psychoneurological Hospital (named after IK Kurbanov)
2.	Mirdjalilov Nematulla	Deputy Head, Inspectorate for Medical and Social Expertise
Assessment Team:		Sue Eitel, Dildora Sekler, Usmankhodjaeva Adibakhon
24. Meeting with the key stakeholders on REHABILITATION WORKFORCE		
1.	Djumaeva Gulchekhira	Head of Department, Department of International Indicators and Health Prospects
2.	Agzamova Shoirira	Tashkent Pediatric Medical Institute, Department of Ambulatory Medicine
3.	Svetlichnaya Nailiya	Assistant Professor, State University of Physical Culture and Sports of Uzbekistan
4.	Baxodirova Munisa	Associate Professor, Neurology Department, Centre for the development of professional qualification of medical workers
5.	Muxamedxanova Shaxnoza	Dean of the Faculty of Higher Nursing, Tashkent Pediatric Medical Institute
6.	Ermatova Aziza	Chief Specialist, Ministry of Employment and Poverty Reduction
7.	Muminova Lola	Head of Department, Republican Centre for Social Adaptation of Children
8.	Samidova RK	Chief Specialist, Ministry of Health
9.	Tuxtasimova DS	Director, Centre for the Development of Medical Education
10.	Nurmatova Shoirira	Head Doctor, Republican Children's Psychoneurological Hospital (named after IK Kurbanov)
11.	Salixodjaeva Rixsi	Head of the Department of Higher Nursing
Assessment Team:		Sue Eitel, Dildora Sekler, Usmankhodjaeva Adibakhon

(Continued)

Table F1. Contd.

NO.	NAME	ORGANIZATION
26. In brief meeting Cathal Morgan and Andrey Cazacu with Assessment Team		
Cathal Morgan, Andrey Cazacu, Sue Eitel, Dildora Sekler, Adibakhon Usmankhodjaev		
27. Meeting with the key stakeholders on: FINANCE		
1.	Kurbonova Mutabarxon	PHC chief nurses (primary care) multidisciplinary clinic/PHC Andijan region
2.	Xodjiev Nasibjob	PHC chief nurses (primary care) multidisciplinary clinic/PHC Andijan region
3.	Turdiyeva Sanobar	PHC chief nurses (primary care) multidisciplinary clinic/PHC Bukhara region
4.	Madjitova Moxiniso	PHC chief nurses (primary care) multidisciplinary clinic/PHC Bukhara region
5.	Zuhurova Umida	PHC chief nurses (primary care) multidisciplinary clinic/PHC Bukhara region
6.	Sheraliyeva Sanobar	PHC chief nurses (primary care) multidisciplinary clinic/PHC Jizak region
7.	Korganbayeva Jumakul	PHC chief nurses (primary care) multidisciplinary clinic/PHC Jizak region
8.	Yuldashev Jorabek	PHC chief nurses (primary care) polyclinic/PHC Jizak region
9.	Maxkamova Mukarram	PHC chief nurses (primary care) polyclinic/PHC Kashkadarya region
10.	Saidova Norbibi	PHC chief nurses (primary care) polyclinic/PHC Kashkadarya region
11.	Yangiboyeva Ozoda	PHC chief nurses (primary care) polyclinic/PHC Kashkadarya region
12.	Tursunqulova Nasiba	PHC chief nurses (primary care) polyclinic/PHC Navoi region
13.	Kezekeyeva Tamara	PHC chief nurses (primary care) polyclinic/PHC Navoi region
14.	Islomova Orzigul S	PHC chief nurses (primary care) multidisciplinary clinic/PHC Navoi region
15.	Yuldasheva Saboxat	PHC chief nurses (primary care) multidisciplinary clinic/PHC Namangan region
16.	Mavlanova Muyassar	PHC chief nurses (primary care) multidisciplinary clinic/PHC Namangan region
17.	Omonova Umida	PHC chief nurses (primary care) multidisciplinary clinic/PHC Namangan region
18.	Yarmatova Nazokat	PHC chief nurses (primary care) multidisciplinary clinic/PHC Samarkand region
19.	Tolipova Muxlisa	PHC chief nurses (primary care) multidisciplinary clinic/PHC Samarkand region
20.	Yoldasheva Marguba	PHC chief nurses (primary care) multidisciplinary clinic/PHC Samarkand region
21.	Naimov Karomatullo	PHC chief nurses (primary care) multidisciplinary clinic/PHC Surxandarya region
22.	Gafforova Sayyora	PHC chief nurses (primary care) multidisciplinary clinic/PHC Surxandarya region
23.	Jorayeva Baxtigul	PHC chief nurses (primary care) multidisciplinary clinic/PHC Surxandarya region
24.	Ayubov Farruh	PHC chief nurses (primary care) polyclinic/PHC Surxandarya region
25.	Boymurodova Nasiba	PHC chief nurses (primary care) polyclinic/PHC Sirdarya region
26.	Absattarova Barno	PHC chief nurses (primary care) polyclinic/PHC Sirdarya region
27.	Odilova Zebo	PHC chief nurses (primary care) polyclinic/PHC Sirdarya region
28.	Imomova Dilrabo	PHC chief nurses (primary care) polyclinic/PHC Sirdarya region
29.	Roziyeva Zuxra	PHC chief nurses (primary care) polyclinic/PHC Tashkent region
30.	Zaynutdinova Dilbar	PHC chief nurses (primary care) polyclinic/PHC Tashkent region
31.	Normatova Dilshodaxon	PHC chief nurses (primary care) polyclinic/PHC Fergana region
32.	Abdullayeva Moxiraxon	PHC chief nurses (primary care) polyclinic/PHC Fergana region
33.	Oripova Ranoxon	PHC chief nurses (primary care) polyclinic/PHC Fergana region
34.	Ergasheva Kamoliddin	PHC chief nurses (primary care) polyclinic/PHC Fergana region
35.	Gulomova Munajat	PHC chief nurses (primary care) multidisciplinary clinic/PHC Xorezm region
36.	Rajabova Navbahor	PHC chief nurses (primary care) multidisciplinary clinic/PHC Xorezm region
37.	Sobirova Xulkar	PHC chief nurses (primary care) multidisciplinary clinic/PHC Xorezm region
38.	Sapoyeva Oygul	PHC chief nurses (primary care) multidisciplinary clinic/PHC Xorezm region
39.	Yembergenova Gulshad	PHC chief nurses (primary care) polyclinic/PHC Karakalpakstan Republic

(Continued)

Table F1. Contd.

NO.	NAME	ORGANIZATION
40.	Matchanova Gulara	PHC chief nurses (primary care) polyclinic/PHC Karakalpakstan Republic
41.	Xidoyatova Zulxumomr	PHC chief nurses (primary care) multidisciplinary clinic/PHC Tashkent City
42.	Salixodjaeva Rixsi	Chief nurses in Ministry of Health, Tashkent City
	Assessment Team:	Sue Eitel, Dildora Sekler, Usmankhodjaeva Adibakhon
28. Meeting with SHIF (State Health Insurance Fund)		
1.	Sharipov Farux	Executive Director
2.	Ermatov Zaxid	Deputy Executive Director
3.	Gazieva Umida	Head of Quality Monitoring and Assessment Department
	Assessment Team:	Sue Eitel, Dildora Sekler, Usmankhodjaeva Adibakhon, Cathal Morgan, Andrey Cazacu
29. Meeting with UNICEF		
1.	Aliev Umid	Social Policy Specialist
2.	Kaxxarov Jurabek	Disability Support Consultant
3.	Kim Olga	Health-care Specialist
4.	Chicherina Yana	Education Specialist
	Assessment Team:	Sue Eitel, Dildora Sekler, Usmankhodjaeva Adibakhon
30. USAID courtesy visit		
1.	Christiane Ochoa	Health Development Officer
	Assessment Team:	Sue Eitel, Dildora Sekler, Usmankhodjaeva Adibakhon, Cathal Morgan, Andrey Cazacu
31. Meeting with organizations of people with disabilities		
1.	Ibragimova Nilufar	Charity Union of People with Diabetes Mellitus "UMID",
2.	Tursunbaeva Saodat	International Women's Public Foundation "Sharq Ayoli"
3.	Oybek Isakov	Association of Disabled People of Uzbekistan
	Assessment Team:	Sue Eitel, Dildora Sekler, Usmankhodjaeva Adibakhon, Cathal Morgan, Andrey Cazacu
32. Meeting with Asian Development Bank		
1.	Hiddo Huitzing	Health Specialist, Asian Development Bank
2.	Jenevieve Rivera Javier	Project Analyst, Asian Development Bank
3.	Laureen Felisienne Tapnio	Operations Assistant, Asian Development Bank
4.	Farida Djumabaeva	Gender and Social Development Specialist, Asian Development Bank
	Assessment Team:	Sue Eitel, Dildora Sekler, Usmankhodjaeva Adibakhon, Cathal Morgan, Andrey Cazacu
33. Meeting with PHC Almaty and Barcelona Office colleagues		
1.	José Cerezo	WHO International consultant
2.	Aigul Kuttumuratova	RO technical officer on PHC
	Assessment Team:	Sue Eitel and Cathal Morgan
34. Rehabilitation Maturity Model Findings to MOH		
1.	Djumaeva Gulchehra	Head of Dept; international indicator & definition of prospects for health care
2.	Mirjalilov Nematilla	Deputy head of Inspectorate for Medical and Social Expertise
3.	Juraev Mirzajon	Specialist of Inspectorate for Medical and Social Expertise
	Assessment Team:	Sue Eitel, Dildora Sekler, Usmankhodjaeva Adibakhon, Cathal Morgan, Andrey Cazacu
35. MoH Preview of Stakeholder Presentation		
1.	Basitxanova Elmira	Deputy Minister
2.	Yuldashev Sanjar	Leading Specialist of the Department of Organization of Medical Care
3.	Boymirov Eldor	Head of Department, Department of Medical Statistics and Determination of Health Prospects

(Continued)

Table F1. Contd.

NO.	NAME	ORGANIZATION
4.	Djumaeva Gulchehra	Head of Department, Department of International Indicators and Health Prospects
5.	Yunusova Nigina	Leading Specialist of the Department of Coordination of Activities of Specialized Centres
6.	Yusupova Gulnara	Specialist of Economy and Finance Department, Ministry of Health
7.	Dominova Nazira	Specialist of Economy and Finance Department, Ministry of Health
8.	Xoitboeva Rano	Specialist of Education and Science Department, Ministry of Health
9.	Raximova AR	Ministry of Health, IT-Med
	Assessment Team:	Sue Eitel, Dildora Sekler, Usmankhodjaeva Adibakhon, Cathal Morgan, Andrey Cazacu
36. Debriefing meeting with WHO representative		
1.	Dr Asheena Khalakdina	WHO Country Office representative
	Assessment Team:	Sue Eitel, Dildora Sekler, Usmankhodjaeva Adibakhon, Cathal Morgan, Andrey Cazacu
37. Multistakeholder preliminary findings presentation		
1.	Alimova Gulmira	Chief Specialist on inclusive education, Ministry of Preschool and School Education, Republican Centre for Career Orientation and Psycho-Educational Diagnostics
2.	Urunova Dilrabo	Assistant, Department of Higher Nursing, Centre for the development of professional qualification of medical workers, Tashkent Medical Academy
3.	Askarova Dilfuza	Department Head, Physiotherapevt, RSSPMC for Traumatology and Orthopaedics
4.	Rustamov Xushnud	Orthopaedic Paediatric Traumatologist, RSSPMC for Traumatology and Orthopaedics
5.	Raximova Arina	IT-Med
6.	Mullabaeva Guzal	RSSPMC for Cardiology
7.	Nizamov Azizbek	Head of Olmazar District Health Care Department (PHC), Tashkent City
8.	Mamatkulova Gulnoza	Head Physician of the 15th polyclinic of Olmazor, Tashkent City
9.	Nurmatova Shoirra	Republican Children's Psychoneurological Hospital (named after IK Kurbanov)
10.	Musafinov Dilshod	Assistant, Department of Higher Nursing. Centre for the development of professional qualification of medical workers, Tashkent Medical Academy
11.	Abdukarimova N	RSSPMC for Paediatrics
12.	Ryabikin Dmitriy	Head of Rehabilitation Department, National Children's Medical Centre
13.	Churinov Kutlimurod	Ministry of Employment and Poverty Reduction
14.	Mirjalilov Nematilla	Ministry of Employment and Poverty Reduction
15.	Najmiddinova N	Paediatrician, RSSPMC for Paediatrics
	Assessment Team:	Sue Eitel, Dildora Sekler, Usmankhodjaeva Adibakhon, Cathal Morgan, Andrey Cazacu

Note: DMSS: Department for organizing Medical and Social Services (DMSS).

Annex G. APs, 2022

The Table I1. presents the list of assistive products (APs) as of 2022.

Table I1. List of assistive products, 2022

No.	Name of region	Adult W/C	Child W/C	Hearing aid	Crutches (pairs)	Cane	Walker	Elbow crutch	Cane (for the blind)	Colostomy bag	Urine bag	Prosthetics and orthotics (APs)		Total people	Total products
												People	Products		
1.	R. Karakalpakstan	589	131	463	340	1338	71	97	179	30	10	519	1095	3767	4343
2.	Andijan	322	21	104	86	14	27	17	56	14	28	540	1252	1229	1941
3.	Bukhara	321	34	148	157	231	16	13	48	13	6	375	842	1362	1829
4.	Jizzakh	94	19	64	59	117	11	5	14	0	0	403	871	786	1254
5.	Kashkardarya	358	104	266	185	239	19	19	25	7	3	739	1170	1964	2395
6.	Navoi	199	35	263	54	258	23	7	7	1	3	296	560	1146	1410
7.	Namangan	690	91	572	155	269	30	56	66	10	3	396	842	2338	2784
8.	Samarkand	465	21	215	192	377	11	25	64	32	18	685	1453	2105	2873
9.	Syrdarya	332	47	229	165	260	24	32	67	14	12	457	745	1639	1927
10.	Surkhandarya	332	77	175	180	308	23	27	14	8	0	415	974	1559	2118
11.	Tashkent	173	15	111	178	197	34	28	27	50	42	1277	2536	2132	3391
12.	Fergana	564	102	327	161	104	46	27	46	6	5	561	1266	1949	2654
13.	Khorezm	104	20	36	70	76	12	9	14	19	15	278	573	653	948
14.	Tashkent City	90	13	84	92	138	17	23	17	90	65	1772	3081	2403	3712
Total		4633	730	3057	2074	3926	364	387	644	294	210	8713	17260	25032	33579

Source: unpublished correspondence shared with the WHO Country Office in Uzbekistan by the DMSS

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