World Health Organization

European Region

A situation assessment of rehabilitation in Armenia

World Health Organization

European Region

A situation assessment of rehabilitation in Armenia

Abstract

This publication provides an overview of the rehabilitation landscape in Armenia as of 1 November 2022. It summarizes notable accomplishments, identifies requirements and highlights opportunities for improvement within the rehabilitation sector in Armenia. The assessment was carried out under the guidance of the Ministry of Health of Armenia, along with its Health Care Policy Department. Technical assistance was provided by the WHO Regional Office for Europe and the WHO Country Office in Armenia. The effort was a collaborative undertaking involving various government ministries, state entities, development partners, United Nations agencies, professional associations, organizations representing people with disabilities, service providers, and users benefiting from rehabilitation services.

The approach taken was rooted in evidence, and it was tailored to suit the distinctive social, cultural, economic and political context of the country. It is important to note that the content of this document captures a specific moment in time and does not constitute a comprehensive analysis of the entire rehabilitation sector. The analysis primarily centres around aspects such as rehabilitation policy, governance, service delivery, financing, information management and human resources. The overarching objective is to enhance the availability and improve access to high-quality rehabilitation services in Armenia.

Keywords

REHABILITATION; DISABLED PERSONS; UNIVERSAL HEALTH CARE; WORLD HEALTH ORGANIZATION.

Document number:
WHO/EURO:2024-9294-49066-73155 (PDF)
WHO/EURO:2024-9294-49066-74637 (print)

© World Health Organization 2024

Some rights reserved. This work is available under the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 IGO licence (CC BY-NC-SA 3.0 IGO; https://creativecommons.org/licenses/by-nc-sa/3.0/igo).

Under the terms of this licence, you may copy, redistribute and adapt the work for non-commercial purposes, provided the work is appropriately cited, as indicated below. In any use of this work, there should be no suggestion that WHO endorses any specific organization, products or services. The use of the WHO logo is not permitted. If you adapt the work, then you must license your work under the same or equivalent Creative Commons licence. If you create a translation of this work, you should add the following disclaimer along with the suggested citation: "This translation was not created by the World Health Organization (WHO). WHO is not responsible for the content or accuracy of this translation. The original English edition shall be the binding and authentic edition: A situation assessment of rehabilitation in Armenia. Copenhagen: WHO Regional Office for Europe; 2024".

Any mediation relating to disputes arising under the licence shall be conducted in accordance with the mediation rules of the World Intellectual Property Organization (http://www.wipo.int/amc/en/mediation/rules/).

Suggested citation. A situation assessment of rehabilitation in Armenia. Copenhagen: WHO Regional Office for Europe; 2024. Licence: CC BY-NC-SA 3.0 IGO.

Cataloguing-in-Publication (CIP) data. CIP data are available at http://apps.who.int/iris.

Sales, rights and licensing. To purchase WHO publications, see http://apps.who.int/bookorders. To submit requests for commercial use and queries on rights and licensing, see https://www.who.int/about/policies/publishing/copyright

Third-party materials. If you wish to reuse material from this work that is attributed to a third party, such as tables, figures or images, it is your responsibility to determine whether permission is needed for that reuse and to obtain permission from the copyright holder. The risk of claims resulting from infringement of any third-party-owned component in the work rests solely with the user.

General disclaimers. The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

All reasonable precautions have been taken by WHO to verify the information contained in this publication. However, the published material is being distributed without warranty of any kind, either expressed or implied. The responsibility for the interpretation and use of the material lies with the reader. In no event shall WHO be liable for damages arising from its use.

Cover photo: © WHO / Nazik Armenakyan

Contents

Preface ... vi
Acknowledgements ... vii
Abbreviations ... ix
Executive summary ... xi

1. Background and methodology ... 1
1.1 International, regional and national developments in rehabilitation ... 2
1.2 Methodology ... 3
1.3 Limitations ... 4

2. Introduction to rehabilitation ... 5

3. Health trends and rehabilitation needs in Armenia ... 7
3.1 Armenia country context ... 8
3.2 Sustainable Development Goals in Armenia ... 8
3.3 Armenia context and rehabilitation needs ... 9
3.3.1 Population ageing ... 9
3.3.2 Prevalence of noncommunicable diseases ... 11
3.3.3 Persons with disabilities ... 12
3.3.4 Estimated need for rehabilitation ... 13
3.3.5 Injuries from the 2020 Nagorno-Karabakh conflict ... 13
3.3.6 Landmines and explosive remnants of war ... 15

4. Overview of Armenia's health system and rehabilitation ... 16
4.1 Health policy documents ... 17
4.2 Organization of Armenia's health-care system ... 17
4.3 Ministries involved in health and rehabilitation ... 17
4.4 MoH mission and organizational structure ... 18
4.5 Health facilities and human resources ... 19
4.6 Other stakeholders in rehabilitation ... 19
4.6.1 United Nations agencies ... 19
4.6.2 Donors ... 20

5. Rehabilitation governance ... 22
5.1 Rehabilitation governance and regulatory documents ... 23
5.1.1 Rehabilitation within health-related documents ... 23
5.1.2 Rehabilitation within disability-related documents ... 23
5.1.3 Rehabilitation documents related to children ... 25
5.2 Rehabilitation leadership, planning and coordination ... 26
5.2.1 Rehabilitation leadership ... 26
5.2.2 Coordination platforms ... 26
5.3 Rehabilitation accountability, reporting and transparency ... 27
5.4 Governance, procurement and regulation of AP ... 27

6. Rehabilitation financing ... 30
6.1 Government budget for Armenia 2022 ... 31
6.2 General financing information ... 32
6.3 Financing for rehabilitation and AT ... 33
6.3.1 Rehabilitation and AT financing and expenditure within the MoH ... 33
6.3.2 Rehabilitation and AT financing and expenditure within the MoLSA ... 35

7. Rehabilitation human resources and infrastructure/equipment 36
7.1 Rehabilitation workforce in Armenia 37
7.1.1 Rehabilitation workforce as listed in the 2013 *Occupation Classifier* *38*
7.1.2 Rehabilitation workforce represented in the *Health and Healthcare Statistical Yearbook 2021* *40*
7.1.3 Rehabilitation workforce identified through the *Rapid assessment report* *41*
7.2 Rehabilitation workforce education and training 41
7.2.1 Yerevan State Medical University 42
7.2.2 National Institute of Health 42
7.2.3 Armenian State Institute of Physical Culture and Sport 43
7.2.4 Armenian State Pedagogical University 43
7.2.5 International Center for Professional Development 43
7.2.6 Other training 43
7.3 Licensing, regulation and continuing education 44
7.3.1 Licensing 44
7.3.2 CPD 44
7.4 Professional associations 44
7.5 Remuneration 46
7.6 Rehabilitation infrastructure/equipment 46

8. Rehabilitation information 47
8.1 Data on disability, rehabilitation needs and population functioning 48
8.1.1 Census information 48
8.1.2 Rehabilitation and AT needs in Armenia 48
8.1.3 Disability status determination and information management 49
8.2 Data, digitalization and Armenia's HIS 50
8.3 Data on availability/utilization of rehabilitation 51
8.4 Data on outcomes, quality and efficiency of rehabilitation 51
8.5 Government funding on rehabilitation research 52

9. Rehabilitation service accessibility and quality 53
9.1 Overview of rehabilitation service accessibility 54
9.1.1 Rehabilitation centres 54
9.1.2 Rehabilitation in health facilities 55
9.1.3 Rehabilitation for children 56
9.1.4 Rehabilitation in the community 56
9.1.5 Vision and hearing 56
9.1.6 AT – service providers and products 57
9.1.7 Rehabilitation in emergencies or disasters 58
9.1.8 Rehabilitation and COVID-19 61
9.2 Overview of quality of rehabilitation 62
9.2.1 Rehabilitation interventions 62
9.2.2 Treatment plans and documentation 62
9.2.3 Multidisciplinary teams and person-centred care 62

10. Rehabilitation outcomes and system attributes 64
10.1 Outcomes 65
10.2 Attributes 65
10.2.1 Equity 65
10.2.2 Efficiency 65
10.2.3 Accountability 65
10.2.4 Sustainability 65

11. WHO Rehabilitation Maturity Model scoring 66

12. Conclusions and recommendations 70
12.1 Conclusions 71
12.2 Recommended actions 71
Governance 71
Financing 72
Human resources 73
Information 74
Rehabilitation service 74
Emergency preparedness and response 75
References 76
Annex 1. Rehabilitation in health systems: guide for action 84
Annex 2. Visit schedule 86
Annex 3. Participants 87
Annex 4. Overview of rehabilitation 93
Annex 5. Licensed providers of assistive products and technology in Armenia...... 95

Preface

The Government of Armenia places utmost importance on the health and well-being of its citizens. The Ministry of Health is deeply involved in the reform of the health-care system and acknowledges the integration of rehabilitation into the broader spectrum of health-care services as an essential part of universal health coverage.

The Ministry of Health highly values the technical assistance provided by WHO in order to scale access to rehabilitation within the health system, including preparedness and response plans during emergencies.

Under our leadership, the situation assessment undertaken in Armenia during November 2022, now provides a basis upon which to plan and deliver high-quality rehabilitation services.

The Government of Armenia is committed to taking the necessary steps to incorporate the key findings and recommendations of this situation assessment into our national action planning processes. For example, we have in place an interministerial and multistakeholder working group with technical support from the WHO Regional Office for Europe. This team is working on a national strategy which will deliver a clear vision and strategic goals for the future of rehabilitation and assistive technology in Armenia. Additionally, this interministerial group is also tasked with developing an action plan which will detail how the Rehabilitation and Assistive Technology Strategy vision and goals will be implemented through defined, measurable and timebound activities.

The Ministry of Health emphasizes its commitment and willingness to facilitate the advancement of the availability of quality and person-centred rehabilitation services, aligning with the global initiative "Rehabilitation 2030" led by WHO, ensuring healthy lives and promoting well-being for all people in Armenia.

We convey our gratitude to the WHO team for their unwavering technical support and look forward to our continued collaboration in the rehabilitation sector of our country.

Armen Nazaryan, Deputy Minister, Ministry of Health of Armenia.

Acknowledgements

This report was made possible through the combined efforts of the WHO Regional Office for Europe, the WHO Country Office in Armenia and key stakeholders supporting rehabilitation and persons with disability in Armenia.

Sincere appreciation is extended to the Ministry of Health, Ministry of Labor and Social Affairs, and the WHO Country Office in Armenia for their engagement in the compilation and synthesis of available data related to disability, rehabilitation and assistive technology. These contributions were essential to the foundation of this report, and the baseline information contained within.

The main authors of this report are Satish Mishra, WHO Regional Office for Europe, Denmark; Cathal Morgan, WHO Regional Office for Europe, Denmark; Sue Eitel, WHO Regional Office for Europe, Denmark; Zhanna Harutyunyan, WHO Country Office in Armenia; Liana Barseghyan, Ministry of Health, Armenia; Liana Aghajanyan, Advisor to the Minister of Health on Paediatric Rehabilitation, Ministry of Health, Armenia; Anahit Petrosyan, Advisor to the Minister of Health on Physical and Rehabilitation Treatment, Ministry of Health, Armenia.

Editors

Cathal Morgan, WHO Regional Office for Europe, Denmark; Tomas Zapata, WHO Regional Office for Europe, Denmark; Marthe Everard, WHO Country Office in Armenia; Knar Ghonyan, Ministry of Health, Armenia.

Peer reviewers

Kirsten (Kiki) Lentz, United States Agency for International Development; Tomas Zapata, WHO Regional Office for Europe.

Peer contributors (individuals and organizations)

Nune Pashayan and Kristina Gyurjyan, Ministry of Health; Gohar Yerimyan, National Institute of Health; Karen Mikayelyan, State Health Agency; Ani Chilingaryan, Unified Social Service; Artur Kesoyan, Ministry of Labor and Social Affairs; Lusine Grigoryan, Ministry of Education, Science, Culture and Sport; Samvel Kharazyan, Task Force for Universal Insurance; Anna Ananikyan, Ministry of Finance; Hasmik Arakelyan and Alvard Poghosyan, United Nations Children's Fund, Armenia; Lilit Hovhannisyan and Goharine Avetyan, United Nations Development Programme, Armenia; Armen Karapetyan and Armenuhi Mkoyan, Ministry of Emergency Situations; Nune Ter-Margaryan and Lusine Poghosyan, Yerevan State Medical University; Marianna Harutyunyan, Gohar Hovyan and Stepan Grigoryan, Armenian State Pedagogical University; Gevorg Nalbandyan, Armenian State Institute of Physical Culture and Sport; Ara Babloyan, International Center of Professional Development, Arabkir Joint Medical Center and Institute of Child and Adolescent Health; Laura Movsisyan, Kosh Rehabilitation Center; Armineh Babikian, Interdisciplinary Rehabilitation Fellowship, Therapists for Armenia nongovernmental organization (NGO); Anahit Isakhanyan, Armenian Association of Clinical Rehabilitators; Arman Manukyan, Armenian National Federation of Physical and Massage Therapy; Hayk Mkrtchyan, Armenian Paramedical Association; Gayane Hovhannisyan and Zaruhi Harutyunyan, Armenian Ergotherapists Association; Armine Harutyunyan, Polyclinic No. 8 closed joint-stock company, Yerevan; Artur Petrosyan, Interorto German Prosthesis Center; Hayk Abgaryan and Hakob Atanesyan, Artmed Medical Rehabilitation Center; Gayane Zakaryan and Irina Tovmasyan, ArBeS Health Care Center; Avetis Avetisyan, Petros Manukyan and Ani Petrosyan, Saint Gregory the Illuminator Medical Center; Ara Tekyozyan, Ortez Prosthesis and Orthosis Center; Anna Artsruni, ArMed National eHealth Operator; Armen Alaverdyan, Unison NGO; Sipan Asatryan and Vahan Dishlanyan, Coalition for Inclusive Legal Reforms NGO; Mushegh Hovsepyan, Disability Rights Agenda NGO; Kristine Kirakosyan, Agate Rights Defense Center for Women with Disabilities NGO; Shushan Davtyan, Arabkir United Children's Charity Foundation; Anush Babayan, Armenian Speech Therapists Association; Artyom Petrosyan, Armenian Red Cross Society; Gagik Muradyan,

Gratsia International Rehabilitation Center of the Armenian Red Cross Society; and Armine Hovakimyan, Scientific Research Institute of Spa Treatment and Physical Medicine.

We would like to express our appreciation to all individuals and rehabilitation service users who openly contributed their knowledge, expertise and personal experiences regarding the rehabilitation landscape in Armenia. These inputs played a crucial role in shaping this report.

Many thanks go to the United States Agency for International Development (USAID) for their continued commitment to rehabilitation and the resources needed to accomplish the situation assessment.

Abbreviations

AACR	Armenian Association of Clinical Rehabilitologists
ANFPMT	Armenian National Federation of Physical and Massage Therapy
AP	assistive products
ARCS	Armenian Red Cross Society
ArMed	Armenia's national digital health system
ASIPCS	Armenian State Institute of Physical Culture and Sport
ASPU	Armenian State Pedagogical University
AT	assistive technology
ATS	Armenia Transformation Strategy 2050
BBP	Basic Benefit Package
CHDE	Center for Humanitarian Demining and Expertise
CIS	Commonwealth of Independent States
CJSC	closed joint-stock company
CPD	continuous professional development
EMT	emergency medical team
ERW	explosive remnants of war
ESLA	European Speech and Language Therapy Association
EU	European Union
GDP	gross domestic product
HIS	health information system
ICF	International Classification of Functioning, Disability and Health
ICPD	International Center for Professional Development
ICRC	International Committee of the Red Cross
ILRC	Independent Living Resource Centre
IRF	Interdisciplinary Rehabilitation Fellowship
ISPO	International Society for Prosthetics and Orthotics
LLC	limited liability company
MES	Ministry of Emergency Situations
MoESCS	Ministry of Education, Science, Culture and Sport
MoH	Ministry of Health
MoLSA	Ministry of Labor and Social Affairs
MSEC	Medical-Social Expertise Commission
NCD	noncommunicable disease
NEO	National eHealth Operator
NGO	nongovernmental organization
NIH	National Institute of Health

OOP	out-of-pocket
PHC	primary health care
PMR	physical medicine and rehabilitation (doctor)
P&O	prosthetics and orthotics/prosthetist and orthotist
rATA	rapid assistive technology assessment
RMM	Rehabilitation Maturity Model
SDG	Sustainable Development Goal
SHA	State Health Agency
STARS	Systematic Assessment of Rehabilitation Situation
TRIC	Template for Rehabilitation Information Collection
TRWG	Trauma Rehabilitation Working Group
UHI	Universal Health Insurance
UNCRPD	United Nations Convention on the Rights of Persons with Disabilities
UNDP	United Nations Development Programme
UNICEF	United Nations Children's Fund
UNSDCF	United Nations Sustainable Development Cooperation Framework
USAID	United States Agency for International Development
USS	Unified Social Service
WFOT	World Federation of Occupational Therapists
YSMU	Yerevan State Medical University

Executive summary

In Armenia, the development of rehabilitation has been driven by natural disasters[1] and war[2]. The international response to these events has focused on humanitarian support – with particular emphasis on addressing the short- and long-term needs of those injured. Foreign investments have introduced elements of contemporary rehabilitation. At the same time, Soviet-era treatment techniques and terminologies continue to be used in Armenia.

Armenia's population is both shrinking and ageing. The country has roughly 3 million inhabitants; 15% of them are over the age of 65. The Armenian diaspora (~8 million people) is an important influence as there are many health-related initiatives (including rehabilitation) that are driven and supported by them.

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" *(1)*. Rehabilitation encompasses provision of assistive products (AP) and should be available for anyone who needs it. In Armenia, rehabilitation remains closely linked with disability, and access to services is generally linked to those individuals with a disability determination.

In Armenia, programme and policy leadership on rehabilitation comes from the Ministry of Health (MoH). Other ministries that play a role in rehabilitation are the Ministry of Labor and Social Affairs (MoLSA), Ministry of Defence, and Ministry of Education, Science, Culture and Sport (MoESCS).

In March 2021, the Government of Armenia, supported by WHO, conducted an in-country rapid assessment on rehabilitation (WHO, *Rapid assessment report of rehabilitation in Armenia*, unpublished, March 2021). Although the assessment report was not published, findings were shared with the MoH and key stakeholders within the country. Content is referenced throughout this document.

In June–September 2022, the WHO Regional Office for Europe and the WHO Country Office in Armenia conducted a desk review on the rehabilitation situation in Armenia. Responding to a request from Armenia's MoH, the Regional Office provided further technical support for an in-country assessment of rehabilitation on 8–15 November 2022.

This Systematic Assessment of Rehabilitation Situation (STARS) *(2)* uses standard tools developed by WHO and is structured around the building blocks for health system strengthening. These include leadership and governance, financing, health workforce, service delivery, health information systems, and medicines and technology (which can encompass AP).

During the November STARS assessment in Armenia, the team engaged with eight ministries and agencies, and six educational bodies; visited eight health facilities in Yerevan; held two focus group discussions; and interacted with over 90 stakeholders. Additional details are provided in Section 1.2. of this report, while details from the visit are found in Annex 2 and Annex 3.

This report reflects the rehabilitation situation in Armenia as of 1 November 2022.

1 The Spitak earthquake in 1988 injured more than 130 000 people and killed more than 35 000 people.

2 In particular, the Nagorno-Karabakh conflict.

Key findings – strengths

Armenia's understanding of contemporary rehabilitation is emerging. There are "pockets of excellence" evidenced across many centres in Yerevan. In recent years, there have been positive advances related to rehabilitation that are backed by the government's commitment to reform. This includes restructuring disability determination (May 2021), modernizing Armenia's national digital health system (ArMed), establishment of the Unified Social Service in 2021, and investing in policies and practices on assistive technology (AT). All these efforts contribute to a forward-looking agenda from which to further advance rehabilitation in Armenia.

Rehabilitation governance. Although, there is no focal point (person) within the MoH for rehabilitation medical aid and service delivery, the ministry has two advisors on rehabilitation (one for adults, one for children) and two deputy ministers who provide oversight, and rehabilitation is included within the job descriptions of some departments/divisions. Within the MoLSA, the Equal Opportunity Unit oversees actions related to AT.

Rehabilitation financing. Rehabilitation is included in the Basic Benefit Package (BBP) for socially vulnerable/special groups (including children under the age of 18). The State Health Agency (SHA) noted that expenditure on rehabilitation increased from 2021 to 2022; this is believed to be a result of the impact of the war with Azerbaijan in late 2020.

Rehabilitation human resources and infrastructure. Education and training programmes exist for different disciplines at different levels. In 2022, the National Institute of Health launched an innovative 10-month continuing education programme called the Interdisciplinary Rehabilitation Fellowship. This programme addresses skills and knowledge across the rehabilitation workforce and contributes to the development of contemporary rehabilitation interventions and methods.

Rehabilitation information. Armenia launched ArMed in 2017; it is managed on behalf of the Government of Armenia by a private company called National eHealth Operator (NEO). ArMed holds information on the type, number and location of rehabilitation services. It comprises a broad range of categories related to rehabilitation and has the potential to provide a case management function for service providers and rehabilitation professionals. NEO is running a project with the Asian Development Bank to consolidate data on the health workforce. In addition, WHO together with the United Nations Development Programme (UNDP) supported the 2022 rapid assistive technology assessment (rATA), which provides evidence from which relevant interventions may be explored and implemented.

Rehabilitation service accessibility and quality. There is evidence of physiotherapy services provided across primary, secondary and tertiary levels of care, in addition to some initiatives providing mobile services and community level care. The MoH shared information on over 196 facilities licensed to provide rehabilitation medical aid and services in Armenia. Within and around Yerevan there are examples of high standards of practice for rehabilitation that align with contemporary intervention methods and understanding.

Emergency preparedness and response. A national emergency medical team (EMT) was established in 2021 under the auspices of the MoH and Ministry of Emergency Situations (MES), with the support of the WHO EMT Secretariat and the Arbeiter Samariter Bund Georgian Office. The national EMT has been recognized as a priority mechanism for responding to emergency situations. In 2022, Armenia hosted the 5th Emergency Medical Teams Global Meeting, during which there were various sessions on the importance of rehabilitation integration in EMTs, as one of the key considerations of the EMT initiative since its inception.

Key findings – challenges

Systems and practices from Soviet times may impede the development of the rehabilitation sector in Armenia. Examples include rehabilitation-related terminology not keeping pace with contemporary norms and emphasis on passive treatment techniques[3] especially at outpatient or primary health care (PHC) levels. Although there is evidence of good practice, this is not system-wide nor standardized. This context, together with present-day findings, shape the key challenges and potential implications presented in this section.

Governance

Formal rehabilitation focal points within and across ministries are not yet established. The MoH has advisors supporting rehabilitation, while the MoLSA has a department that addresses AT policy work. Other ministries also engage in rehabilitation but do not have specific staff assigned to this area. Without a formal designation and clear roles for rehabilitation management and coordination, this work may be overshadowed by other priorities or left unattended, as staff may not recognize rehabilitation or AT issues as their responsibility.

There is no national strategy on rehabilitation. Rehabilitation activities can be fragmented unless they are guided by one overarching and measurable action plan that includes all relevant departments, ministries and stakeholders. A national strategy with specific and quantifiable actions to guide the development of rehabilitation and AT would create a cohesive vision for the sector and systematically address gaps and challenges identified through this report.

There is no inter-ministerial coordination platform on rehabilitation. Although the MoH spearheaded the formation of a working group on rehabilitation at the end of 2020, this coordination was not formalized, and the group no longer functions. An established structure would provide a vital forum within which rehabilitation issues can be shared and discussed. By contrast, the lack of systematic coordination may hamper a streamlined approach in developing the rehabilitation sector.

Multiple United Nations agencies provide technical support for AT policies and guidance documents. Armenia's MoLSA welcomes technical support on AT from the United Nations Children's Fund (UNICEF), UNDP and WHO. All three agencies contributed to the rATA, and UNDP is leading efforts towards further developments in the sector. Increased and strengthened coordination between these agencies presents a real opportunity to align efforts to assist the government in scaling up access to rehabilitation and AT, and avoid duplication of effort.

Financing

The BBP does not cover rehabilitation for adults without special or vulnerable status. For adults with functioning limitations who do not qualify for rehabilitation coverage through the BBP, the impact can be injurious and costly. Without timely interventions after surgery or other medical care, individuals may experience secondary complications, have longer healing times and may fail to achieve a full recovery.

3 Passive treatment implies lack of participation from the individual receiving the therapy intervention.

Funding for AP is not included in the BBP. Currently, there is no provision for simple AP like mobility aids or self-care products within the BBP. People with difficulty functioning can wait months before being assessed for a disability determination and gaining eligibility to receive AP. This inhibits the continuum of care and negatively affects the overall health and functioning of the individual.

Funds for rehabilitation through the BBP are part of a general health facility budget and are generally depleted before the end of the year. There is no designated budget line for rehabilitation within health facilities. During site visits, many facilities reported that BBP funds were depleted by the end of the year and there were no remaining funds to provide rehabilitation services. Treatments would need to be paid out-of-pocket, delayed until the next budget year or possibly referred to centres that still had available funds. Without a specific budget line for rehabilitation, expenses for other health services may drain existing BBP resources and leave no opportunity to pay for rehabilitation care.

There is a lack of consolidated data on financing for rehabilitation and AT. Though some data is available on rehabilitation and AT through government budgets, this information is linked with services for persons with disabilities or individuals under the age of 18. There is little or no data available on these services within the health system or captured through routine facility reporting.

Human resources

The terminology applied to the rehabilitation workforce is inconsistent and outdated. The terminology used to describe the rehabilitation workforce is not consistent across educational facilities, the Ministry of Economy's *Occupation Classifier (3),* and Armenia's *Health and Healthcare Statistical Yearbook (4).* In addition, many terms are outdated (e.g. rehabilitologist and kinesiotherapist) and do not align with contemporary understanding. Without consistent and updated terms, it is difficult to quantify or establish a baseline for the rehabilitation workforce in Armenia and difficult to "speak the same language" with international rehabilitation experts.

Armenia lacks a well-developed multidisciplinary/interdisciplinary rehabilitation workforce. There are a variety of rehabilitation-related specializations for medical doctors in Armenia, and the groundwork for occupational therapy has been established. Other rehabilitation-related professions also exist in various forms. However, the absence of a well-developed workforce, with diverse professions represented equally, reduces the potential for maximizing the treatment outcomes that could be achieved through highly integrated care.

There is inadequate regulation among the rehabilitation workforce. The rehabilitation workforce in Armenia is largely unregulated. Many professions are not formally regulated by the state and minimum qualifications do not accompany all job titles (e.g. kinesiotherapist or rehabilitologist). Without these standards, quality assurance among the health workforce is difficult to determine or enforce. The lack of regulation may undermine the evolution of the country's rehabilitation workforce.

A variety of professional associations exist, but most are in nascent stages of development. Armenia has various umbrella associations that encompass multiple professions; some use antiquated terms and some, like occupational therapy and speech and language therapy, link with international/regional contemporary rehabilitation organizations. Alignment with international professional associations can support the development of professions within Armenia and create regional and global synergies across the rehabilitation sector.

Information

There is limited data on population functioning in Armenia. Although the 2022 census includes the Washington Group questions on disability, data was not yet accessible during the STARS assessment. Armenia estimates rehabilitation needs through disability determination, the rATA survey and prevalence of noncommunicable diseases. Although all are useful, without standardized data on population functioning (e.g. WHO's Model Disability Survey *(5)* or similar tool), baseline data may be inconsistent and not provide a solid foundation from which to determine needs and change.

There is a lack of consistent, consolidated information on the rehabilitation workforce and services. The lack of uniform and centralized information on the rehabilitation workforce and details on existing services limit Armenia's ability to establish a clear baseline from which stakeholders can develop strategic plans. 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.

Only limited data is collected or collated on rehabilitation utilization and outcomes. As noted previously, Armenia lacks detailed and consolidated data on rehabilitation service providers, and comprehensive workforce numbers and types of professions. As with other health services, it is important to document treatments provided (utilization data) and compare this with workforce data. In addition to collecting output measures, tracking outcomes of interventions is vital as this can provide answers to questions related to quality and efficacy of rehabilitation interventions.

Rehabilitation services

A contemporary understanding of rehabilitation and the importance of achieving functional outcomes are not yet part of standard practice in Armenia. Although some specialized centres in Yerevan provide solid evidence-based practices that align with international standards, this is not common across all facilities. At PHC levels, passive treatment modalities (short wave diathermy, ultrasound, etc.) are the most common interventions, with little attention to treatment outcomes based on contemporary evidence. Without a common grasp of rehabilitation and its correlation with functioning, the sector will not evolve in a cohesive way in Armenia.

The availability of rehabilitation within primary health care is under-developed, while rehabilitation at community-level is negligible. In many cases, simple rehabilitation interventions can be provided to individuals in their homes or in outpatient settings that reduce the need for further care at inpatient facilities. In addition, for those treated in hospitals, the absence of rehabilitation at primary and community levels creates a gap in the continuum of care upon discharge and can create setbacks from initial rehabilitation gains.

AP are provided only for persons with disabilities or other vulnerable status. Many people, even those with short-term conditions (like a broken leg or after orthopaedic surgery), can benefit from AP. Without timely access to AP, the opportunity for an individual to optimize his or her functioning through use of such products is greatly reduced. Unless and until AP are available to anyone who needs them, people in need of AP will remain dependent on others to assist them to undertake basic daily activities.

Rehabilitation is not integrated in emergency response and preparedness plans. Armenia is at risk of natural disasters (earthquakes) and potential resurgence of conflict with neighbouring Azerbaijan. Without emergency trauma preparedness and a readiness plan that includes rehabilitation and AT, injurious impact on the population through these events may be exacerbated.

Recommended actions

The following recommendations aim to address some of the challenges that Armenia faces related to rehabilitation; they offer opportunities for future engagement and may provide a 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 Government of Armenia:
  - 1.1 formally identify rehabilitation focal points within relevant ministries and their departments, and define specific roles and responsibilities on rehabilitation;
  - 1.2 establish a cross-ministerial national-level rehabilitation and AT committee or working group; and
  - 1.3 develop a national strategy on rehabilitation and AT that actively involves and includes all relevant ministries, departments and stakeholders.

2. Clarify information on rehabilitation and related terminology

- It is recommended that the Government of Armenia, together with relevant stakeholders:
  - 2.1 review and amend rehabilitation-related terminology to reflect contemporary and international standards and integrate these amended terms across all education programmes and legal documents;
  - 2.2 utilize contemporary rehabilitation language in any newly developed, revised or updated laws or health policy documents; and
  - 2.3 conduct awareness campaigns to inform the public about contemporary rehabilitation.

3. Review and streamline processes of engagement to strengthen the AT ecosystem in Armenia

- It is recommended that the Government of Armenia, the MoLSA, the MoH, UNICEF, UNDP, WHO and relevant stakeholders:
  - 3.1 develop a collective short-term "AT joint action plan" (e.g. December 2022–June 2023) to identify key action items and set out an implementation framework and specific roles and responsibilities; and
  - 3.2 conduct monthly meetings to review the process of engagement, increase transparency and ensure that all stakeholders are working towards the same goals with the same methods.

Financing

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

- It is recommended that the MoH and SHA, together with relevant authorities and stakeholders:
  - 4.1 pilot the reimbursement of selected AP within Armenia's BBP;
  - 4.2 consider reimbursement of rehabilitation services for adults (without vulnerability status or a disability determination) through Armenia's BBP;
  - 4.3 explore different ways for people to have timely access to AP, such as through specialists recommending products for adult conditions (bypassing the Medical-Social Expertise Commission) as with the current opportunities that exist for children, and piloting provision of simple AP (crutches, walkers, etc.) within the BBP; and
  - 4.4 (MoH) consider alternative strategies, through the BBP scheme, to ensure that rehabilitation receives a dedicated percentage of health facility budgets, such as health facilities creating a specific budget line for rehabilitation that could "safeguard" these resources to be available throughout the year.

5. Share emerging practices in the European Region on the inclusion of rehabilitation and AT services within essential health-care packages

- It is recommended that WHO support the MoH, SHA and other relevant stakeholders in Armenia to:
  - 5.1 facilitate access to information on financing rehabilitation and AT through online forums or exposure visits to other countries to learn from pilot initiatives on integrating rehabilitation and AT into existing health-care packages (e.g. Georgia and Tajikistan); and
  - 5.2 raise awareness of, and explore opportunities to utilize, the existing WHO products and initiatives in financing for rehabilitation, through regional webinars.

Human resources

6. Clarify, strengthen and expand Armenia's rehabilitation workforce

- It is recommended that the MoH, MoESCS, MoLSA and other relevant stakeholders:
  - 6.1 establish a formal sub-working group to develop proposed standards for rehabilitation workforce terminology, undergraduate education requirements, post-graduate continuing medical education, worksite eligibility, scope of practice and other regulatory standards, as applicable;
  - 6.2 consider piloting WHO's *Rehabilitation competency framework (6)* and the *Guide for rehabilitation workforce evaluation (7)* to gain a deeper understanding of the existing situation and gaps related to the rehabilitation workforce in Armenia;
  - 6.3 explore opportunities to establish an in-country prosthetics and orthotics education programme in Armenia, going beyond the short courses offered by suppliers (e.g. International Society for Prosthetics and Orthotics (ISPO)-recognized Human Study *(8)* blended learning programme);
  - 6.4 consider rehabilitation staff (including paramedical personnel) in further plans for individual licensing; and
  - 6.5 outline continuing professional development for a wide range of rehabilitation workforce positions (including physical therapists, occupational therapists, speech and language therapists etc.).

7. Engage relevant international associations and facilities in neighbouring countries to share information and experiences that could inform rehabilitation practices in Armenia

- It is recommended that the MoH, together with WHO and relevant stakeholders in Armenia:
  - 7.1 create linkages with relevant international bodies – World Physiotherapy, the International Society of Physical and Rehabilitation Medicine and the ISPO – to identify potential synergies and areas of engagement;
  - 7.2 continue engagement with the World Federation of Occupational Therapists and the European Speech and Language Therapy Association to further work on educational standards, practices and regulatory efforts to strengthen these professions in Armenia;
  - 7.3 support a site visit to Tbilisi, Georgia, to observe best practices in rehabilitation service delivery at the Ken Walker University Clinic for Medical Rehabilitation (multidisciplinary team, active treatment techniques and integration of AP within health system service delivery) and best practices for physical therapy, occupational therapy, and speech and language therapy education programmes; and
  - 7.4 facilitate a site visit to Tajikistan to observe provision of AP at PHC levels.

Information

8. Synchronize existing, or develop new, electronic data fields related to rehabilitation

- It is recommended that the Government of Armenia, the MoH, NEO, MoLSA and relevant stakeholders:
  - 8.1 examine WHO's *Routine health information systems rehabilitation toolkit (9)* and identify potential indicators for use or potential integration into ArMed;

8.2 develop a "service mapping for rehabilitation and AT" resource and make this publicly available on MoH and MoLSA websites;
8.3 review existing ArMed data fields (e.g. discharge status drop-down menu, health workforce data) and provide guidance on how these should be applied for rehabilitation interventions or updated to capture contemporary workforce data; and
8.4 discuss with Armenia's State Statistical Committee rehabilitation-related content that may be included in future Health and Healthcare Statistical Yearbook data for Armenia.

Rehabilitation service

9. Promote timely and effective rehabilitation interventions across the continuum of health care

- It is recommended that the MoH, MoLSA and relevant stakeholders:
  9.1 strengthen referral pathways within and between ministries and agencies (including between tertiary and primary health-care settings) to reduce or avoid disruption in care upon discharge;
  9.2 develop linkages and alignment with PHC reform initiatives underway in Armenia to enhance opportunities for demonstration projects that integrate rehabilitation and AT into the scope of PHC services;
  9.3 review WHO's *Package of Interventions for Rehabilitation* (to be launched in 2023) to stimulate discussion on treatment protocols and standards, and agree prioritization of them within the BBP;
  9.4 promote the use of functional outcome measures as the desired outcome for all rehabilitation interventions at all levels of care;
  9.5 raise awareness on contemporary rehabilitation and its application at all levels of care; and
  9.6 create 3–4 "patient journey" histories to illustrate the existing gaps in the referral and service provision system and help determine protocols and guidance for frontline services on how these gaps in service provision can be addressed to ensure a continuum of care approach.

Emergency preparedness and response

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

- It is recommended that the MoH, MES and relevant stakeholders:
  10.1 ensure that rehabilitation is included in national and subnational health and emergency policies, strategies and legislation, including disaster risk reduction, as part of the health system response;
  10.2 stockpile rehabilitation equipment, such as AP, to meet anticipated surges in emergency needs, and identify supply chains for surge procurement; and
  10.3 consider integrating rehabilitation into national EMTs; utilize the publication of detailed *Minimum technical standards and recommendations for rehabilitation (10)*; and continue the integration of rehabilitation standards across all aspects of clinical care in EMTs.

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" *(11);* it identifies 10 areas for united and concerted action to reduce unmet needs for rehabilitation and strengthen its role in health. In 2019, WHO also released the *Rehabilitation in health systems guidelines (1)* 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 *(1)*. 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 rehabilitation applied to the health system building blocks is presented in Annex 1.

The WHO Regional Office for Europe initiated a four-year programme (2018–2022) to strengthen access to rehabilitation services and assistive products (AP) in the Region, and identified eastern Europe, central Asia and the Caucasus as a geopolitical priority – regions which include Armenia.

Armenia's Transformation Strategy 2050 was announced by the Prime Minister on 21 September 2020. It outlines 16 objectives for the country. The fourth objective, "Healthy and safe citizen, public", notes that "Armenia should create all necessary conditions for healthy lifestyle, health care, rehabilitation and effective work activity, as well as ensure full and complete state care for children and disabled groups" *(12)*.

The Nagorno-Karabakh conflict occurred between 27 September and 10 November 2020 (Section 3.3.5.). The tragic loss of life was compounded by extensive injuries to civilians, servicemen and women. The after-effects of the war impacted the rehabilitation and assistive technology (AT) sector in Armenia in the following ways:

- The demand (and national budget) for AP and rehabilitation increased.
- An informal working group on rehabilitation was created in December 2020, which evolved into the Trauma Rehabilitation Working Group (TRWG) in March 2021 (Section 5.2.2.).
- WHO provided technical support to Armenia's Ministry of Health (MoH) to undertake a rapid assessment of the post-conflict rehabilitation situation in Armenia (WHO, *Rapid assessment report of rehabilitation in Armenia*, unpublished, March 2021)[1].
- The MoH developed *Clinical practice guidelines for rehabilitation of individuals after upper and/or lower limb amputation* (June 2022) *(13)*.

In September 2022, additional cross-border clashes occurred between Armenia and Azerbaijan. This is evidence of the continued risk of conflict in the region and highlights the need for Armenia to have an emergency response plan that includes not only life-saving capacity, but also the capacity to accommodate those with immediate rehabilitation and AT needs.

1 The report is available through the WHO Country Office in Armenia.

1.2 Methodology

This assessment utilizes WHO's Systematic Assessment of Rehabilitation Situation (STARS) methodology and reporting template *(2)*. STARS does not provide an academic evaluation of rehabilitation, nor is it intended to produce a detailed analysis. It offers a snapshot in time to review the rehabilitation status, identify strengths and gaps, and create a foundation for producing a national rehabilitation strategic plan.

Although the March 2021 rapid assessment provided key information in an emergency, its limited scope did not allow the exploration of the wider rehabilitation context. In mid-2022, the WHO Regional Office, the WHO Country Office in Armenia and the MoH began a three-stage process to formally assess the rehabilitation situation in the country using STARS:

- Stage 1 (May–June 2022): the Country Office collected and consolidated data from key stakeholders in Armenia following the Template for Rehabilitation Information Collection (TRIC) *(14)*.
- Stage 2 (July–August 2022): a Regional Office consultant supplemented the TRIC with further desk review and created a preliminary draft of the STARS report.
- Stage 3 (8–15 November 2022): the Regional Office and Country Office provided in-country technical support to the MoH to fill gaps in the preliminary draft STARS report.

Stage 1: Completion of the TRIC

WHO's TRIC questionnaire comprises eight sections[2] with over 100 questions. The Country Office focal point on rehabilitation completed the TRIC in English based on conversations and email exchanges with relevant stakeholders in Armenia. She sent this document to the Regional Office consultant in June 2021.

Stage 2: Desk review and preliminary draft of the STARS report

In addition to the TRIC, the Regional Office consultant used the *Rapid assessment report* (WHO, unpublished, 2021) and other resources identified through a desk review to create a preliminary draft of the STARS report. This report was shared with the Regional Office and the Country Office on 1 September 2022.

Stage 3: In-country technical support to fill gaps in the preliminary draft STARS report

Recognizing that a virtual assessment could not create a complete picture of the rehabilitation situation in Armenia, the MoH requested WHO to provide in-country technical support to fill gaps identified in the preliminary draft of the STARS report. During 8–15 November 2022, Dr Cathal Morgan and Ms Sue Eitel supported the Country Office and MoH in carrying out an assessment of the rehabilitation and AT situation in Armenia.

During the in-country assessment, the team (Dr Morgan, Ms Eitel and Ms Harutyunyan) engaged with eight ministries and agencies, and six educational bodies, visited eight health facilities in and around Yerevan, held two focus group discussions and interacted with over 90 stakeholders; a full visit schedule is in Annex 2, and key stakeholders engaged in the process are listed in Annex 3. In addition to data collection, WHO also provided preliminary findings through the Rehabilitation Maturity Model (see Box 1) and a debriefing for key stakeholders on 15 November.

2 These include six sections focused on the health system strengthening building blocks plus additional sections on infrastructure and emergency preparedness.

Box 1. Rehabilitation Maturity Model

The Rehabilitation Maturity Model (RMM) is another standard tool used during the STARS process *(1)*. There are 50 components across seven domains in the RMM. Each component has illustrative descriptors that indicate levels of maturity of rehabilitation in the health system. The purpose of using the RMM is to provide an overview on the performance of different rehabilitation components. This overview enables comparison across components and domains that can then assist in the identification of priorities and recommendations for strategic planning. The RMM performance summary (Section 11) and the PowerPoint slides on RMM findings were shared with the MoH.

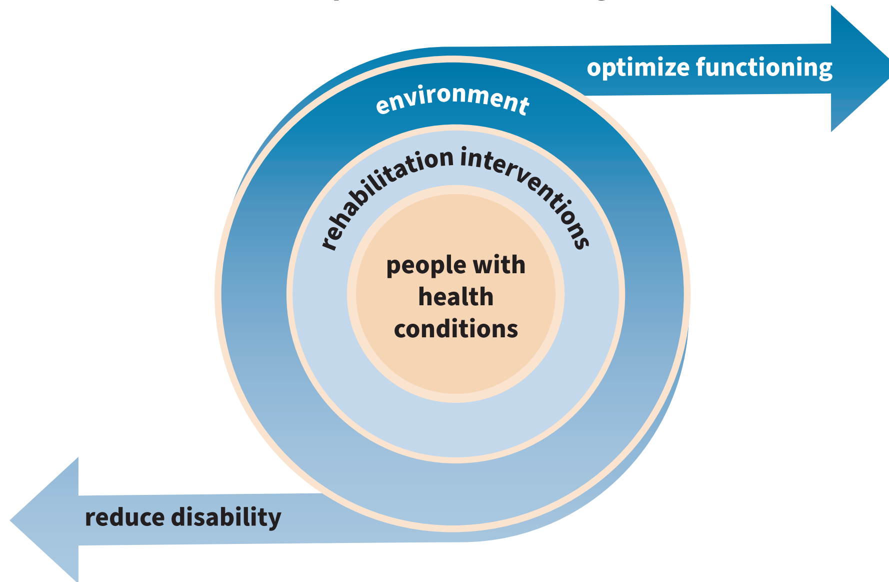
1.3 Limitations

One of the limitations of the STARS process in Armenia is that the in-country discussions and site visits focused exclusively on stakeholders and service providers in Yerevan. It is believed that service quality and availability in Yerevan are generally of a higher standard, and the availability and level of care diminish the farther one travels from the capital. That said, it should be noted that this assessment did not include site visits to different regions (*marzes*) within the country and this can be considered a limitation.

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 (see Fig. 1) *(15)*.

Fig. 1. Rehabilitation interventions optimize functioning



Source: WHO Regional Office for the Western Pacific *(15)*.

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

Rehabilitation interventions are targeted actions to build muscle strength, and improve balance, cognitive ability or communication skills. This skill-building can assist people in performing basic daily activities, such as moving around, self-care, eating and socializing.

Rehabilitation also removes or reduces barriers in society through modification of people's personal environments – such as home, school or work – to allow them to safely and efficiently move around.

In many countries, rehabilitation is closely associated with disability, and is sometimes considered a disability service. However, rehabilitation is a health strategy for the entire population, including people with a disability.

Rehabilitation should be available for all people within health systems, as part of the continuum of health care, and is important at all levels of the system (tertiary, secondary, primary and community). For additional information on rehabilitation please see Annex 4.

3. Health trends and rehabilitation needs in Armenia

3.1 Armenia country context

Armenia declared its independence from the former Soviet Union in September 1991. The country borders Azerbaijan, Georgia, Iran and Turkey. Armenia is the smallest country in the Caucasus region; with a territorial area of 29 743 km^2, Armenia is just slightly smaller than Belgium.

Armenia has 10 administrative regions (*marzes*) plus the City of Yerevan. The regions include Aragatsotn, Ararat, Armavir, Gegharkunik, Kotayk, Lori, Shirak, Syunik, Tavush and Vayots Dzor. Marzes are further subdivided into communities (*hamaynks*). The City of Yerevan has the status of a *hamaynk*.

As of January 2022, Armenia's population was 2.961 million, with 64% living in urban areas and 36% in rural areas *(16)*. The fertility rate in Armenia has remained low (1.6 children per woman in 2018) and maternal mortality decreased to 18.3 per 100 000 live births in 2017 *(17)*. Armenia has a shrinking and ageing demographic trend, and a large diaspora estimated to be 7–10 million ethnic Armenians globally *(17)*. Within the country, Armenians represent 98.1% of the population; minority groups include Russians, Yezidis, Kurds, Assyrians, Greeks, Ukrainians and others. The official language is Armenian, and the religion is Christian *(16)*. The National Population and Housing Census in Armenia was last conducted in October 2022; official results were not available at the time of this assessment *(18)*.

According to the United Nations Development Programme (UNDP), Armenia's Human Development Index value for 2019 was 0.776 – which puts the country in the high human development category – positioning it at 81 out of 189 countries and territories *(19)*.

Armenia is a member of the Commonwealth of Independent States (CIS), created in December 1991. At present the CIS unites: Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, the Russian Federation, the Republic of Moldova, Tajikistan, Turkmenistan, Uzbekistan and Ukraine *(20)*. In addition, Armenia has close ties with the European Union (EU). Armenia and EU relations are based on the EU-Armenia Comprehensive and Enhanced Partnership Agreement (CEPA), which fully entered into force on 1 March 2021. Armenia is committed to pursuing a comprehensive reform agenda based on democracy, transparency and the rule of law – in particular, the fight against corruption, reforming the judiciary and enhancing its accountability to citizens, and ensuring equal economic, employment and social opportunities for all *(21)*.

3.2 Sustainable Development Goals in Armenia

The United Nations and its partners in Armenia are working towards achieving the Sustainable Development Goals (SDGs): 17 interconnected and ambitious goals which address the major development challenges faced by people in Armenia and around the world *(22)*. To help Armenia achieve the SDGs at country level, the United Nations supported the development of an innovation platform called "SDG Lab" *(23)*. Armenia's National SDG Innovation Lab was launched in November 2017.

The government also launched the development of the comprehensive Armenia Transformation Strategy 2050 (ATS), including the 2030 Action Plan, organized around 16 mega goals and embracing the SDGs. In the absence of a National SDG Framework, the ATS has offered an opportunity to link the government's long-term vision, sectoral strategies, policies and budgets, and to accelerate the implementation of the SDGs *(17)*.

In general, Armenia is on track to reach the SDGs. According to the 2022 Sustainable Development Report, Armenia has met 71% of the SDGs and is ranked 66 of 163 countries globally *(24)*. Within SDG 3 (good health and well-being), the sole indicator that has a decreasing score in Armenia is related to road traffic accidents *(24)*. A visual summary of overall trends related to the SDGs in Armenia in presented in Fig. 2.

Fig. 2. SDG trends in Armenia 2022

Source: Sustainable Development Report 2022 *(24)*.

The United Nations Sustainable Development Cooperation Framework (UNSDCF) 2021–2025 is the central framework for planning and implementation of development activities at the country level. As such, it articulates the United Nations collective offer to support Armenia in achieving key SDGs and national development priorities. The UNSDCF has three priorities *(17)*:

- Priority I: people's well-being and capabilities
- Priority II: green sustainable and inclusive economic development
- Priority III: responsive and effective governance.

Within Priority I, a key outcome is that "People benefit from a universal, affordable, accessible and quality health system, while adopting healthy lifestyle practices" *(17)*. Strengthening health systems to integrate rehabilitation aligns with this important outcome.

3.3 Armenia context and rehabilitation needs

The health context and trends can serve as proxy indicators of demand for rehabilitation services. These include, but are not limited to, the age of the population, the prevalence of noncommunicable diseases (NCDs) and the number of persons with disabilities or functional limitations.

3.3.1 Population ageing

Women represent 52.8% of the population of Armenia, while men represent 47.2%. The country's population is weighted on the middle-age group, with more than half aged 25–64, and 15% of the population aged 65 and older *(25)*. According to the United Nations demographic aging scale, when the proportion of the population

aged 65 and above exceeds 7%, the population is considered to be ageing *(26)*. Table 1 presents details of the Armenian population, by age group *(25)*.

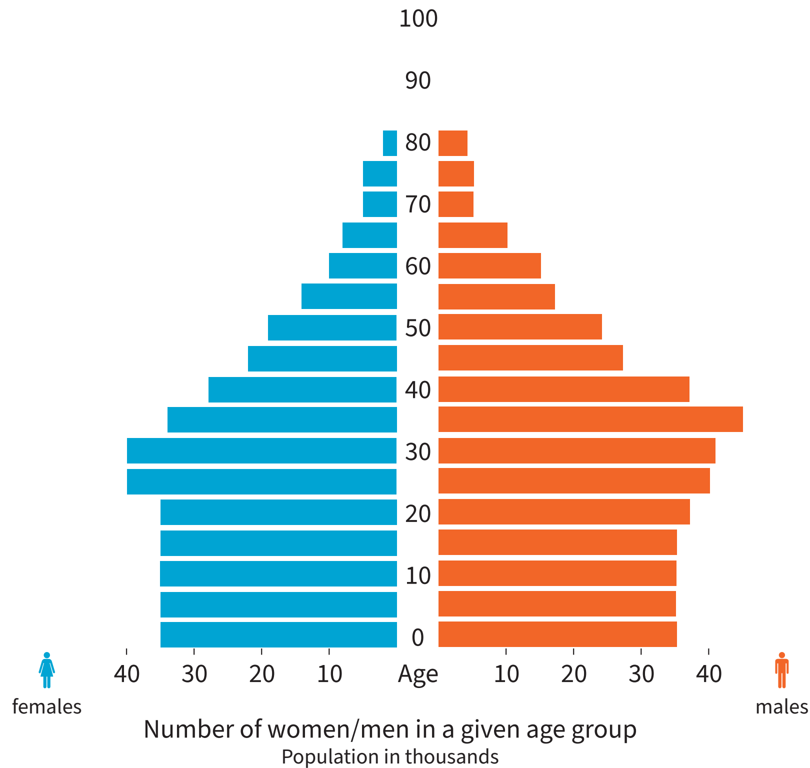
Table 1. Age groups in Armenia (1 January 2021)

Descriptor	Number of people	Proportion of population
Total population	2 963 300	100%
Age 0–4 years	185 800	6%
Age 5–14 years	412 600	14%
Age 15–24 years	339 200	11%
Age 25–39 years	731 300	26%
Age 40–64 years	835 000	28%
Age 65 and older	459 400	15%

Source: Statistical Committee of the Republic of Armenia *(25)*.

Fig. 3 presents Armenia's population data as a pyramid, organized by age group and sex *(27)*.

Fig. 3. Armenia population pyramid 2022



Source: United Nations Population Fund *(27)*.

3.3.2 Prevalence of noncommunicable diseases

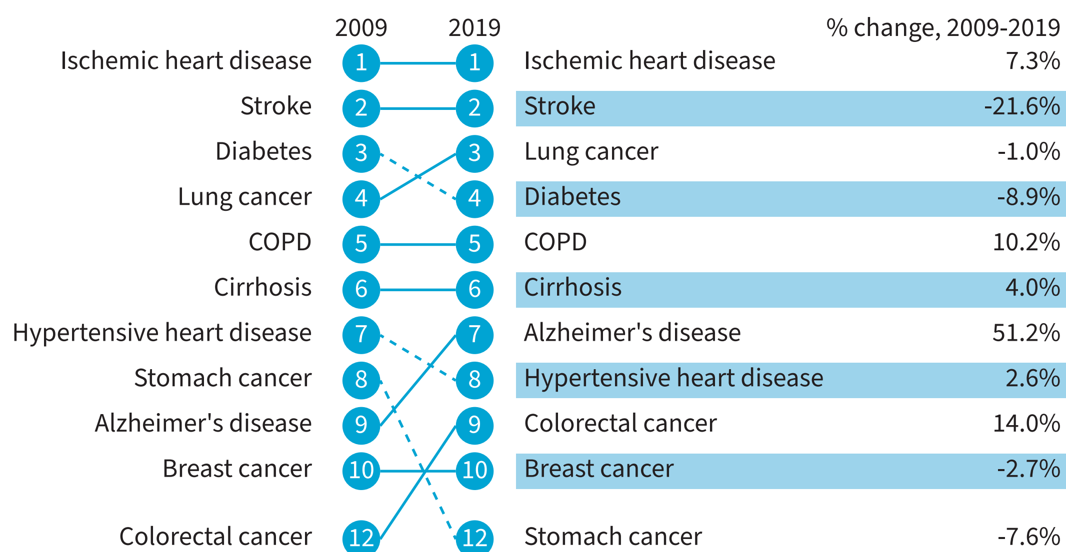
NCDs such as cancer, cardiovascular disease, diabetes and chronic respiratory diseases and their risk factors are an increasing public health and development challenge in Armenia *(28)*.

WHO has previously supported NCD-related missions to Armenia: the first-ever STEPS[3] survey to be conducted in Armenia was carried out during September–December 2016 *(29)*, and a study in November 2018 produced the report *Prevention and control of noncommunicable diseases in Armenia – the case for investment*. An excerpt from the 2018 study reads:

> Noncommunicable diseases (NCDs) account for an estimated 93% of all deaths in Armenia. The latest figures, from 2016, show that people in Armenia have a 22% chance of dying prematurely – that is, before the age of 70 years – from one of the four main NCDs (cardiovascular diseases, diabetes, chronic respiratory diseases, and cancer), with a significantly higher probability for men (31%) than women (15%). This highlights a significant opportunity to make progress on SDG 3.4, which aims to reduce premature mortality from NCDs by one third by 2030 *(28)*.

A comparison between 2009 and 2019 (Fig. 4) illustrates the high rate of NCDs in Armenia *(30)*.

Fig. 4. Causes of death in Armenia 2009 and 2019 comparison



COPD: chronic obstructive pulmonary disease.

Source: Institute for Health Metrics and Evaluation – Armenia (30).

In addition to surveillance activities, Armenia also attended the 2013 WHO European Ministerial Conference in Turkmenistan and adopted the *Ashgabat Declaration on the prevention and control of noncommunicable diseases in the context of Health 2020* (Box 2).

3 STEPwise approach to NCD surveillance – WHO package.

Box 2. Ashgabat Declaration

The WHO European Ministerial Conference on "Prevention and combating noncommunicable diseases in the context of Health 2020" was held in Turkmenistan on 3–4 December 2013. It was attended by Member States of the European Region, including Armenia. The conference ended with the adoption of the *Ashgabat Declaration on the prevention and control of noncommunicable diseases in the context of Health 2020*. The Declaration called on countries to express their commitment to enhancing efforts to achieve implementation of the WHO Framework Convention on Tobacco Control; increasing the priority of tasks aimed at reducing the prevalence of NCDs, involving all stakeholders and the whole of society in the solutions to this problem; and strengthening health systems to tackle NCDs *(31)*.

3.3.3 Persons with disabilities

Rehabilitation intersects with the disability sector, as persons with disabilities are a key population group who may benefit from rehabilitation.

Armenia's 2021 *Law on the Rights of Persons with Disabilities (32)* defines "disability" as "a phenomenon (situation) arising as a result of the interaction of people with health problems and environmental barriers (including attitudes), which prevents a person from fully and effectively participating in public life on an equal basis with others". The law defines a "person with disability" as "a person who, as a result of the interaction of physical, mental and(or) long-lasting problems and environmental barriers, may have a limitation of full and effective participation in public life on an equal basis with others".

Armenia's 2021 Statistical Yearbook defines a disabled person as "a person who needs caring for and protection in connection with restriction of vital activity as a consequence of physical or medical deterioration. Restriction of vital activity finds its expression in full or partial loss of ability to move, to orient, to communicate, to control behaviour, as well as loss of ability to work" *(25)*.

In many countries, an estimate of the number of people with disabilities is collected through national census data. Armenia's 2011 census questionnaire included only one question related to disability, identifying people with disability status granted by law: "Are there persons in the household with the status of disability granted by law?". However, no targeted questions on individual functioning were asked to the interviewees to identify the performance of basic universal activities such as walking, seeing, hearing, cognition, self-care and communication *(33)*. The October 2022 census contains the Washington Group *(34)* questions on disability; but this data had not been verified at the time of this report.

As of July 2022, the total number of persons with disabilities in Armenia was just under 200 000 *(35)* (see Table 2 for details). There are three groups of disability determination: Group I (most severe), Group II, and Group III. An individual's limitations/abilities in self-care, mobility, orientation, communication and control of behaviour are assessed *(36)*. In general, individuals in Group I are fully dependent on others; Group II require some assistance from others and may need AP; and Group III can do things independently with more time or AP; see Section 8.1.3 for updates on disability determination using the International Classification of Functioning, Disability and Health (ICF).

Table 2. Number of persons with disabilities in Armenia (1 July 2022)

Location	Total persons with disability		Number by type of disability group							
			Group I		Group II		Group III		Children	
	Total	Women	Total	Women	Total	Women	Total	Women	Total	Girls
Yerevan	58 016	27 809	3 610	1 515	20 461	9 659	31 042	15 733	2 903	902
Aragatsotn	8 960	4 033	437	180	3 046	1 329	5 042	2 392	435	132
Ararat	18 538	8 776	963	407	5 863	2 568	10 710	5 495	1 002	306
Armavir	13 682	5 925	620	258	4 536	1 813	7 716	3 591	810	263
Gegharkunik	18 735	8 987	700	280	6 167	2 781	11 166	5 736	702	190
Lori	18 547	9 135	754	316	6 316	3 126	10 744	5 446	733	247
Kotayk	15 452	6 950	683	273	4 709	2 016	9 207	4 404	853	257
Shirak	18 954	9 454	723	321	6 476	2 972	10 790	5 852	965	309
Syunik	10 856	5 207	463	193	3 735	1 616	6 227	3 242	431	156
Vayots Dzor	4 455	2 205	150	62	1 546	703	2 623	1 396	136	44
Tavush	8 549	4 279	341	130	2 966	1 450	4 902	2 563	340	136
Total Armenia	194 744	92 760	9 444	3 935	65 821	30 033	110 169	55 850	9 310	2 942

Source: Statistical Committee of the Republic of Armenia *(35)*.

3.3.4 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 *(37)*. The estimates are based on the Global Burden of Disease and are summarized here according to global estimates, regional estimates and figures specific to Armenia *(38)*:

- Globally, one in three people (2.4 billion) experience conditions that could benefit from rehabilitation.
- In the European Region, two in five people (370 million) experience conditions that could benefit from rehabilitation.
- In Armenia, two in five people (1.1 million) experience conditions that could benefit from rehabilitation.

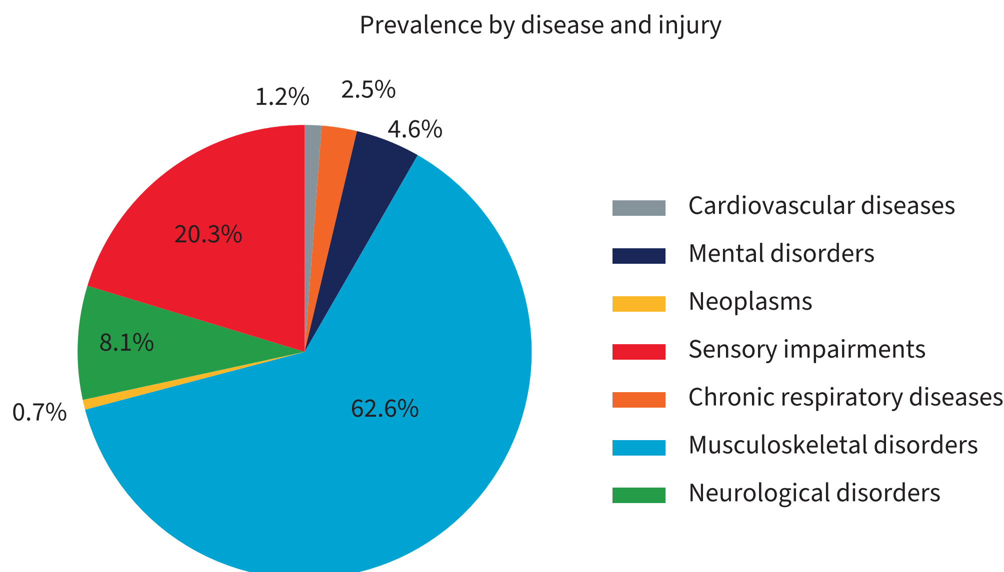
Further analysis reveals that in Armenia, 1 141 279 people (out of a population of 3 019 674) have a condition that is amenable to rehabilitation, giving a prevalence of 38%. These conditions lead to a burden of disease of 132 614 years lived with disability *(37)*. A further breakdown showing prevalence by disease and injury is provided in Fig. 5.

3.3.5 Injuries from the 2020 Nagorno-Karabakh conflict

The March 2021 *Rapid assessment report* provided estimates of the number of people injured through the conflict and information from the Military Medical Department of the Armenian Armed Forces *(39)* (Box 3).

Table 3 presents the numbers of those injured in the 2020 Nagorno-Karabakh conflict, as reported in the March 2021 *Rapid assessment report*.

Fig. 5. Prevalence of conditions in Armenia amenable to rehabilitation, 2019



Source: The Lancet (37).

Box 3. Nagorno-Karabakh conflict – injuries

On 29 March 2021 the Military Medical Department of the Armenian Armed Forces released a statement noting that there were 11 000 Armenian service personnel injured or sick due to the 2020 Nagorno-Karabakh conflict. Of this number 55% (6050) had minor injuries, 36% (3960) were moderately injured, 7% (770) seriously injured and 2% (220) were extremely severely injured. There were 5000 surgical interventions carried out, 1500 servicemen were "currently hospitalized" and 885 people were officially recognized as having a disability.

Table 3. Numbers injured in the 2020 Nagorno-Karabakh conflict

Injury	Numbers of individuals affected
Major limb amputations (excluding digits)	80–130
Spinal injury	50–80
Major burns	100–150
Severe traumatic brain injury	100–200 (low confidence)
Severe limb injury including nerve injury	1500–2500

The estimated number of people who would require significant rehabilitation services was in the range of 1830–3060. Of these, some would recover function with no or little lasting impairment, while others would require lifelong support.

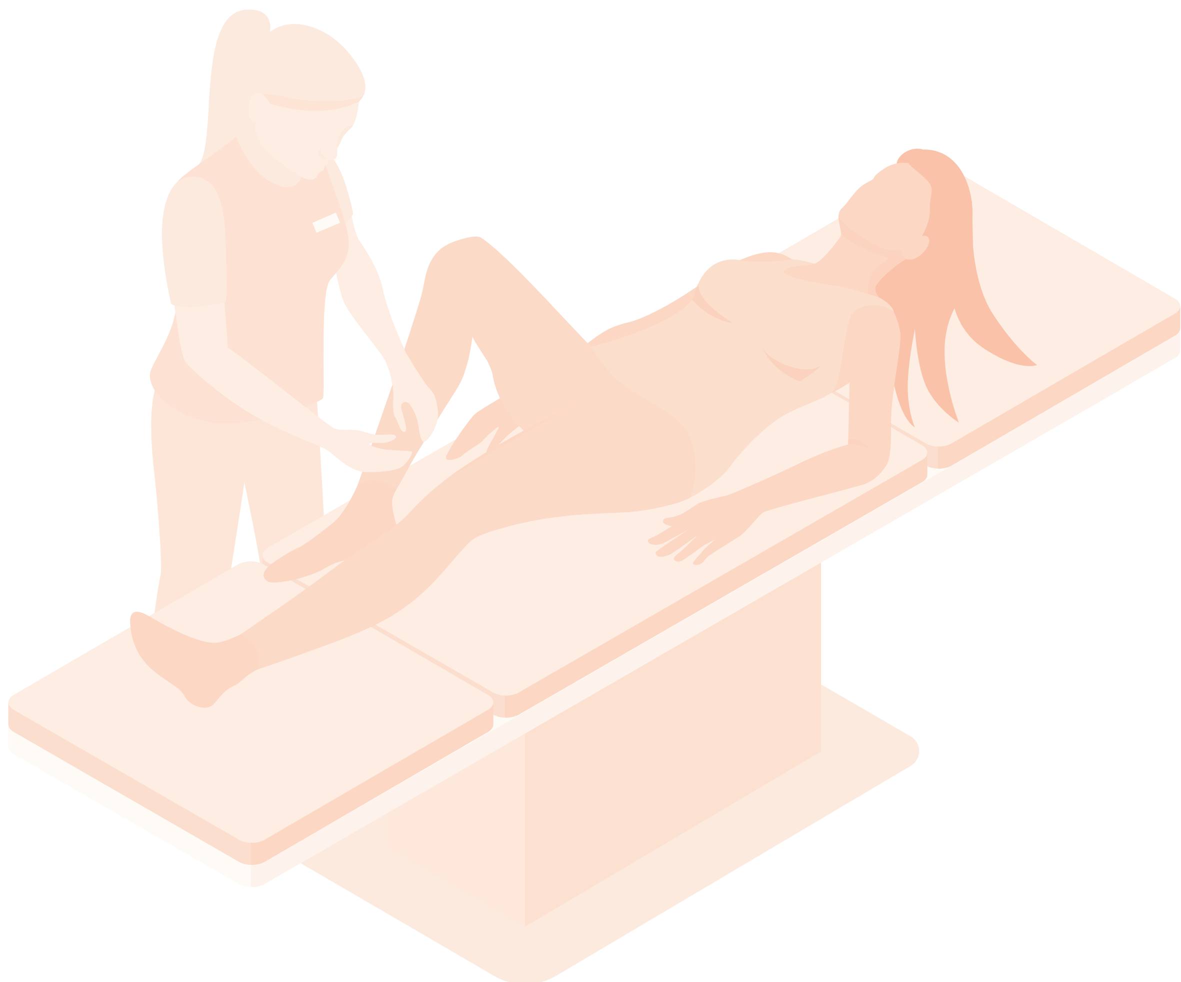
3.3.6 Landmines and explosive remnants of war

In Armenia, contamination with landmines and explosive remnants of war (ERW) is primarily the consequence of the armed conflict with Azerbaijan in 1988–1994 over the Nagorno-Karabakh region, in which both sides used mines, with the heaviest contamination along the borders with Azerbaijan *(40)*. Of 11 provinces in Armenia, four are contaminated by landmines.

The total of all known casualties in Armenia from landmines and ERW as of the end of 2019 is 635 (129 killed, 355 injured and 151 unknown) *(40)*.

Armenia's Mine Victim's Rehabilitation and Reintegration Programme is managed by the Ministry of Labour and Social Affairs (MoLSA) together with the Armenian Center for Humanitarian Demining and Expertise (CHDE) and is funded by the Government of Armenia *(40)*. The CHDE's main collaborating partners related to rehabilitation and AT comprise:

- Armenian Red Cross Society (ARCS) (Gratsia International Rehabilitation Center in Yerevan) *(41)*;
- International Committee of the Red Cross (ICRC) – coordinating victim assistance; and
- MoLSA – for the provision of medical treatment, financial assistance and rehabilitation, including prosthetics.



4. Overview of Armenia’s health system and rehabilitation

4.1 Health policy documents

The over-arching health policy document for Armenia is the draft *Five-year (2020–2025) development strategy of the health system of the Republic of Armenia*, which is pending approval *(42)*. Other health-related documents and the intersection with rehabilitation are discussed in Section 5.1.1.

4.2 Organization of Armenia's health-care system

Armenia's health-care system features three principal components: the national or "republican" service level, which provides tertiary care hospitals and an epidemiological service; the regional service level, which provides hospitals; and the municipal and community service level, which has primary health care (PHC) providers.

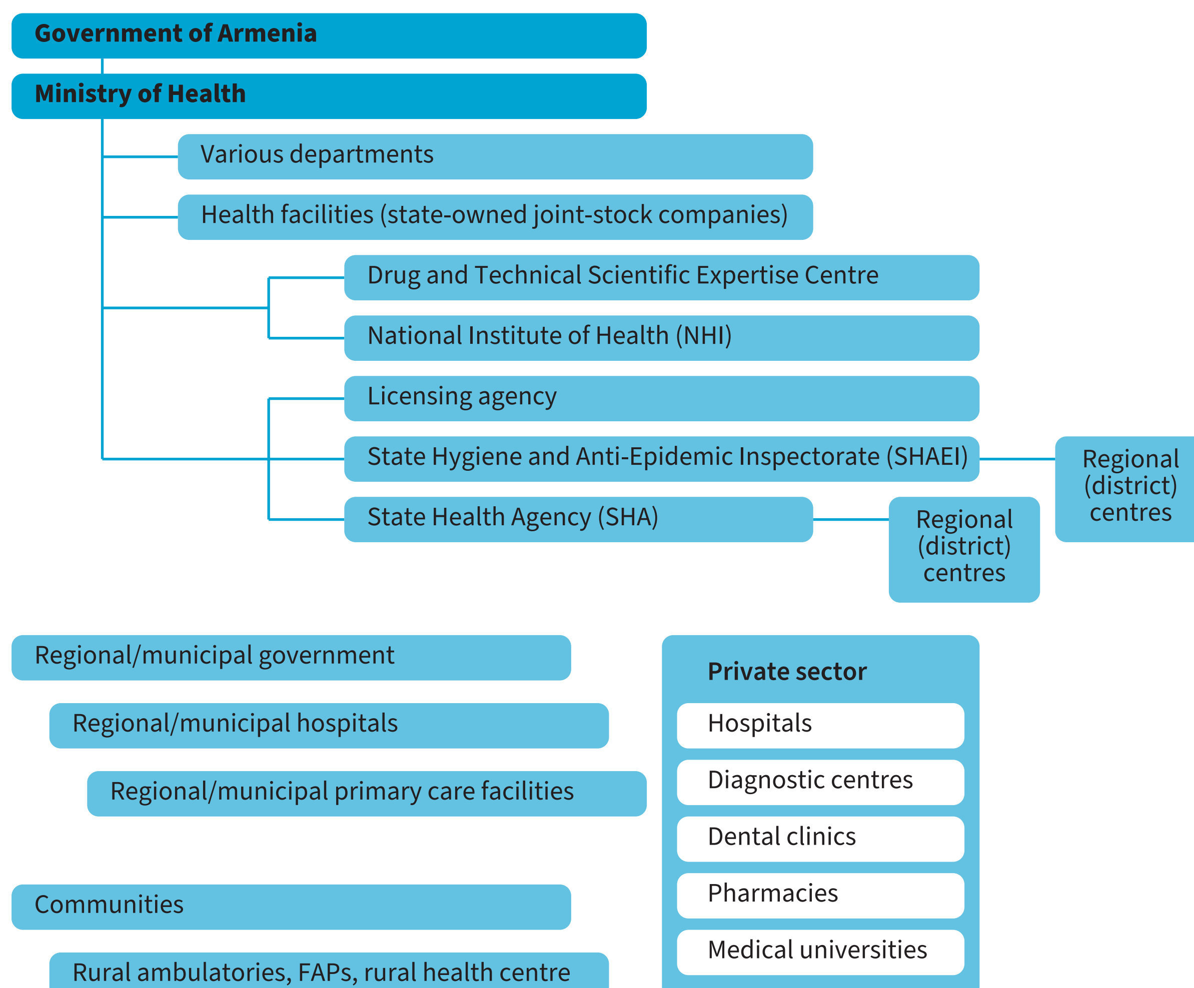
Except for the services of the State Hygiene and Anti-Epidemic Inspectorate and several tertiary care hospitals, operation and ownership of primary care services and hospitals have been devolved to regional and local governments (Fig. 6). Hospitals have financial autonomy and are responsible for their own budgets and management. Regional government formally continue to monitor the volume of care provided while the MoH retains regulatory functions. The State Health Agency (SHA) acts as the third-party payer, purchasing services covered under the Basic Benefits Package (BBP) on behalf of the state (see Section 6). Almost all pharmacies, dental services and medical equipment providers are privately owned, as are many hospitals in Yerevan *(43)*.

4.3 Ministries involved in health and rehabilitation

Although the MoH assumes primary responsibility for the health of the population (Section 4.4.), other ministries in Armenia play a role in the provision of rehabilitation and AT. These include, but are not limited to:

- The **MoLSA** provides social services for vulnerable populations (e.g. persons with disabilities) and is the main agency responsible for providing AP. The MoLSA also houses the Equal Opportunity Unit, has engaged in developing Independent Living Resource Centres (ILRCs), and established centres for integrated social services (Unified Social Service (USS)) in 2021. There are 49 USS centres in the country (informally known as territorial centres) – with 4–5 in each region. The USS centres house the Medical-Social Expert Commissions (MSECs) responsible for disability determination, and referral for AT products and individual plans.
- The **Ministry of Education, Science, Culture and Sport** (MoESCS) provides special education programmes for children with disabilities and is the main employer of speech therapists (logopeds).
- The **Ministry of Defence** has its own rehabilitation facilities and hospitals that serve military personnel.
- The **Ministry of Emergency Situations** (MES) has two units relevant to rehabilitation: a social support unit for its own employees and a psychological support unit under its rescue service (several thousand people benefitted from this service in 2021). The MES has a national strategy and action plan for 2021–2023 (not yet endorsed by the government), but this does not specify any actions on rehabilitation.
- The **Ministry of Finance** Department of Budget Development deals with health and social budgets for the state.
- The **Office of the High Commissioner for Diaspora Affairs**, established in June 2019, has a role in engaging health professionals in rehabilitation and across many other sectors.

Fig. 6. Organizational structure of Armenia's health-care system



FAP: *Feldsher*/midwife health post

Source: Richardson 2013 *(43)*.

4.4 MoH mission and organizational structure

According to clause 9 of the statute of the MoH, its objectives are as follows:

1) maintain human and public health, improve population health, prevent diseases, reduce disability and mortality rates;
2) develop the policy of the Government of the Republic of Armenia in the field of health care and ensure its implementation;
3) maintain maternal and child health;
4) protect the health and safety of employees;
5) ensure public health and sanitary-epidemiological safety of the population; and
6) organize and manage military mobilization preparations of the health-care system. *(44)*

The MoH provides international and interdepartmental collaboration in the field of health care, organizes analysis of the status of health of children and women, defines priorities for the field, processes and implements targeted programmes, develops drafts of legal acts in the field of health care, and organizes health system operations, management and financing *(45)*.

The structure and organization of Armenia's MoH is illustrated in Fig. 7 *(46)*. Specific to rehabilitation, the Maternal and Child Health Department oversees regulations and policy development on child rehabilitation *(47)* and the Health Care Policy Department coordinates the organization of inpatient and outpatient services for people over the age of 18 years, and has served as the focal point for the STARS in-country work. In addition, there are two advisors on rehabilitation (one for adults and one for children) who engage directly with the Minister (they are not reflected in Fig. 7). During the STARS governance meeting on 8 November 2022, it was also noted that rehabilitation falls within the purview of two deputy ministers (one for outpatient and one for hospital services). Additional information on governance for rehabilitation can be found in Section 5.2.1.

4.5 Health facilities and human resources

Standard global indicators on health facilities and personnel include the number of health facilities, beds, doctors and nurses. Table 4 presents the numbers on these indicators for Armenia *(4)* and Fig. 8 provides a comparison of key public health indicators per 10 000 population *(25)*.

4.6 Other stakeholders in rehabilitation

Alongside government interventions in rehabilitation, there are other key contributors to the disability, rehabilitation and AT landscape in Armenia. These include but are not limited to the following.

4.6.1 United Nations agencies

UNDP is engaged in the Stronger Services for Equal Participation and Inclusive Development Project.[4] The project is funded by the Russian Federation has four main components:

- establishing ILRC (one pilot in Armavir – currently under construction);

Table 4. Overview of health facilities and human resources in Armenia, 2020

Description	Number				Total per 10 000 population
	Total	MoH, regional and municipal health-care facilities	Private	Other	
Hospitals providing medical care	126	78[a]	41	7	No data
Hospital beds	12 871	7 640	4 368	863	43.4
Number of PHC units	500	352[b]	127	21	No data
Number of physicians (all specialties)[c]	14 027	6 557	3 986	3 484	47.3
Number of mid-level medical staff[c]	16 528	11 136	4 367	1 025	55.8

[a] There are 13 hospital facilities operating under the MoH *(48)*.

[b] The only facility considered under the MoH is the polyclinic operating as part of Surb Grigor Lusavorich Medical Center.

[c] Excluding private medical and dental surgical clinics.

Source: MoH *(4)*.

4 Information is from an interview with UNDP in Yerevan on 9 November 2022.

- building capacity for organizations of persons with disability, which includes understanding application of the ICF;
- strengthening the AT ecosystem in Armenia (see Section 5.4. for additional details); and
- raising awareness on how to access services – bringing services closer to people, especially in communities.

The United Nations Children's Fund (UNICEF) is part of the Stronger Services for Equal Participation and Inclusive Development Project. In addition, UNICEF authored the 2019 report *Evaluation of rehabilitation services for children in Armenia: rapid assessment analysis and mapping (47)*, and supports early childhood development, inclusive education system reform, early detection (neonatal screening) and early childhood interventions.

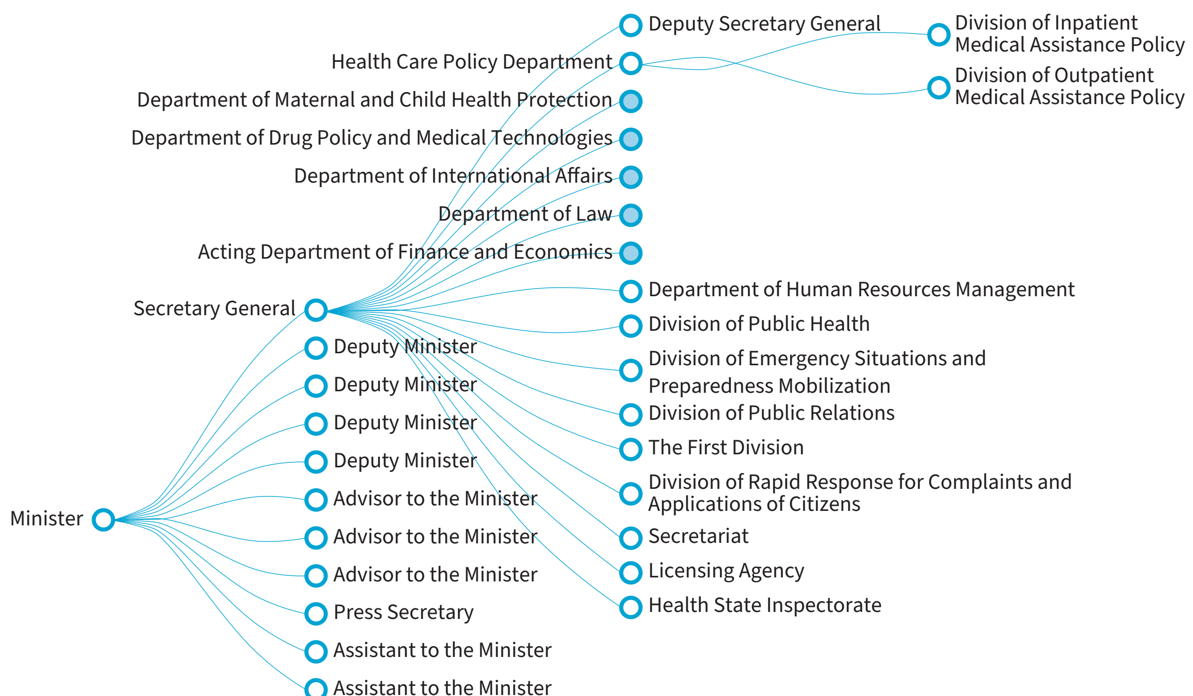
WHO provides technical support for strengthening rehabilitation in health systems (STARS and related actions), contributes to strengthening AT in Armenia in collaboration with other United Nations bodies (the 2022 rapid assistive technology assessment (rATA)) and houses a rehabilitation and AT focal point within the Country Office.

4.6.2 Donors

Prior to the outbreak of COVID-19, the United States Agency for International Development (USAID) had ceased implementation of health sector programmes in Armenia. However, with the ongoing pandemic taking a toll on Armenia's health systems, USAID has been supporting the government with immediate emergency health response to combat the virus *(49)*.

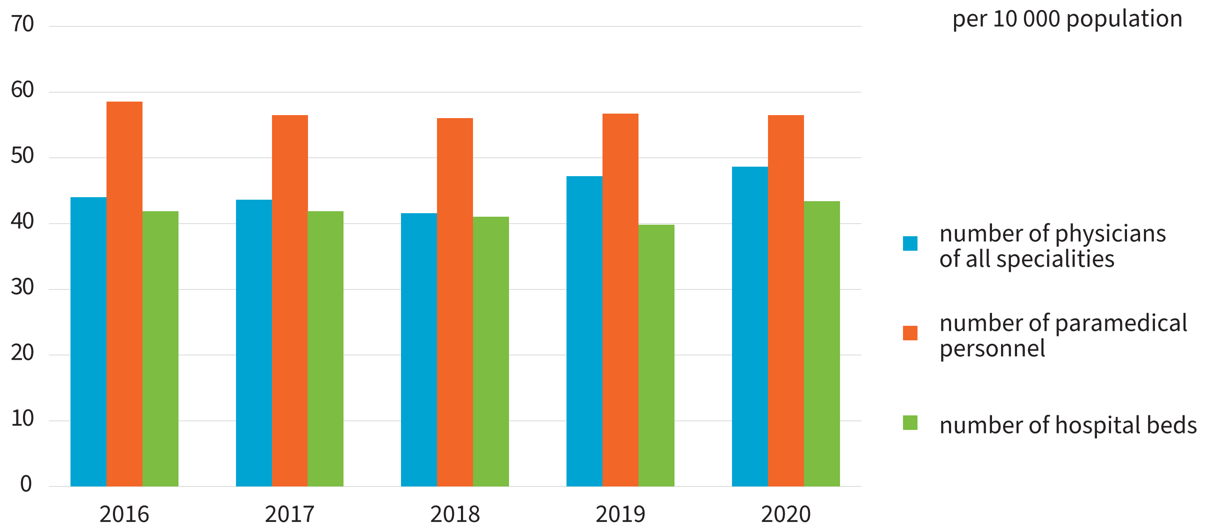
USAID's social sector portfolio includes a three-year project (2019 to March 2023) that is funded through USAID Washington. The project's international partner is Mobility International USA and the focus is to establish two

Fig.7. Structure and organization of Armenia's MoH



Source: MoH (unofficial translation) *(46)*.

Fig. 8. Key public health indicators in Armenia 2016–2020



Source: Statistical Committee of the Republic of Armenia *(25)*.

ILRCs: one in Gyumri, Shirak Region, and another in Vanadzor, Lori Region *(50)*. This project is in line with the MoLSA's desire to have six ILRCs.[5] Two ILRCs have been supported by USAID, and the Armavir ILRC is supported by UNDP/UNICEF. There are discussion on whether rehabilitation and AT will be provided through the ILRCs. According to USAID,[5] the ILRCs at Gyumri and Vanadzor will have AT. According to UNDP, the Armavir centre will not provide AT.[6] The MoLSA had an interest in including rehabilitation at these centres, but there is a trend towards encouraging disability inclusion at health facilities rather than creating a separate rehabilitation service.

> *"Rehabilitation makes me better. The independent living centre makes me value myself as I am."*
>
> – a person with disability.

In addition to support for ILRCs, USAID has also provided support to the MoESCS for 34 schools, and for three pedagogical psychological support centres – which included establishing a resource room, creating an accessible toilet and installing ramps for greater accessibility. This is part of the MoESCS inclusive education reform (2016–2023) which ends in April 2023.

5 Information from 9 November 2022 interview with USAID Armenia.

6 Information from 9 November 2022 interview with UNDP.

5. Rehabilitation governance

Rehabilitation governance refers to the steering and rule-making functions carried out by governments and decision-makers to achieve national rehabilitation objectives. Setting the strategic direction for rehabilitation by way of policy, legislation and planning, alongside robust methods for implementation and tracking progress is a key requisite in terms of health system strengthening generally.

Table 5 provides a point-in-time overview of key components of rehabilitation governance and its current status in Armenia.

Table 5. Key components of rehabilitation governance and its current status in Armenia

Key components	Status
Rehabilitation legislation and policies	Rehabilitation is referenced within other laws, and specific guidance on rehabilitation is provided in health-related documents (see Section 5.1.1).
Rehabilitation strategic plan	Armenia has not yet developed a rehabilitation strategic plan.
Leadership and coordination	Rehabilitation leadership is not centralized; coordination mechanisms for rehabilitation existed in the past, but are no longer active.
Rehabilitation accountability and reporting	Armenia's national digital health system (ArMed) provides a platform for reporting. In addition to ArMed, many facilities have their own reporting systems used to capture information on service provision and functioning of their centres.
Regulatory mechanisms	Licensing in Armenia is at facility level and not for individuals. The rehabilitation workforce in Armenia is largely unregulated.
AT policies, plans and procurement	The MoLSA is responsible for AT in Armenia. UNICEF, UNDP and WHO are supporting this sector (see Section 5.4.).

5.1 Rehabilitation governance and regulatory documents

5.1.1 Rehabilitation within health-related documents

Within the MoH, the delivery of rehabilitation is referenced or specified across many documents. It is difficult to capture all laws or policy documents that influence rehabilitation or determine their level of priority through a desk review. Some key documents and their relevance are highlighted in Box 4.

5.1.2 Rehabilitation within disability-related documents

Specific to disability, there are several key documents that provide information related to rehabilitation:

- The **Constitution of Armenia (Article 83)** provides a strong mandate to the state, stipulating that "everyone shall have the right to social security during old age, disability, loss of bread-winner, unemployment and other cases prescribed by law" *(57)*.
- Armenia signed the **United Nations Convention on the Rights of Persons with Disabilities** (UNCRPD) on 30 March 2007 and ratified it on 22 September 2010 *(58)*.
- Armenia submitted its **initial report to the Committee on the Rights of Persons with Disabilities** on 19 September 2011 (published July 2013) *(59)*.

Box 4. Health-related laws that reference rehabilitation

***Republic of Armenia Law on Medical Aid and Service to the Population, HO-42, 4 March 1996** (51)*.

Clinical rehabilitation is mainly reflected in this law. In Article 2, Part 1, Clause 1 "medical aid and service" is defined as "provision of advisory, preventive, curative, palliative, medicinal assistance to the population, conducting diagnostic examinations, **rehabilitation treatment**, medical examination, provision of paramedical and non-therapeutic services". In Article 2, Point 1, Clause 8, the paramedical services are defined as "services supporting medical care and maintenance, the list of which is approved by the authorized body of state administration in the field of health care of the Republic of Armenia" *(51)*.

***Order of the Republic of Armenia Minister of Health on Approving the List of Paramedical Services, N 29-N, 6 May 2021** (52)*.

The order of the Minister of Health lists 11 approved paramedical services:

1. psychological
2. kinesiological
3. ergotherapeutic
4. orthotic
5. prosthetic
6. social workers
7. special pedagogical (logoped, deaf pedagogue, typhlopedagogue, art therapist, play therapist)
8. information advisory (diabetes school, breastfeeding school, maternity school)
9. professional technical maintenance of medical equipment
10. therapeutic physical education
11. body care, tanning and preservation.

***"Occupation Classifier", Annex to Order of the Minister of Economy, N 873-N, 19 September 2013** (3)*.

The classifier defines the names of occupations in Armenia and the descriptions of their requirements with corresponding codes. Rehabilitation staff are also reflected in the document.

***Republic of Armenia Government Decision on State-Guaranteed Medical Assistance and Services with Free and Privileged Conditions, N 318-N, 23 March 2004** (53)*.

This law regulates the main types of state-guaranteed medical care and services under free and preferential conditions, where rehabilitation is under specialized medical assistance. Under human resources, alongside other medical and mid-level medical personnel, are listed "physiotherapists" as doctors providing inpatient services, "Nurses of physiotherapy and rehabilitation treatment" as inpatient mid-level personnel, "Physiotherapists" as PHC physicians and "Nurses of physiotherapy" as PHC mid-level medical personnel.

***Republic of Armenia Law on Social Assistance, HO-231-N, 30 December 2014** (54)*.

According to this law, social services are classified according to several criteria, one of them is the medical-social service, which is focused on the prevention of diseases, their complications and a person's impairments, health recovery and maintenance, implementation of health and rehabilitation measures and their support, and continuous surveillance for disease detection purposes and care provision.

Rehabilitation assistance is listed as one of the main social services. Clinical rehabilitation assistance is aimed at treating diseases, injuries, physical, mental and other disorders; preventing the development and

Box 4. (Continued)

aggravation of mutilations and diseases leading to disability; and restoring impaired or lost body functions and health for persons with disabilities. Rehabilitative assistance is provided in the form of rehabilitative medical care and services, among other forms of assistance.

Republic of Armenia Government Decision on Determining the Procedure and Conditions for Providing Rehabilitation Assistance, N 1035-H, 10 September 2015 *(55)*.

This decision regulates the procedure and conditions for rehabilitation assistance provision, and defines: terms and forms of "rehabilitation assistance" and "clinical rehabilitation"; terms related to AP provision; terms for acquisition of both APs and state certificates for APs; procedures for completing state certificates and determining their price value; management of returned APs; types of APs, their usage period and groups of beneficiaries; and a list of the specialists included in the multidisciplinary needs assessment team *(55)*.

Republic of Armenia Government Decision on Approval of Necessary Technical and Professional Qualification Requirements and Conditions for Medical Aid and Service of Polyclinics (Mixed, for Adults and for Children), Separate Specialized Rooms, Family Senior Nursing Offices, Inpatient and Outpatient Services, Rural Health-care Facilities, Midwifery Points, Women's Consultation Services, N 1936, 5 December 2002 *(56)*.

This document provides details on the minimum requirements for the physical structure, equipment and medical instruments, and personnel for a wide variety of health service settings. Rehabilitation-related settings include, but are not limited to: physiotherapeutic units, paediatric exercise therapy units, rehabilitation and kinesiotherapeutic units, reflexology rooms, medical massage rooms, paediatric rehabilitation units, paediatric rehabilitation services and balneological units. The requirements for paediatric units appear to be more robust, detailed and aligned with contemporary standards than those for adult units.

- In 2012, lawmakers in Armenia drafted *a* ***Law on the Rights, Protection and Social Inclusion of Persons with Disabilities*** in compliance with the UNCRPD. This will replace the Law on the Social Protection of the Disabled, transitioning towards social inclusion, based on the protection and respect of the basic human rights and dignity of persons with disabilities *(60)*.
- On 5 May 2021, Armenia adopted the ***Law on the Rights of Persons with Disabilities*** *(61)*.

5.1.3 Rehabilitation documents related to children

There was a National Strategy on Social Inclusion of Persons with Disabilities and a National Strategy on Child's Rights Protection and Plans of Action for 2017–2021. In addition, every year the government approved the Annual Workplan on Social Inclusion of Persons with Disabilities. These documents emphasize the need to align national sectoral legislation with UNCRPD *(62)* and establish a multisector approach for the provision of services that provide support to children with disabilities and to monitor implementation *(47)*.

A special chapter on early intervention and rehabilitation was included in the National Strategy for Child and Adolescent Health and Development and Plan of Actions for 2015–2020 *(47)*.

Paediatricians, family doctors and nurses conduct screening and assess children using Ireton's Child Developmental Inventory *(63)*. The screening is performed during "well-child visits" (partially combined with other screenings and vaccinations) and consists of clinical examination and a questionnaire to be filled out by health workers and parents *(47)*.

5.2 Rehabilitation leadership, planning and coordination

5.2.1 Rehabilitation leadership

According to the March 2021 *Rapid assessment report*, the MoH appointed a deputy minister with responsibility for rehabilitation in addition to two consultants from within the sector to advise on adult and paediatric rehabilitation. UNICEF's 2019 report *(47)* notes that the MoH has an approved list of technical or policy advisors, as unpaid positions; for example, in specialist areas such as paediatrics and paediatric rehabilitation, among others. These advisors analyse situations in respective areas and make suggestions for development. The Mother and Child Health Department oversees regulations and policy development on child rehabilitation *(47)*. According to the TRIC, the Health Care Policy Department coordinates activities related to the organization of rehabilitation medical care and services for persons over 18 years of age. The head of this department (Knar Ghonyan) was the MoH's representative in the TRWG and guides the MoH rehabilitation advisors' activities. During the STARS assessment, all aforementioned staff were highly engaged; their participation was essential in capturing relevant and accurate information.

Within the MoLSA, the Department of Disability Related Issues has five staff in charge of developing policy and regulations related to the benefits, provision of services and support for persons with disabilities, including provision of assistive devices *(47)*. During the STARS assessment, the MoLSA was represented by the Equal Opportunity Unit and the STARS team was also generously hosted by the USS.

5.2.2 Coordination platforms

Within Armenia, there are multiple formal and informal coordination platforms related to disability, rehabilitation and AT. These include but are not limited to:

- the National Council on Disability Issues, established in 2008, comprising government officials, regional representatives, persons with disabilities and their representatives, nongovernmental organizations (NGOs) and organizations of persons with disabilities *(47)*;
- the Interagency Commission on Child Protection with representation from the MoH, MoLSA, MoESCS and others *(47)*; and
- the Interagency Committee for Health of the Elderly, which is not specific to rehabilitation.[7]

At the end of 2020, the MoH called together an informal working group on rehabilitation to address the impacts of the war with Azerbaijan (September–November 2020). Following *Rapid assessment report* recommendations, the group evolved into the TRWG in March 2021. The distribution list of invitees reached over 50 individuals including representatives from diaspora, health and rehabilitation centres, United Nations agencies and NGOs. The MoH spearheaded this initiative with support from WHO. Eight meetings were held in March–December 2021. At the end of 2021, there was discussion about transitioning from "rehabilitation in emergencies" to "strengthening rehabilitation in health systems" but this never materialized. The TRWG has been dormant since December 2021.

7 Information from 8 November 2022 governance meeting in Yerevan.

5.3 Rehabilitation accountability, reporting and transparency

The current context in Armenia provides a solid base from which to strengthen rehabilitation accountability, reporting and transparency. The ArMed system is an emerging eHealth platform that is required by the MoH; health facilities must use ArMed to be licensed and to be reimbursed for services funded through the BBP. In addition to the required ArMed system, some health facilities have their own internal digital platform that captures all data related to service provision in their specific facility.[8] The main finding from the STARS process is that rehabilitation service and care is facility dependent. In some health facilities or centres there are very high levels of accountability, quality, reporting and transparency (e.g. the ArBeS Health Care Center) while in other facilities these aspects are less well developed.

5.4 Governance, procurement and regulation of AP

The process of provision of AP is regulated by *Government Decision N 1035-H (55)* (see Box 4), and several orders of the MoLSA *(55,64,65,66)*.

The price values of state certificates for AP are defined by *Order 4-A/1 of the Minister of Labour and Social Affairs (66)*.

Box 5 presents insights into the high-level collaborations and assessments undertaken concerning AT in Armenia.

Box 5. High level collaboration and assessments on AT in Armenia

In Armenia, UNICEF, UNDP and WHO are collaborating with the MoLSA to strengthen and support the provision of AT in the country. The in-country coalition conducted a population-based survey (the rATA) to map the need, demand, supply and user satisfaction with AT. This assessment was completed in mid-2022 and initial findings will be presented in the future. A more systems-level assessment to evaluate Armenia's capacity to finance, regulate, procure and provide AT (Assistive Technology Capacity Assessment) is planned for the latter part of 2022 (unpublished TRIC data, 2022).

The MoLSA, MoESCS and the MoH are working to harmonize their support for children and adults with disabilities, including services and AT provision at different levels. The MoLSA is responsible for disability assessment, certification and provision of limited types of AT, such as wheelchairs, walkers, some prostheses and hearing devices. It also sets the standards for AT provision, oversees the delivery of vouchers to eligible individuals to obtain necessary products, and is expected to map the existing resources and estimate AT needs for the best possible unified response *(67)*.

To improve access to AT in Armenia *(68)*, UNICEF and UNDP, with technical support from WHO, are working to:

- develop the policy framework on AT, including funding mechanisms, a national AP list and technical specifications for professional service provision;
- facilitate collaboration between social, education and health systems for unified and coordinated provision of AT;

8 Information from site visits conducted in and around Yerevan during the STARS assessment.

- integrate AT into disability assessment; and
- support education service providers to understand the usage and benefits of AT in learning.

The Tech2Life Initiative *(69)* is a component of the UNDP and UNICEF joint project Stronger Services for Equal Participation and Inclusive Development, which aims to support the development of an enabling environment for AT in Armenia. It targets not only people with disabilities but any person who might need AT – including elderly people – to live healthy, productive, independent and dignified lives, and to participate in education, the labour market and civic life.

Additional information on the AT ecosystem in Armenia was gathered from in-country interviews (with UNDP, UNICEF and service users) and is summarized below:

- UNDP has mapped the AT provision system: public provision is through the MoLSA and the private sector has more than five companies that provide AP.
- The MoLSA has a recognized list of products that should be available in Armenia – all are focused on persons with disabilities.
- UNDP supported a contest for AT design; there is a need for awareness raising and people still connect AT with persons with disabilities.
- UNDP has developed a concept note (still being validated by the MoLSA and not available for public review) that contains four key priority areas:
  - working with government to establish a specific department within the MoLSA focused on AT, producing statistics on AT and a list of AP and related standards;
  - assessment of services and AT needs; providing centres with minimal equipment and supporting MSECs in their work related to AT prescription;
  - engaging private sector contests/incubators; providing funding to fabricate products in Armenia and follow ISO standards; and
  - raising awareness that AT is not only for persons with disabilities and on the use of AT in education.

UNDP has contracted a local NGO (Disability Rights Agenda) to support the work in developing a Priority Assistive Products List, conduct legal document research on AT in Armenia, and research what skills people need to have to provide AT (to be complete by mid-December 2022); the contract continues until March 2023.

Summary of rehabilitation governance situation

- No ministry has one specific focal point designated for rehabilitation and AT.
  - The MoH has multiple levels of engagement in rehabilitation: two deputy ministers, two department heads and two informal ministerial advisors (one for adults and one for children).
  - The MoLSA has different departments providing oversight for disability-related work (including AT), but has no single focal point to represent the Ministry in all aspects of this work.

- Armenia ratified the UNCRPD (September 2010) but not the Optional Protocol; it submitted its first report in 2011.

- Armenia adopted the *Law on the Rights of Persons with Disabilities* in May 2021.

- There is no national plan for rehabilitation; however, there are multiple national strategies (social inclusion and child protection) that reference rehabilitation.

- Interministerial coordination platforms exist in Armenia, though none specific to rehabilitation are currently operational.
- Licensing is required for facilities to provide rehabilitation; licensing for individuals is not required in Armenia nor is licensing for prosthetic and orthotic providers.
- The rehabilitation workforce in Armenia is largely unregulated.
- UNICEF, UNDP and WHO are all engaged in supporting the MoLSA in the AT sector (with policies, assessments and products).

6. Rehabilitation financing

Rehabilitation financing plays a pivotal role in ensuring people's access to essential rehabilitation services and high-quality care without incurring financial hardship. The adequate allocation of financial resources to rehabilitation services is essential for the effective implementation and sustainability of recommended service delivery approaches. Furthermore, the establishment of financing and procurement policies is vital to ensure the availability and accessibility of AP for those in need.

Table 6 provides an overview of key components of rehabilitation financing and its status in Armenia during the STARS assessment.

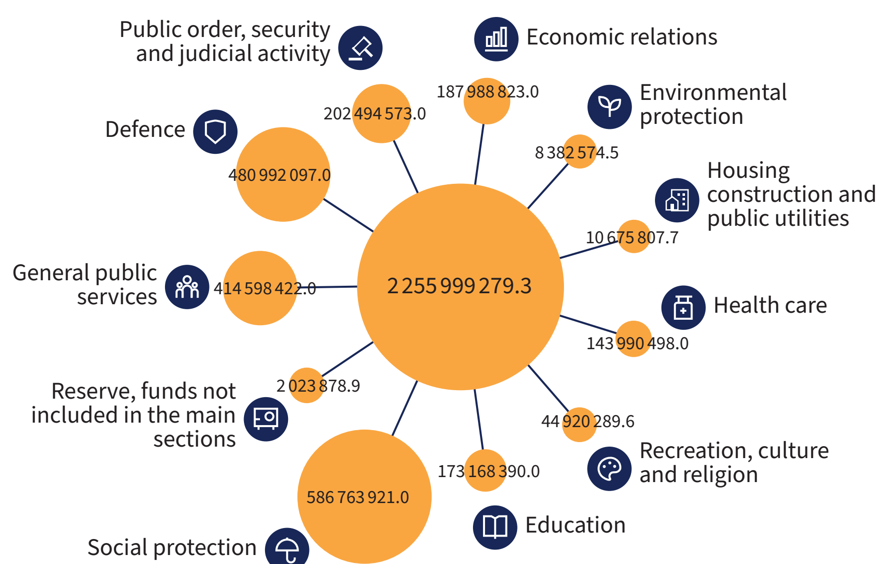
Table 6. Key components of rehabilitation financing and its current status in Armenia

Key components	Status
Mechanisms for rehabilitation financing	Rehabilitation is financed through MoH and MoLSA budgets.
Rehabilitation expenditure	In 2021, expenditure on rehabilitation was nearly US$ 5 million.
Rehabilitation expenditure as proportion of total health expenditure	Figures for 2016 indicate that rehabilitation expenditure is less than 1% of total health expenditure.
AP expenditure	The 2022 budget for AP is US$ 4.9 million.
Out-of-pocket (OOP) costs for rehabilitation	OOP costs are about 85%; data on rehabilitation spending is not disaggregated.

6.1 Government budget for Armenia 2022

The operating budget for Armenia in 2022 was just over 2.2 trillion dram (~US$ 5.5 billion)[9]. Of this amount, approximately 6% is for health care (nearly US$ 329 million) (Fig. 9 and Table 7) *(70)*.

Fig. 9. Armenia government budget 2022 (in Armenian dram)



Source: Government of Armenia (unpublished data) *(70)*.

9 Exchange rate used is 1 Armenian dram = US$ 0.0025 (as of 1 November 2022).

Table 7. Government of Armenia 2022 disaggregated health budget

Description	Armenian drams	US dollar	Percent
Total health budget 2022	131 789 506 000	328 786 746	100
Inpatient services	60 717 506 000	151 477 244	46.1
Outpatient services	37 423 916 100	93 364 699	28.4
Public health services	15 610 164 800	38 944 036	11.8
Health care (not included in other areas)	12 889 703 300	32 157 064	9.8
Medical products, devices, equipment	5 148 274 100	12 843 847	3.9

Source: Government of Armenia *(70)*.

6.2 General financing information

In the past 20 years, health spending in Armenia has gone from US$ 26 per capita to over US$ 520 per capita, reaching just over 11% of gross domestic product (GDP). In the same period, the proportion of government spending on health has dropped by nearly 50%. In 2019, OOP spending reached nearly 85% of total health-care spending – over three times the average OOP spending in the WHO European Region *(71)*. Table 8 provides specific details.

Table 8. Comparison of Armenia's health expenditure statistics 2000–2019

Descriptor	2000	2006	2012	2019
Health spending – US dollars per capita	US$ 26	US$ 126	US$ 336	US$ 524
% of government spending on health	22.8%	27.1%	17.3%	12.4%
% OOP spending	62.0%	61.2%	78.6%	84.8%
GDP – US dollars per capita	US$ 623	US$ 2158	US$ 3682	US$ 4623

Source: WHO *(72)*.

The right to health care is enshrined in Armenia's Constitution. Specifically, Article 85 states that: "Everyone shall, in accordance with law, have the right to health care. The law shall prescribe the list of free-of-charge basic medical services and the procedure for the provision thereof". According to *Government Decision N 318-N (53)* this right is exercised through three types of services:

- free of charge: BBP with costs paid by the state
- subsidized: the state pays part of the costs, the rest is paid by the citizen
- private: the citizen pays the fees.

Despite the existence of the BBP, the largest share of the health-care system's funding comes from payments made by citizens, at 85%. In 2019, amendments were made to *Government Decision N 318-N (53)* which expanded the BBP. However, in September 2021, the media started raising the alarm that 1.3 million people who were to receive treatment under the BBP were facing a problem: the budget for carrying out those BBP treatments had run out *(73)*.

"After 15 November, don't get sick – the BBP money is all used up"

– health facility manager discussing the challenges of BBP funding.

In 2019, the government began the work to introduce a universal health insurance (UHI) system. In November 2021, the draft decision to give procedural approval to the UHI system was published and made available for public comment *(74)*. The insurance system is not expected to be implemented before 2024. Within the UHI proposal, rehabilitation is mentioned in paragraph 31 of the document *(74)* relating to PHC physicians' participation in developing individual rehabilitation programmes. Other than this point, rehabilitation is not directly referenced in the document.

The SHA was created in 1997 and was originally subordinated to the government until 2001 when it was incorporated into the MoH. Through the SHA, the MoH acts as the sole purchaser and single payer for medical services covered under the BBP *(75)*. The SHA prepares the contracts with providers, processes the reporting and disbursement of funds from the budget and conducts audits *(75)*.

6.3 Financing for rehabilitation and AT

Financing for rehabilitation and AT is supported, at least in part, by multiple ministries in Armenia.

The 2019 UNICEF report *(47)* notes that the MoESCS received financial support from the state budget for financing inclusive education in mainstream schools, for special education and for social care services provided in special schools. In addition, Pedagogical–Psychological Support Centres receive state-financing for functional assessment of children and the provision of services. Subsections 6.3.1 and 6.3.2 focus on budgeting and financing for rehabilitation and AT within the MoH and MoLSA.

6.3.1 Rehabilitation and AT financing and expenditure within the MoH

In Armenia, primary and emergency health care are free for all of the population. Hospital and specialized care are free for children under 18, pregnant women and some specific groups, including children and adults with a certified disability *(47)*.

In addition, there are 40 types of services covered by the BBP, and others which have preferential or subsidized rates *(76)*. The services that may directly or indirectly cover rehabilitation include but are not limited to:

- assessment and rehabilitative treatment services for children with intellectual, psychiatric, auditory, physical, motor and other developmental disabilities;
- medical assistance for socially disadvantaged and special groups (Box 6);
- newborn screenings for early detection of congenital hypothyroidism, phenylketonuria, hearing and visual difficulties, and hip dysplasia;
- palliative care and support; and
- other medical care and maintenance not included in other groups.

The state guarantees rehabilitation treatment for children aged 0–18 years and those from certain social groups; the list is approved by *Government Decision N 318-N (53)*. Children with a registered disability receive rehabilitation treatment according to the individual rehabilitation programme issued by the MSECs. The MoH

Box 6. BBP rehabilitation-related services for socially disadvantaged and special groups

The following state-guaranteed rehabilitation services are provided free of charge:
- rehabilitation for children with mental, behavioural and hearing impairments;
- telerehabilitation (distance) for children with mental, behavioural and hearing impairments;
- rehabilitation of children with physical (mobility) disorders;
- inpatient rehabilitation treatment for children with developmental disabilities, and select treatments on an outpatient basis;
- hearing rehabilitation (including inpatient, outpatient and day-care services);
- cochlear implant surgery and a year of postsurgical rehabilitation treatment;
- rehabilitation for brain spinal cord injuries; and
- physiotherapeutic care (outpatient, inpatient, and day-care).

Inpatient rehabilitation treatment compensation is based on the number of hospital beds/days during the financial year. Generally, such compensation is not provided for more than the maximum amount of bed/days for treatment of a patient (regardless of the type of care provided).

provides orthoses, splints and other devices used in orthopaedics (free of charge) for children with a certified disability, while devices for children without disability certification are provided based on payment *(47)*.

During the STARS finance group discussion in Yerevan, the SHA indicated that in January–October 2022, the BBP provided reimbursement for about 4000 cases for rehabilitation totalling 1.5 billion dram (~US$ 3.8 million).

Additional illustrative figures on MoH financing for rehabilitation are provided in Table 9.

Table 9. Illustrative MoH financial support for rehabilitation in 2016 and 2021

Year	Description	Dram	US dollars
2016	Rehabilitation services, neonatal screening programmes and hospital treatment of children with disabilities and developmental disorders	1.1 billion	2.74 million
2016	Rehabilitation services	765.7 million[a]	1.9 million
2021	Assessment and rehabilitative treatment services for children	422 million	1.05 million
2021	Medical assistance for socially disadvantaged and special groups	1.746 billion	4.34 million

[a] This was less than 1% of the entire state health expenditures in Armenia *(47)*.

Source: 2016 data *(47)* and 2021 data (unpublished TRIC data, 2022).

In Armenia, nearly all rehabilitation centres are private or are run by NGOs (unpublished TRIC data, 2022). The MoH contracts these centres to provide assessment and rehabilitative treatment services for children. In 2021, the MoH signed contracts with 11 organizations to provide outpatient rehabilitation services, and with nine organizations for inpatient services (unpublished TRIC data, 2022).

For children, the state – through the MoH – covers a rehabilitation course comprising 30 visits for those with motor disorders, or 70 visits for children with mental disorders *(47)*.

The Government of Armenia approved a budget to support 17 inpatient and home-based palliative care services in 2020, covering salaries for physicians and nurses, transportation and medicines. The number of palliative care

services grew significantly, with 23 services licensed to provide such care – more than 10 of them supported by state funds – as of February 2021 *(70)*.

6.3.2 Rehabilitation and AT financing and expenditure within the MoLSA

A disability certification, through the MSEC, is required for the MoLSA to support an individual's rehabilitation or AT needs.

The MoLSA provides grants to NGOs for 24-hour care, day-care and social rehabilitation services. The social rehabilitation services budget for services provided through grant agreements for persons with disabilities in 2022 was approximately 251 million dram (US$ 626 493 (unpublished TRIC data, 2022).

AP are provided to persons with disabilities within the framework of the Support to Persons with Disabilities programme through the governmental budget. The budget for 2022 on AP was just under 2 billion dram (~US$ 4.99 million). The AP provision is coordinated by the MoLSA (unpublished TRIC data, 2022).

Summary of rehabilitation financing situation

- Armenia provides financial support for rehabilitation and AT within MoH and MoLSA budgets, but these are integrated within larger budget categories and disaggregation is not always available.
- In Armenia OOPs represent nearly 85% of health-care costs. It is estimated that the proportion of OOP costs for rehabilitation are at this level or higher, but there is no evidence to support this claim.
- The BBP does not include a package specific to rehabilitation; these activities are directly or indirectly referenced in different packages.
- Within health facilities, rehabilitation can be covered by the BBP, but only for individuals under the age of 18 and for adults with a disability determination or vulnerability status.
- In January–October 2022, about 4000 rehabilitation cases benefitted from BBP coverage totaling 1.5 billion dram (~US$ 3.8 million).
- The MoLSA 2022 budget for AP is ~2 billion dram (~US$ 5 million).
- The MoH does not have a specific budget for AP.
- Insufficient BBP funds at the end of the year have created barriers in offering rehabilitation services to eligible individuals; this leads to waiting lists, referral to other facilities with remaining funds or necessity to pay OOP for services.
- Armenia does not yet have universal health coverage, but is currently reviewing a proposed policy toward UHI. Within the UHI proposal, rehabilitation is mentioned only as it relates to the relationship between PHC doctors and MSECs.

7. Rehabilitation human resources and infrastructure/ equipment

Contemporary rehabilitation workforce encompasses a wide range of professions who deliver care within different levels of the health system. Additionally, an adequate level of technical infrastructure and equipment is essential to support professional interventions (e.g. motor learning, gait and adaptive aids).

Table 10 describes the key components of rehabilitation human resources and infrastructure/equipment in Armenia during the STARS assessment.

Table 10. Key components of rehabilitation human resources and infrastructure/equipment in Armenia

Key components	Status
Total number of rehabilitation personnel	Estimates suggest 100 doctors in rehabilitation-related work, over 300 physiotherapeutic nurses and 300 speech therapists.
Number of rehabilitation personnel per 10 000 population	This is difficult to determine as available data is limited by inconsistent listing/counting of rehabilitation occupations.
Distribution of rehabilitation personnel across geographic areas	Consolidated data is incomplete, and reliability is questionable due to inconsistent terminology.
Licensure and regulations for rehabilitation personnel	Licensure for individuals is not yet required in Armenia; draft concepts are being developed.
Rehabilitation infrastructure/equipment	Minimum standards for personnel and equipment are identified in Decree N1936-N (5 December 2002) *(56)*.

7.1 Rehabilitation workforce in Armenia

It is difficult to get a clear and consistent picture of the rehabilitation-related workforce in Armenia[10]. One challenge is the translation of professional positions from Armenian to English. In addition, the absence of protected job titles or standards of practice in Armenia makes workforce quantification a challenge (WHO, *Rapid assessment report of rehabilitation in Armenia*, unpublished, 2021).

"For many years we have been working in confusion"

– key stakeholder speaking during the meeting on rehabilitation workforce in Armenia.

The four sources of information used in this report to describe the rehabilitation-related workforce and provide workforce estimates are:

- Ministry of Economy *Occupation Classifier*,[11] 19 September 2013 *(3)*
- *Health and Healthcare Statistical Yearbook 2021 (4)*
- *Rapid assessment report of rehabilitation in Armenia* (WHO, unpublished, 2021)
- in-country discussion focused on workforce and educational facilities (9 November 2022).

10 Although 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".

11 The 2013 classifier was in the process of being updated as of August 2022.

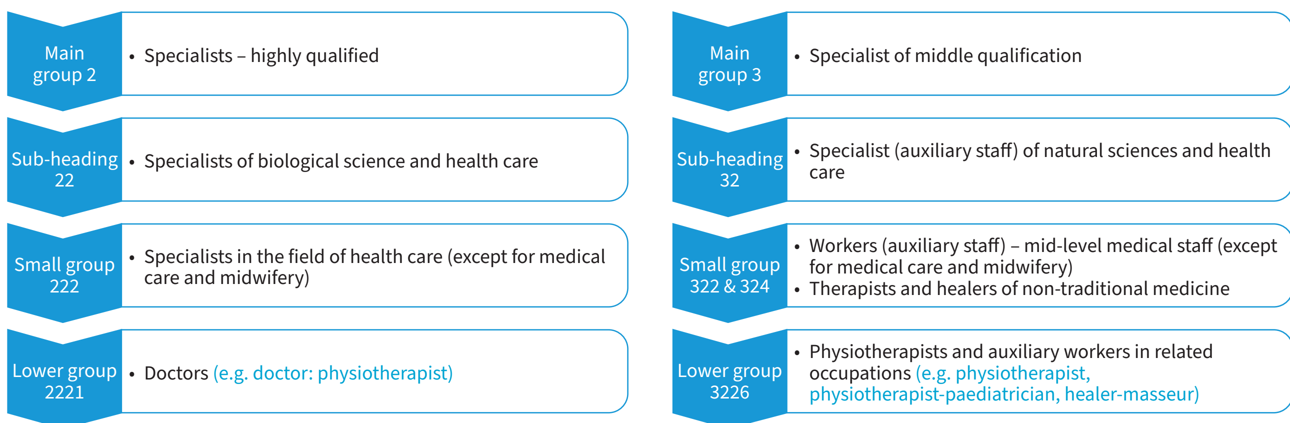
During the STARS assessment process, the MoH's Human Resources Department actively participated in all discussions. Additionally, the Department noted that a review is underway of specialties and clinical residencies – in recognition of the need to standardize job titles. Finally, the Department noted that there is a need to update the scope of practice, qualifications and regulations of rehabilitation professionals and further confirmed that they were revisiting the process of licensing for individuals working in this area. The open engagement and level of commitment by the Department is greatly appreciated and applauded.

7.1.1 Rehabilitation workforce as listed in the 2013 *Occupation Classifier*

The classifier defines the names of occupations in Armenia and provides a description of their requirements with corresponding codes. The current classification is based on ISCO-88[12] and classification from the Russian Federation. It is in the process of being updated.

Fig. 10 provides a visual of the two key group headings related to the rehabilitation workforce.

Fig. 10. Occupational classifiers in Armenia – highly qualified and middle qualified



Source: Authors.

Rehabilitation-related professions and their occupation code are listed in Table 11.

12 International Standard Classification of Occupations from the International Labour Organization.

Table 11. Rehabilitation-related occupation codes in Armenia

Code	Occupation	Notes
2221	Doctor – rehabilitator	There are 45 types of doctors; all are code 2221.
2221	Doctor – physiotherapist	
2230	Nurse categories	18 nurse types; rehab nurse not listed
2331	Teacher – logoped (speech therapist)	2331 logopeds are working within the public primary education sector
2340	Teacher – defectologist	2340 denotes occupations in the field of special education
2340	Teacher – logoped (speech therapist)	
2340	Teacher of special ed., deaf	
2340	Teacher of special ed., people with mental disabilities	
2340	Teacher of special ed., people with physical disabilities	
2340	Teacher of special ed., mutes	
2340	Teacher of special ed. for the blind	
2340	Translator for the deaf	
2445	Psychologist of health care	7 types of psychologists listed
3226	Masseur	There are 14 occupations listed for 3226, which is the category for "physiotherapists and auxiliary staff of related occupations"
3226	Massage therapist	
3226	Orthopaedic – inpatient care	
3226	Paediatrician	
3226	Physiotherapist–paediatrician	
3226	Specialist in rehabilitation gymnastics	
3226	Specialist in artificial body organs	
3226	Therapist for rehabilitative treatment activities	
3226	Therapist – rehabilitation of physical abilities	
3226	Technician: Traumatologist	
3226	Technician: prosthetist	
3226	Physiotherapist	
3226	Masseur of hand palm	
3226	Electrotherapist	
3229	Specialist in vision correction	3229 denotes mid-level staff not included in other groups
3229	Pronunciation correction specialists	
3229	Pronunciation defect correction specialists	
3229	Specialist in treatment of occupational diseases	
3231	Nurse – prevention of occupational disease	Code 3231 denotes medical care personnel and focuses on nurses; 28 nurse categories – no rehab nurses are listed
3231	Nurse – home health care for patients	
3231	Nurse – medical care at home	

Source: Minister of the Economy *(3)*.

7.1.2 Rehabilitation workforce represented in the *Health and Healthcare Statistical Yearbook 2021*

Consolidated data from Armenia's *Health and Healthcare Statistical Yearbook 2021 (4)*, reveals that the rehabilitation workforce in Armenian comprises over 100 medical doctors of various specializations, and over 300 "physiotherapeutic and rehabilitation nurses", as well as a variety of "massagists". Speech therapists are not represented. Comparing Table 8 and Table 9 it is notable that many of the professions listed in the *Health and Healthcare Statistical Yearbook 2021* do not align with the current occupation codes in Armenia.

Table 12 details the total number of rehabilitation-related professionals in the country (and in Yerevan) with disaggregated data on those working in hospitals and PHC facilities. Table 13 provides data on the number and location of these professionals in regions outside Yerevan.

Table 12. Physicians and mid-level health-care personnel in Armenia – 2020

Description	Total number			Hospitals			PHC facilities		
	Armenia	Yerevan	Other	Armenia	Yerevan	Other	Armenia	Yerevan	Other
Physicians									
All types of Physicians[a]	10 391	6 846	3 545	4 981	3 675	1 306	5 410	3 171	2 239
Physiotherapist	68	49	19	24	21	3	44	28	16
Manual therapist	10	9	1	5	5	0	5	4	1
Reflexotherapist	28	25	3	8	8	0	20	17	3
Kinesiotherapy physician	22	18	4	14	12	2	8	6	2
Sports doctor	4	4	0	2	2	0	2	2	0
Psychotherapist	17	14	3	10	9	1	7	5	2
Clinical psychologist	12	12	0	7	7	0	5	5	0
Ophthalmologist[b]	278	209	69	151	139	12	127	70	57
ENT physician[c]	228	156	72	123	97	26	105	59	46
Palliative care physician	3	3	0	0	0	0	3	3	0
Mid-level personnel									
Mid-level personnel (all)	16 014	8 337	7 667	8 497	5 242	3 225	7 517	3 095	4 422
Physiotherapuetic & rehab nurse	312	235	77	191	159	32	121	76	45
Therapeutic massagist	28	23	5	14	9	5	14	14	0
Children's massagist	10	10	0	0	0	0	10	10	0
Sports massagist	3	3	0	2	3	0	1	0	0
Point massagist	3	0	0	3	0	0	0	0	0
Ergotherapist	4	0	0	3	0	0	1	0	0

[a] Registered physicians: 14 396, of which 10 391 are working within inpatient/outpatient facilities.

[b] Registered ophthalmologists: 363.

[c] Registered ear-nose-throat (ENT) physicians: 297.

Source: MoH *(4)*.

Table 13. Physicians and mid-level personnel outside Yerevan – 2020

Description	Regions outside of Yerevan									
	Aragat-sotn	Ararat	Arma-vir	Geghar-kunik	Kotayk	Lori	Shirak	Syunik	Tavush	Vayots Dzor
Physicians (all)	226	425	386	352	560	507	522	233	239	95
Physiotherapist	4	2	3	2	1	1	3	2	1	–
Kinesiotherapy physician	–	2	1	–	–	–	1	–	–	–
Psychotherapist	–	–	–	–	–	–	3	–	–	–
Reflexotherapist	–	–	1	–	–	–	1	1	–	–
Manual therapist	–	–	–	–	–	–	–	–	1	–
Mid-level (all)	520	918	831	816	986	1002	1245	665	489	205
Physiotherapeutic and rehab nurse	12	4	5	6	6	10	25	5	2	2
Therapeutic massagist	–	–	–	–	–	1	4	–	–	–
Sports massagist	–	–	–	–	–	–	1	–	–	–
Ergotherapist	–	–	–	–	–	1	3	–	–	–

Source: MoH *(4)*.

7.1.3 Rehabilitation workforce identified through the *Rapid assessment report*

The numbers of different professional groups identified during the rapid assessment are estimates based on interviews with various professional associations. The data collected includes:

- rehabilitation medicine = 0
- kinesiology = 63
- ergotherapy = 100
- speech therapy = 300
- prosthesis and orthosis = 0.

7.2 Rehabilitation workforce education and training

There are five main educational facilities/training institutions in Armenia that are involved in training rehabilitation-related professionals. Their work is described sections 7.2.1–7.2.5.; information contained in these sections is consolidated from the 9 November 2022 human resources meeting in Yerevan.[13]

13 Feedback from Arabkir United Children's Charitable Foundation on the draft STARS report highlighted their work with the UNICEF Armenian Office to develop specifications and competency frameworks for each specialty, including the scope of knowledge, skills, competencies and functions they should gain or master. Currently, a programme is being planned in collaboration with the Swiss SEMRA Plus Foundation and the Swiss government to improve the continuing education of nurses and rehabilitation professionals (see sections 7.2.1–7.2.5 for more information).

7.2.1 Yerevan State Medical University

Yerevan State Medical University (YSMU) offers a variety of education and training related to rehabilitation. Since 2000, YSMU has offered a two-year residency programme for medical doctors with graduates recognized as "rehabilitologists". In 2018, YSMU began a clinical residency in rehabilitation medicine (seven graduates) and graduates from this programme are recognized as "doctor rehabilitologists". The university also has a residency for sports medicine (six graduates) and graduates are known as "Sports doctors".

In addition to residency programmes, YSMU also offers several short training courses related to rehabilitation:

- six-month training for kinesiotherapists for medical issues – similar to paramedical training (with around five graduates each year, there have been 30 so far);
- six-month training for rehabilitation nurses;
- 2–3-month refresher training in spinal medicine; and
- 2–7 weeks refresher training in paediatric rehabilitation.

In 2011, YSMU launched a two-year clinical residency education programme called "Paediatric rehabilitation" for medical doctors. This programme fulfils the training requirements for certification in physical medicine and rehabilitation, and contributes to implementation of general paediatric rehabilitative therapeutic management, including through: early interventions, age-appropriate functional training, programmes of therapy, play-based activities (avocation), educational and vocational planning, transitional planning, adjustment to disability support and prevention strategies.[14]

7.2.2 National Institute of Health

The National Institute of Health (NIH) offered a two-year medical residency related to rehabilitation from 1996 to 2011, with 1–2 graduates annually (WHO, *Rapid assessment report of rehabilitation in Armenia*, unpublished, March 2021).

In addition to the standard training programmes offered at the NIH, a new rehabilitation-related course for existing specialists began in October 2022, the Interdisciplinary Rehabilitation Fellowship (IRF)[15]. The IRF is a 10-month, hybrid fellowship programme that encompasses physical therapy, occupational therapy, speech and language therapy, and physical medicine and rehabilitation. Partners on the project include the AASMC, Therapists for Armenia, Polaris EduCorp, the NIH and the Health Network for Armenia. The IRF was designed to scale up competencies highlighted in the WHO Rehabilitation Competency Framework (i.e. clinical practice, professionalism, research, leadership, and learning and development). Given the post-conflict context of Armenia, the programme also has an emphasis on post-conflict/post-emergency rehabilitation. Clinical areas covered include rehabilitation in emergencies, wound care and burns, orthopaedics/amputations/prosthetics and orthotics (P&O), neurorehabilitation, rehabilitation in acute care, pain science, mental health, and independent living and AT. Fellows will also be expected to complete a capstone project integrating clinical competencies with one of three themes: research; leadership and advocacy; or teaching and learning. Fellows will be mentored by programme faculty as they work through their capstone projects. Projects will be aimed at making advancements, specifically with regard to rehabilitation. The initial cohort is 30 participants (26 from Armenia and four from Nagorno-Karabakh). Physiatrists, physical therapists, occupational therapists, and speech and language pathologists meeting the minimum requirements are eligible to apply. The programme has been accredited by the MoH to provide continuous professional development (CPD) credits for participants.

---

14 Source: ArBeS Health Care Centre feedback on the draft STARS report.

15 Information on this course is from an email exchange with the Armenian American Sports Medicine Coalition (AASMC) founder and Chief Executive Officer on 26 August 2022.

7.2.3 Armenian State Institute of Physical Culture and Sport

The Armenian State Institute of Physical Culture and Sport (ASIPCS) has 13 different education programmes, but has two that are related to rehabilitation. ASIPCS offers a Masters in Sports (one-year programme) and has 20–30 graduates each year. Since 1998, it has offered a four-year "physical therapy and kinesiology"[16] (physiotherapy) bachelor-level course. Each year the course has 40–50 graduates.[17,18]

The programme also offers a master's degree (full-time – one year; distance learning – 1.5 years).

7.2.4 Armenian State Pedagogical University

Training in ergotherapy (occupational therapy) was available in the Armenian State Pedagogical University (ASPU) Department of Special Pedagogy from 2005 to 2015. It was a four-year bachelor's degree programme and had 8–12 graduates annually. Since 2015, only a two-year master's level programme has continued.[19] According to participants in the 9 November human resources meeting, the bachelor's programme may reopen in 2023.

ASPU's Department of Special Pedagogy/Defectology also trains speech therapists (logopeds). It has a four-year bachelor's programme and a two-year master's level programme. In 2022, there were 44 bachelor-level graduates and 29 master's-level graduates. ASPU also highlighted their four-year clinical logoped undergraduate course, with extensive discussion on the differences between these professions. ASPU has provided training related to defectology since the 1980s. It also provides training on psychology, but this was again disputed as a pedagogical university cannot prepare clinical psychologists.

7.2.5 International Center for Professional Development

The International Center for Professional Development (ICPD) in Yerevan is a membership organization. The main aims are to organize quality medical educational events, contribute to CPD through affordable high quality and informative resources and create a library to facilitate ongoing medical education. The first interdisciplinary two-day accredited virtual symposium – on "Post-conflict rehabilitation" – was organized by Therapists for Armenia, AASMC and ICPD in 2021, with close collaboration and engagement of diaspora organizations and experts. The project was sponsored by the Government of Armenia, as well as various national and diaspora funds *(78)*.

7.2.6 Other training

P&Os

P&Os are currently trained on the job via apprenticeships in the four orthopaedic laboratories where products are made. Following the 1988 Spitak earthquake, a regional P&O training centre opened in Armenia; activities ceased after about 10 years, due to the emphasis on privatization in early 2000. P&O centres and personnel

16 Information in this subsection was shared during the 9 November 2022 human resources meeting; there was some debate on the use of the term "kinesiologist". Some felt this term is only suitable for medical professionals – medical doctors with one year residency to be called "Doctor kinesiologist".

17 An estimated 800 graduates since 2002 (20 years x 40 per year).

18 Feedback from ASIPCS on the draft STARS report noted that ASIPCS currently has a Physical Rehabilitation Chair, under which a "Health-Improving Physical Culture (Kinesiology)" bachelor's degree programme is provided. The duration of the full-time course is four years, and the distance learning course is five years.

19 Information from 9 November 2022 Workforce Meeting in Yerevan.

are now largely unregulated. Senior staff tend to have been educated under the previous system, while new staff are trained via apprenticeships. A detailed review of P&O staff and services was conducted by the ICRC in March 2021, but the report is not publicly available (WHO, *Rapid assessment report of rehabilitation in Armenia*, unpublished, March 2021).

Social workers

Social workers provide a hub of information exchange at community level and they are employed as local government staff. According to the law on social assistance, a social worker should be available for every 5000 people *(54)*. In 2017, World Vision began a programme called "CLASS" (Community Level Access to Social Work), through which a distance training course was supported at Yerevan State University.[20] In 2017, there were eight social workers active at the community level and as of 2022 there are 139.

7.3 Licensing, regulation and continuing education

7.3.1 Licensing

In Armenia, licensing exists at facility level, but not at an individual level. Currently, licenses are not required for individual practitioners, but there are efforts underway to introduce this process *(79)*.

Specific to licensing for facilities, Decree 276 (27 March 2008) *(79)* details the type of health-care services that can be delivered in the country – rehabilitation is included. Any organization that meets the minimum requirements may apply for a licence to provide a service. As of November 2022, there is no requirement for re-licensing, but the MoH is reviewing this policy.

7.3.2 CPD

Certification is used in lieu of licensing for individual health professionals. A medical worker is granted continuous professional certification if the individual has three years of professional work experience in the past five years and has the minimum number of CPD credits as prescribed by law. Every five years, the following credits are required: 220 for physicians and 140 for nurses *(80)*. CPD is not yet required for the rehabilitation workforce (aside from medical doctors and nurses).

7.4 Professional associations

Some associations related to rehabilitation in Armenia were identified through desk review (Table 14) while others were met during the in-country assessment. Armenia became a member of the World Federation of Occupational Therapists (WFOT) in 2012, but does not have representation in World Physiotherapy, the International Society for Prosthetics and Orthotics, nor the International Society of Physical and Rehabilitation Medicine.

20 Information in this subsection is from informal discussion during an interview with USAID and has not been verified with World Vision.

Table 14. Rehabilitation-related professional associations operating in Armenia and among the diaspora 2022

Name of association	Comments
Armenian American Health Professionals Organization	Based in the United States of America (USA); supports three states and Armenia
Armenian American Sports Medicine Coalition	Based in the USA; operates in Armenia and within Armenian-American communities; co-author of IRF
Armenian Association of Clinical Rehabilitologists (AACR)	Founded in 2020
Armenian Ergotherapists' Association (Arm-ETA)	Recognized by WFOT since 2012
Armenian National Federation of Physical and Massage Therapy (ANFPMT)	Founded in July 2019; member of the World Massage Federation (since 2019)
Armenian Paramedical Association (APA)	Founded in May 2022; an umbrella organization for other professional associations
Armenian Speech Therapists' Association	Founded in April 2018; member of the European Speech and Language Therapy Association (ESLA) since July 2022
Association of Kinesiologists and Professional Masseurs of Armenia	Founded in May 2019
Therapists for Armenia	Based in the USA; co-author of IRF

Source: Author's desk review.

Four professional associations joined together during the in-country assessment to share information on their history, their membership and their work. All noted that they do not yet have established websites.

Armenian National Federation of Physical and Massage Therapy. The ANFPMT was formally rebranded in 2019, to include the word "physical" in the name. It has about 115 members – mainly kinesiotherapists and massage therapists, but also has medical doctors and lay persons (if they have some related training). Membership is 24 000 dram per year; trainings are held and members receive discounts or participate free of charge. The ANFPMT has international linkages with the World Massage Federation. Board meetings are held each month and generally address challenges. One recent challenge focused on treatment interventions for COVID-19. WHO has indicated that it can share links to webinars on this topic.

Armenian Paramedical Association. APA was established in May 2022. The organization was founded in response to the impact of the 2020 war and also COVID-19 cases. The aim of the organization is to ensure access to paramedical services based on an interdisciplinary approach. The APA started with nine members and now has 43. The APA has no links to any international organizations but aims to serve as an umbrella organization for other professional associations (aiming to include P&O, physical therapy, occupational therapy, psychology and social work). The Association of Kinesiologists and Professional Masseurs of Armenia was established in 2019, and became a member of the APA in 2022. The APA is planning to establish two further associations – for orthosists and prosthetists. The challenge is that the paramedical field is not regulated and so it is difficult to organize members and create a type of interagency collaboration.

Armenian Association of Clinical Rehabilitologists. Created at the end of 2020 with five founding members, the AACR currently has 35 members – all are medical doctors. One of the challenges is the lack of correct terminology to describe professions. COVID-19 and the 2020 war both helped create awareness on the need for rehabilitation.

Armenian Ergotherapists' Association. Created in 2017, Arm-ETA has about 130 members; graduates from occupational therapy education in Armenia automatically become members. Arm-ETA is an associate member of the WFOT and a member of the European Network of Occupational Therapy in Higher Education. The aim of the association is to develop the profession and promote higher education; in 2023 ASPU hopes to re-open the bachelor programme for occupational therapy. COVID-19 was a big challenge for Arm-ETA, as nobody had employment and many professionals were out of a job; it would have been good to have a collective voice at that time.

7.5 Remuneration

According to information from the TRIC, rehabilitation therapists earn about US$ 2000–3000 per year. By comparison, nurses earn US$ 3000 per year and medical doctors US$ 4200 per year.

7.6 Rehabilitation infrastructure/equipment

The MoH indicated that all health facilities providing rehabilitation must be licensed to do so. The minimum requirements for licensure are outlined in *Government Decision N 1936-N* (5 December 2002) and include human resources and infrastructure/equipment standards *(56)*.

Summary of rehabilitation human resources and infrastructure/equipment situation

- The rehabilitation workforce situation in Armenia is complex and evolving.
- Armenia has at least five educational institutions involved in training relevant to the rehabilitation-related occupations.
- The terms used to describe the rehabilitation workforce in Armenia are not consistent between official resources (e.g. the *Occupation Classifier* and *Health and the Healthcare Statistical Yearbook*) and do not reflect contemporary rehabilitation terminology.
- Data on the rehabilitation workforce is inconsistent and incomplete. Different sources estimate over 100 medical doctors having a specialization related to rehabilitation, in addition to over 300 physiotherapeutic nurses and 300 speech therapists.
- Armenia has multiple professional rehabilitation-related associations, some are umbrella groups covering more than one profession. Occupational therapists and speech and language therapists each have their own association and have linkages with international groups (WFOT and ESLA).
- Individual licensing is under discussion, but not yet required in Armenia. Continuing professional development is indicated only for medical doctors and nurses.
- Remuneration for rehabilitation professionals ranges from US$ 2000 to US$ 4200 a year.
- Information on prosthetists and orthotists is limited. ICRC conducted an assessment on this topic in March 2021, but the report's findings are not publicly available.
- Standards for rehabilitation infrastructure, equipment and personnel are defined in *Government Decision N 1936-N (56)*. In general, the requirements for rehabilitation services for children are more detailed than for adult services.

8. Rehabilitation information

Health information on rehabilitation is essential to underpin decision-making in terms of health policy, management and clinical care.

Table 15 describes the key components of the health information system (HIS) and their current status in Armenia, in terms of challenges and opportunities.

Table 15. Key components of the HIS and their current status in Armenia

Key components	Status
Data on disability, rehabilitation needs and population functioning	Data on disability is available (MSEC). rATA is complete –and a report forthcoming. The October 2022 census contains questions on disability; but data is not yet available.
Data, digitalization and Armenia's HIS	ArMed is the recognized HIS used in Armenia. All health facilities are required to use ArMed if they are supported by the BBP.
Data on availability/utilization of rehabilitation	Although Armenia has data on rehabilitation availability, it comes from different sources and there is no central repository for this information. Utilization may be captured by ArMed but only for services reimbursed by the BBP (children, vulnerable individuals).
Data on outcomes, quality and efficiency of rehabilitation	Although some facilities collect data on treatment outcomes, this is not routine practice and there is no centralized data on this topic.
Data-driven decision-making	Data drives decision-making in some facilities, but this is not common practice for rehabilitation interventions.
Government funding for rehabilitation research	Other than education institutions, there is a little or no research conducted on rehabilitation and there is no specific budget allocated for this work.

8.1 Data on disability, rehabilitation needs and population functioning

8.1.1 Census information

In Armenia's 2011 census, there was only one general question on disability *(33)* and no question on functioning, but the Washington Group questions were included in the October 2022 census *(81)*.[21] To attain reliable information regarding how well the population is functioning, the government must integrate a detailed "functioning module" into a health survey or where possible, undertake a dedicated functioning and disability survey. Armenia has not applied WHO's Model Disability Survey *(5)*.

8.1.2 Rehabilitation and AT needs in Armenia

There are multiple data sources that help in estimating the need for rehabilitation. The prevalence of diseases amenable to rehabilitation is one source. In Armenia is it estimated that 38% of the population could benefit from rehabilitation (see Section 3.3.3.). Information on population ageing is another source of data that may

21 The questionnaire is available in *Government Decision on Approving the Republic of Armenia 2022 Census Programme*.

determine the need for rehabilitation. In Armenia 15% of the population is aged 65 or older (Section 3.3.1.). Another data source is the number and type of persons with disabilities. In Armenia, just under 200 000 people are identified as having a type of disability (Table 3). These lists are not mutually exclusive and contribute to an overall picture of a large need for rehabilitation in the country.

The need for AT is being addressed via a joint UNICEF, UNDP and WHO initiative. These partners are working with the MoLSA to conduct a rATA to map the need, demand, supply and user satisfaction with AT. The assessment was completed in mid-2022; report findings should be available at the end of 2022.

8.1.3 Disability status determination and information management

The ICF was translated into Armenian and approved as a National Standard in 2014. Moreover, the MoLSA developed a concept paper on introduction of the "human-rights" based model for disability assessment using the ICF approach instead of the current "medical" model. According to the National Strategy on Social Inclusion of Persons with Disabilities for 2017–2021, the social sector will use the ICF-based new model of disability assessment and service provision in the nearest future *(47)*.

In 2021, the USS was established with 49 centres in the country (with 4–5 territorial centres in each region). The USS reports directly to the Minister of Labour and Social Affairs. Assessment of a person's disability status and identification of the category/group of disability is carried out by the MSEC, housed within the USS. There are 60–70 medical doctors directly involved in MSECs. On days when assessments are scheduled, the dispatch office will assign 3–5 doctors to these sites to undertake this task; in general, the MSEC will conduct 3–5 assessments per day. According to law, once an application has been filed requesting an assessment, this must occur within 30 days.[22]

The first entry point for a person with disability is the PHC system, where the individual receives a referral (form No.088) and takes this to the MSEC. The future plan is to make the form digital and available to receive online at the e-disability digital platform (currently under construction).

In May 2021, Armenia adopted the *Law on Evaluation of Personal Functionality (82)*. The purpose of this law is to introduce a system of assessment of a person's functionality, to create a legal basis for providing services commensurate with the assessed needs of persons with disabilities, based on fundamental human rights. According to Armenia's *Law on the Rights of Persons with Disabilities,* the privileges established for people recognized as persons with disabilities in the first, second and third groups and disabled children shall be preserved until the assessment of the degree of limitation of functionality is carried out (Article 23, provision 4) *(32)*.

By February 2023, all MSECs should be using the ICF for disability determination. All doctors involved with MSECS will be trained on the ICF and must pass an exam. Currently, all electronic data on social protection is consolidated under the NORK (MoLSA electronic system established in early 2000). A sub-component of NORK is "Pyunik", which is the database on persons with disabilities; it is not linked to ArMed. When the system shifts to ICF and e-disability, it will have the capacity to be linked to ArMed.

Between 2016 and 2020, there were 61 321 people "first time recognized" as having a disability. Of this number, 2796 were in Group I (most severe), 13 551 were in Group II (moderate severity) and 39 831 were in Group III (least severe) *(26)* (Table 16).

22 Information in this subsection is from an interview with the USS in Yerevan, on 14 November 2022.

Table 16. Number of people "first time recognized" as persons with disabilities in Armenia

Level of disability	2016		2017		2018		2019		2020	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	16 070	5.4	9 782	3.3	9 713	3.3	14 201	4.7	11 555	3.9
Group I	595	3.7	489	5.0	495	5.1	639	4.5	578	5.0
Group II	3 390	21.1	2 103	21.5	2 011	20.7	2 996	21.1	3 051	26.4
Group III	10 912	67.9	6 240	63.8	6 284	64.7	9 358	65.9	7 037	60.9

Source: Statistical Committee of the Republic of Armenia *(83)*.

8.2 Data, digitalization and Armenia's HIS

In Armenia, the concept of e-Health was formed in 2010, with the adoption of Protocol No. 50, *Approval of the Electronic Information System implementation concept for health care in the Republic of Armenia (84)*. In 2017, a Decision adopted by the Prime Minister *(85)* confirmed the "roadmap" for the introduction of a unified electronic information system.

Electronic health information management systems are comprehensive systems that not only include medical information (electronic medical records or electronic health records) but information related to health-care staff, infrastructure, finance and health insurance.

In March 2020, EU4Digital assessed e-health across six countries in eastern Europe *(85)*.[23] The main advances of e-health in Armenia are outlined in Box 7.

Box 7. EU4Digital key findings on e-health in Armenia 2020 *(85)*

- The MoH is responsible for e-health development and financing priorities, integration into health-care processes, initiatives management, defining development and performance goals, and monitoring.
- The Ministry of High-Tech Industry is the state body designated to develop and implement the digitization policy of the Government of Armenia.
- The roadmap was approved in 2017 (Decision No. 1556-A) and is in the process of implementation in parallel with the National e-Health Strategy for 2020–2025.

The National eHealth Operator (NEO) is a private company established in 2017. NEO's primary role is to manage Armenia's electronic HIS (ArMed). NEO is the custodian of data for the state and has a concession for 15 years. The ArMed system started to be rolled out in 2017 *(87)*; it is anticipated that all health facilities will have all new data migrated to ArMed by early 2023. To be newly licensed to provide health services, a facility must be ArMed compliant. In addition, in order to receive BBP funds, the facility must use the ArMed information system (but may also retain their own system).[24] Ideally, ArMed will be integrated with the information systems of other ministries and state services. ArMed is not yet fully integrated with the MoLSA's NORK database, but this is envisioned.

23 Armenia, Azerbaijan, Belarus, Georgia, Republic of Moldova and Ukraine.

24 Information in this subsection is from an interview with ArMed (NEO) in Yerevan on 11 November 2022.

During the interview with NEO, it was noted that 474 organizations have subscribed to ArMed: 299 polyclinics, 79 medical clinics, 35 hospitals, two sanatoriums, two emergency service institutions and SHA.[25] The NEO representative noted that the system is very flexible and demonstrated many of its functionalities: there is a space for treatment notes and also an eight-level drop-down menu that indicates status at discharge.

Key issues included limited data exchange between ministries and not yet full compliance by health facilities in uploading all data. This is a work in progress and will continue to evolve.

8.3 Data on availability/utilization of rehabilitation

Data on the number and type of rehabilitation and AT services in Armenia is available through different sources, but there is no single source of consolidated data. In Armenia's 2018 *Health System Performance Assessment (26)* pages 102 (rehabilitation) and 113 (physiotherapy) provide some data in this area (Table 17), while the MoH has a list of rehabilitation centres (Section 9.1.1.) and health facilities licensed to provide rehabilitation (Section 9.1.2.). Data on utilization of rehabilitation is available from the health facilities providing these services; the only centralized data is available through the SHA – by summarizing data on reimbursement for rehabilitation through ArMed.

Table 17. Main indicators of rehabilitation and physiotherapy departments in Armenia, 2017

Location	Department type	Number of departments	Average annual bed occupancy	Admission	Discharge	Average stay (days)
Yerevan	Rehab – children[a]	1	45	217	217	22.7
Yerevan	Rehab – adults	3	280	3 879	3 895	16.2
Kotayk	Rehab – adults	1	50	15	15	3.8
Kotayk	Physiotherapy[b]	1	20	10	10	5.1
Shirak	Rehab – adults	1	15	46	46	8.7

[a] This department is located under the National Children's Rehabilitation Center.

[b] The only physiotherapy department is located at the Rehabilitation Center of Kotayk Arzni Railway Hospital.

Source: National Institute of Health *(26)*.

8.4 Data on outcomes, quality and efficiency of rehabilitation

The approaches to medical record keeping varied between centres. Some centres kept electronic records providing comprehensive information on assessment, treatment and outcomes. Other centres had a mix of paper-based records and migration to electronic records, with content focused on the treatments prescribed and the number of sessions provided. Although this varied scenario is not ideal, the centres where good practices have been followed provide an opportunity to inform and guide other sites that are still evolving along the rehabilitation continuum.

In June 2022, the MoH published and circulated *Clinical practice guidelines for rehabilitation of individuals after upper and/or lower limb amputation (13)*. During site visits, only those who were involved in creating the content were aware of these guidelines.

25 These numbers are illustrative and will evolve over time.

8.5 Government funding on rehabilitation research

During the STARS assessment, there was no information from stakeholders that indicated government funding for research on rehabilitation. Education facilities noted that research is part of higher education requirements in the field of rehabilitation, but outside of this (and research conducted by private facilities with their own resources) there is no government funding.

Summary of the rehabilitation information situation

- Armenia's previous census (2011) had no questions on disability or functioning, while the October 2022 census included Washington Group questions on disability.
- Of the population of Armenia, 15% is aged 65 or older.
- It is estimated that 38% of Armenia's population could benefit from rehabilitation.
- As of July 2022, there are 194 744 persons with disability in Armenia (17 442 children). These individuals have been provided a disability determination through the MSECs.
- In May 2021, Armenia adopted the *Law on Evaluation of Personal Functionality*, which will use the ICF in future determination of disability status. By 1 February 2023, all MSECs should be using the ICF for disability status determination.
- The electronic information management systems are evolving in Armenia:
  - The MoLSA currently uses NORK with its "Pyunik" database on persons with disabilities; it will shift to the e-disability platform with the transition to the ICF.
  - The MoH uses ArMed, which is not linked with NORK, but should be compatible with the e-disability platform for data integration.
  - Although ArMed is required by the MoH for health facility licensure and BBP coverage, many health facilities also retain their own internal electronic information management systems.
- Although data on the availability and utilization of rehabilitation and AT services can be found through different sources, there is no centralized repository nor "single source" site for this information.
- Data on outcomes, quality and efficiency of rehabilitation is well-developed in some locations and non-existent or just emerging in some service sites.
- There was no information on government funding of rehabilitation research, and the understanding is that research largely remains within academic institutions.

9. Rehabilitation service accessibility and quality

Improving the quality of services and ensuring accessibility is central to universal health coverage, particularly for the most vulnerable and marginalized people in our societies.

Table 18 describes the key attributes of accessibility and quality in terms of service provision and the current status in Armenia.

Table 18. Key components of rehabilitation service accessibility and quality and their current status in Armenia

Key components	Status
Percentage of tertiary and secondary hospitals with rehabilitation services	It is difficult to determine differences between tertiary and secondary hospitals with available data.
Percentage of districts/communities covered by rehabilitation services	All *marzes* in Armenia have at least some facilities licensed to provide rehabilitation; further analysis is needed to assess detailed rehabilitation coverage.
Number of specialist rehabilitation facilities/units	There are 196 health facilities licensed to provide rehabilitation and nine rehabilitation centres.
Number of rehabilitation beds, and rate per 10 000 population	The total number of rehabilitation beds and rate per 10 000 population require further analysis to be determined.

9.1 Overview of rehabilitation service accessibility

Accessibility is facilitated or limited by many factors. These include, but are not limited to, affordability and availability. Armenia has a variety of sources of information, which includes the MoH, MoLSA and SHA. Consolidated and centralized data on the location of rehabilitation and AT services in Armenia is not well developed.

In this subsection, information on rehabilitation and AT accessibility is organized according to the following:

1. rehabilitation centres
2. rehabilitation in health facilities
3. rehabilitation for children
4. rehabilitation in the community
5. vision and hearing
6. AT – service providers and products
7. rehabilitation in emergencies or disasters
8. rehabilitation and COVID-19.

9.1.1 Rehabilitation centres

According to the June 2022 *Clinical practice guidelines for rehabilitation of individuals after upper and/or lower limb amputation (13)*, there are nine rehabilitation centres operating in Armenia (seven in Yerevan and two in the regions) (Table 19). According to Armenia's 2018 *Health System Performance Assessment (26)*, there are five rehabilitation departments (three in Yerevan, one in Shirak and one in Kotayk) (see Section 8.3.).

Table 19. Names and locations of rehabilitation centres in Armenia, 2022

No.	Name of the rehabilitation centre	Location
1.	ARCS Gratsia International Rehabilitation Center	Yerevan
2.	Republican Paediatric Rehabilitation Center	Yerevan
3.	ArBeS Health Care Center	Yerevan
4.	Homeland Defenders Rehabilitation Center	Yerevan
5.	Armenak ev Anna Tadeoseanner' Medical Center	Yerevan
6.	Artmed Medical Rehabilitation Center	Yerevan
7.	Scientific Research Institute of Spa Treatment and Physical Medicine	Yerevan
8.	Rehabilitation Center Named After Aryeh Cooperstock	Shirak
9.	Vanadzor Medical Center, rehabilitation department	Lori

Source: MoH *(13)*.

9.1.2 Rehabilitation in health facilities

During the STARS assessment, the MoH shared the list of medical organizations licensed to provide rehabilitation. Of the 196 facilities listed, nearly 70% are in Yerevan. Table 20 provides additional details of licensed medical organizations in locations outside of Yerevan.

Table 20. Licensed medical organizations providing rehabilitation services in Armenia (November 2022)

No.	Location	Number of facilities licensed	Percentage of total licensed
1.	Aragatsotn	5	2.5%
2.	Ararat	7	3.6%
3.	Armavir	2	1.0%
4.	Gegharkunik	6	3.1%
5.	Kotayk	15	7.7%
6.	Lori	9	4.6%
7.	Shirak	7	3.6%
8.	Syunik	2	1.0%
9.	Tavush	3	1.5%
10.	Vayots Dzor	5	2.5%
11.	Yerevan	135	69.0%
Total		196	100%

Source: Licensing Agency of the MoH, unpublished data, 11 November 2022.

One observation made through site visits is that some health facilities provide an opportunity to have the public pay a fee to access the exercise equipment or swimming pool as a type of "gym membership". Specific hours are set aside for public use, and this offsets hospital costs and serves as a type of income generation. In addition, independent providers (such as masseurs) may also have agreements with health facilities related to paying for space within the facility to offer their service.

When individuals pay for services, the costs are ~1500–2000 dram (~US$ 3–5) for each treatment.

For medical massage, the fee is ~5000–10 000 dram (~US$ 13–25) depending on the area of the body.

9.1.3 Rehabilitation for children

Rehabilitation services for children are well developed in Armenia – especially in comparison to those for adults. Not only does the BBP cover health interventions for children under the age of 18, but there are rehabilitation centres that focus specifically on children; nine of the 10 marzes have rehabilitation centres for minors and there are 20 paediatric rehabilitologists in Armenia.[26] The minimum standards for equipment and personnel to be licensed to provide paediatric rehabilitation (*Government Decision N 1936-N*) *(56)* are also more detailed and more aligned with contemporary standards than those for adults.

Children with disability status can receive rehabilitation services (such as those of psychologists, speech therapists, ergotherapists, etc.) through day-care centres and civil society organizations receiving state funding. In education, the Republican and Regional Pedagogical-Psychological Support Centres aim to recognize the interests of each child, to ensure the realization of their right to education on equal terms and to increase their opportunities to access education *(88)*.

9.1.4 Rehabilitation in the community

Polyclinics (PHC) are responsible for making home visits in their catchment area. However, physiotherapy is not covered by this, and individuals must pay OOP.[27]

Overall, there is no structured system of community-based rehabilitation services in Armenia. There are several NGOs acting at community level in some regions, providing basic rehabilitation services *(47)*.

For older adults, the ARCS provides community-based home care for lonely, elderly people with chronic illnesses and disabilities through an experienced and skilled staff of nurses, home-care providers and volunteers. The ARCS home-care project targeting older populations is described in Box 8.

9.1.5 Vision and hearing

Vision and hearing screening is included in the early identification measures for children; 95% of hearing screening for children happens at Arabkir Joint Medical Center and Institute of Child and Adolescent Health, while the other 5% happens and Erebuni Medical Center.[28] Treatment interventions for adults and children were not fully explored during the STARS assessment; however, during a site visit to a PHC polyclinic, the facility

26 Information from a site visit to ArBeS Health Care Center.

27 Information from a PHC site visit in Yerevan.

28 Information from a site visit to ArBeS Health Care Centre.

Box 8. ARCS launches new model of elderly care, 2016

With the purpose of assisting government bodies in the fields of social support and health care to decrease social vulnerability among people in need, as well as improve the health of people in communities, the ARCS launched a new model of elderly care in October 2016.

The project is implemented with the Swiss and Monaco Red Cross societies and focuses on the problems of the elderly, disabled and people with chronic diseases, by introducing an integrated system of medical–social home care. Lori and Shirak were the original targeted regions, and Vayots Dzor was included in 2020.

The main directions of the project are:

- building a sustainable system of integrated home-care provision with nurses, home helpers and volunteers;
- mobilization of the community and promoting the concept of active and healthy ageing; and
- strengthening the organizational capacities of the ARCS to play an active role in building the integrated community-based home-care system and conducting community work in Armenia.

In 2022, the programme has around 100 beneficiaries and at least 10 community initiative groups in each region. In 2021, 500 people in total received this service in all three regions.

Source: ARCS *(89)*.

indicated that vision screening and hearing tests are offered at the site, but AP for seeing or hearing are not provided and would need to be obtained elsewhere.

9.1.6 AT – service providers and products

According to Armenia's *Law on the Rights of Persons with Disabilities*, assistive devices are defined as any product, tool, device or technology that is adapted or specifically designed to improve the functionality of a person with disability *(32)*. Assistive devices, which aim at increasing or maintaining a person's functional capability, are distinct from medical devices, which are normally implanted for medical purposes. In Armenia, the MoLSA has a list of 38 APs (with prices) that can be funded through the state budget.

9.1.6.1 Service providers

According to the March 2021 *Rapid assessment report* there are three main P&O centres in Yerevan; one additional centre is planned. Table 21 provides information on AT service providers (P&O centres) in Armenia as of March 2021. In addition, some diaspora organizations (such as Eternal Nation) provide financial support for war wounded to have prosthetics manufactured abroad.

Table 21. Prosthetic and orthotic centres in Armenia 2021

Location	Name	Notes
Yerevan	Ortez	Originated from Project Hope; attached to ArBeS; producing P&O but with a reputation for orthotic provision
Yerevan	Interorto	Prosthetics centre linked to Otto Bock in Germany
Yerevan	Looys Barry	Attached to, but independent from, the Pyunic Association for People with Disability, which also provides other assistive devices including fitted wheelchairs
Yerevan	Homeland Defenders	Planned centre with input from Otto Bock and technical support from the Netherlands (Kingdom of the); has entered a 5-year contract with Ossur to provide orthotics for the war wounded; Aznavour Foundation (France) are also funding further neuro-rehabilitation equipment

Source: WHO, *Rapid assessment report of rehabilitation in Armenia,* unpublished, March 2021.

According to the official website of the MoLSA, there are 21 licensed AT/AP providers in the country (see Annex 5); all of them are based in Yerevan, with branches in some regions. However, there are still four regions (Aragatsotn, Ararat, Armavir and Vayots Dzor) where there are no providers of AP/AT. The MoLSA plans to fill this gap through territorial centres of the USS in the near future.

The July 2022 *Clinical practice guidelines for rehabilitation of individuals after upper and/or lower limb amputation (13)* note that there are currently seven P&O centres in Armenia, which cooperate with rehabilitation teams from different partner organizations, as well as traumatologists, orthopaedists, rehabilitation specialists, vascular specialists, neurologists and other specialists – making up for the absence of specialists on their own staff. The seven centres include:

- Ortez limited liability company (LLC)
- Interorto LLC
- Kamar closed joint-stock company (CJSC)
- Barry Trade LLC
- Luys Barry LLC
- “Support to wounded soldiers and military disabled” charitable NGO
- Nano Pro LLC.

9.1.6.2 AP

The provision of AP is primarily supported through the MoLSA. The MSECs – under the MoLSA –determine the individual rehabilitation programme for persons with disabilities and prescribe the rehabilitation measures to be provided. Of the total rehabilitation measures provided in the first half of 2022, rehabilitation treatment accounted for 47%, while only 5.5% was related to AP *(35)*. Table 22 summarizes key rehabilitation measures provided, while Table 23 offers more complete detail on products and services.

9.1.7 Rehabilitation in emergencies or disasters

As noted previously in this report, the evolution of rehabilitation in Armenia has been significantly influenced by emergency and disaster response – specifically the 1988 Spitak earthquake and conflicts between Armenia and Azerbaijan. These events have brought an influx of resources and attention to Armenia and have had a lasting effect on development efforts in the sector.

Table 22. Summary of rehabilitation measures provided in Armenia (January–June 2022)

Rehabilitation measure	Overall number	Overall percentage	Child number	Child percentage
Total	**390 770**	**100%**	**17 742**	**4.5%**
1. Clinical rehabilitation	208 224	53%	10 467	2.7%
– Rehabilitation treatment	182 711	47%	8 052	2.1%
– Prosthetic-orthopaedic aids	7 763	2%	1 392	0.4%
– Rehabilitation technical products	12 947	3.3%	922	0.2%
2. Vocational rehabilitation	73 610	19%	574	0.02%
3. Social rehabilitation	108 936	28%	6 701	1.7%
– Socio-psychological rehabilitation	70 341	18%	2 343	0.6%

Source: Statistical Committee of the Republic of Armenia *(35)*.

Overall, emergency and disaster response is not under the jurisdiction of the MoH but is instead under the MES established in 2008. The ambulance fleet in Armenia comprises 85 vehicles; each ambulance team includes one physician, a nurse and a driver. There are currently 105 full-time and 197 part-time physicians working in the ambulance system in the city of Yerevan *(90)*.

Emergency service capacities outside the capital are limited. The population can access emergency services country-wide via the 1-03 number. The total number of ambulance activations in 2019 was 521 039 (of which 258 598 were in Yerevan) *(90)*.

Regarding training, there are no emergency medicine rotations within the country. There is some coverage of disaster management for master's degrees in public health, including elements of public health in disasters, disaster medicine and disaster management. All resident physicians are required to take a five-week course on disaster management with modules on organization of medical response in emergency situations; minimization of casualties; and surgery, medicine, obstetrics and psychiatry in disasters. The NIH is working to establish new post-graduate programmes in emergency medicine *(90)*.

There are also ongoing initiatives at community level that should be recognized; Box 9 illustrates one such case study *(91)*.

Armenia established a national emergency medical team (EMT) (Type 1) with strong support from WHO's EMT Secretariat, in response to the Emergency Medical Teams 2030 Strategy to strengthen rapid response amid emergencies worldwide. The initiative is prioritized by the MoH and is involved in the government's 2021–2026 Action Plan *(92)* – reviewing the mechanisms and plans of mutual cooperation between the MoH and MES *(93)*.

A memorandum of understanding was signed between Armenia, Georgia, and Arbeiter Samariter Bund Georgia on 4 June 2021 and the cooperation concept on establishment of a Type 1 EMT was signed on 18 October 2021. An interagency working group on the EMT was established, which has regular meetings. Several training of trainers and exchange visits to Georgia, Germany and the United Kingdom were organized. Armenian EMT staff will comprise family physicians/general surgeons (responsible for medical staff); family physicians and/or cardiologists (for triage centres); doctor radiologists; epidemiologists; infectious disease specialists; nurses; pharmacologists; pharmacists; and psychologists – as well as logisticians; water, sanitation and hygiene specialists; communication technicians; and logistics support specialists. Armenia hosted the fifth EMT Global Meeting on 5–7 October 2022. One of the sessions was devoted to "Rehabilitation in EMTs and spinal cord injury minimum technical standards".

Table 23. AP and rehabilitation interventions provided in Armenia (January–June 2022)

Description of interventions	Number of measures (adults)		Number of measures (children)	
	Total	Women	Total	Girls
1. Clinical rehabilitation	208 224	98 263	10 467	3 422
1.1. Rehabilitation treatment	182 711	87 405	8 052	2 529
1.2. Reconstructive surgery	1 417	712	93	34
1.3. Sanatorium treatment	3 386	1 770	8	6
1.4. Prosthetic-orthopaedic aid	7 763	2 367	1 392	518
1.4.1. Prosthesis	1 858	398	30	10
1.4.2. Orthosis	1 009	377	579	210
1.4.3. Ortho-prosthesis	21	5	4	1
1.4.4. Recliner	16	9	3	2
1.4.5. Shoes	3 176	1 075	692	257
1.4.6. Corset	472	215	51	27
1.4.7. Bandage	107	39	ND	ND
1.4.8. Hardware	10	3	ND	ND
1.4.9. Other	1094	246	33	11
1.5. Rehabilitation technical products	12 947	6 009	922	335
1.5.1. Cane	2 481	1 086	10	2
1.5.2. Crutch	1 846	579	18	7
1.5.3. Wheelchair	2 861	1 166	395	141
1.5.4. Arch support	166	81	41	11
1.5.5. Hearing aid	1 745	890	185	75
1.5.6. Breast prosthesis	951	948	ND	ND
1.5.7. Ocular prosthesis	915	310	28	13
1.5.8. Voice prosthesis	272	14	ND	ND
1.5.9. Other	417	192	41	17
2. Vocational rehabilitation	73 610	36 258	574	182
3. Social rehabilitation	108 936	53 074	6 701	2 173
3.1. Socio-living adaptation	6 639	3 425	317	111
3.2. Socio-environmental adaptation	102 297	49 649	6 384	2 062
3.2.1. Care	1 527	609	323	115
3.2.2. Home care	402	175	13	4
3.3.3. Care in boarding school	181	89	20	8
3.3.4. Socio-psychological rehabilitation	70 341	35 337	2 343	781
3.3.5. Socio-legal consulting	29 827	13 429	3 678	1 150
3.3.6. Braille system training	11	5	1	1
3.3.7. Sign language translation training	8	5	6	3
Total	**390 770**	**187 595**	**17 742**	**5 777**

ND: No data.

Source: Statistical Committee of the Republic of Armenia *(35)*.

Box 9. Project to enhance public health capacities in emergencies

From October 2019 until September 2020, a project was implemented in Syunik, Tavush, Vayots Dzor and Yerevan to strengthen the resilience of local communities in Armenia to withstand and reduce negative impacts of disasters and crises on health – through pandemic preparedness; epidemic control; water, hygiene and sanitation; response to mass-casualty events; first aid; and psychosocial support.

The project contributed to the enhancement of public health capacities in emergency response. Trained community volunteers worked within their communities, building resilience to health-related emergencies. Key project activities included:

– multisectoral cascade community-based capacity-building actions;
– establishing a community-based surveillance system;
– building health in emergencies stocks to allow immediate response to disasters; and
– policy-level actions to support local health authorities in the implementation of the International Health Regulations and to enhance mechanisms of intersectoral coordination.

The project was supported by USAID/Office of US Foreign Disaster Assistance and was run in partnership with the International Federation of Red Cross and Red Cross Societies *(91)*.

9.1.8 Rehabilitation and COVID-19

According to Johns Hopkins Corona Virus Resource Center *(94)*, Armenia has had 434 398 cases of COVID-19, 8655 deaths and 985 807 people have been vaccinated against the virus (33.27% of the population), as of 29 August 2022.

During the site visit to Saint Gregory the Illuminator Medical Center, the STARS team learned that this facility had treated over 32 000 patients with COVID-19. A result of this focused attention was the Center's ability to plan and create a state-of-the-art intensive care unit (with 100 patient beds). In addition, there have been many other hospital upgrades, and Saint Gregory's now has a mobile rehabilitation team (currently two people) to address rehabilitation needs within the hospital. It is hoped that the team will expand in the future.

WHO has supported work on how rehabilitation can mitigate some of the detrimental symptoms of COVID-19. Key activities in Armenia are as follows:

– WHO jointly with the NIH implemented a pilot CPD-accredited webinar entitled "Rehabilitation after COVID-19" on 18 March 2022 for nearly 200 clinicians and rehabilitation specialists.
– WHO suggests a certified online training course with seven modules: **"**Clinical management of patients with COVID-19: rehabilitation of patients with COVID-19" (in English and Russian). The Armenian version was to be made available on the OpenWHO Armenia Platform by the end of 2022.
– The second edition of the WHO leaflet, *Support for rehabilitation: self-management after COVID-19-related illness (95),* has been translated into Armenian and can be used by individuals after hospital discharge and those in the community not in need of acute hospital care.

9.2 Overview of quality of rehabilitation

"This area is so important, and it doesn't receive attention"

– a practitioner speaking during a site visit to a health facility.

One of the recent advances in rehabilitation in Armenia has been the development of the *Clinical practice guidelines for rehabilitation of individuals after upper and/or lower limb amputation (13)* published in July 2022. This work was spearheaded by the MoH with technical and financial support from the WHO Regional Office for Europe. Content was developed by a technical working group with WHO's guidance. This national clinical practice guideline is the first of its kind in Armenia.

9.2.1 Rehabilitation interventions

As with many aspects of rehabilitation, interventions vary and are dependent on the culture and systems adopted by the facility. Some facilities deliver a predominance of passive treatment techniques (such as short wave, ultrasound or electro-therapies), some mix exercise with electro-therapies, while others have invested heavily in manual therapies and functional movement. As treatment protocols are largely absent in the majority of settings, it is difficult to have minimal standards for interventions.

9.2.2 Treatment plans and documentation

Armenia has no standard protocol for patient assessment – there is not one unified document on rehabilitation across settings. During site visits, there was evidence of well-developed treatment plans and documentation; however, there was also evidence of simply documenting that a service was provided.

9.2.3 Multidisciplinary teams and person-centred care

The limited range and number of rehabilitation professions and irregular terminology used in describing the rehabilitation workforce make it difficult to form a multidisciplinary team. Site visits and discussions on the workforce, suggest that there are fewer than five facilities in Armenia that house a comprehensive multidisciplinary team.

Summary of rehabilitation service accessibility and quality

- In the first half of 2022, Armenia provided 390 770 "rehabilitation interventions" (clinical, vocational and social rehabilitation). Of this total, 53% were clinical and only 5% were related to AT.
- There are seven P&O centers in Armenia, 21 AP/AT providers and nine rehabilitation centers; the MoH has provided 196 licences to health facilities since 2003 for rehabilitation service provision.

- Rehabilitation for children is generally more developed and more aligned with contemporary standards than rehabilitation services for adults.
- Armenia has no structured community-based rehabilitation services, though there is evidence of initiatives for children and older adults.
- Screening services related to vision and hearing are part of the early identification programme for children in Armenia. Detailed information on vision and hearing programmes for adults was not fully explored during the STARS assessment.
- Armenia developed the *Clinical practice guidelines for rehabilitation of individuals after upper and/or lower limb amputation*, published in July 2022.
- Armenia's MES does not have protocols or specific interventions related to rehabilitation or availability of AT in emergencies.
- Nearly 15% of Armenia's population has had COVID-19 (434 398 people) (as of 29 August 2022), but data is limited on those with long-COVID symptoms and on facilities that incorporate rehabilitation in treatment regimes.

10. Rehabilitation outcomes and system attributes

10.1 Outcomes

Armenia has no unified database on rehabilitation at the national level. The MoH (through ArMed) and the MoLSA (through NORK and "Pyunik") and other agencies each collect some level of data on rehabilitation and AT, but these data are neither synchronized nor comprehensive.

Rehabilitation outcomes (measuring functioning gains, or slowing functioning loss) are captured by some rehabilitation departments and centres, but this practice is not uniform. Though ArMed provides a robust platform through which information on functioning and outcomes of rehabilitation may be documented, this has not yet been developed or applied. The social services section of the USS is supposed to follow up on the impact or functional change after the provision of AP; however, interviews were not held with this section during the STARS assessment.

10.2 Attributes

10.2.1 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.

10.2.2 Efficiency

Application of evidence-based models of care and the use of standard tests on functioning were observed and outcomes of treatment were measured by progress in the achievement of goals in some instances. That said, Armenia does not have standard rehabilitation assessment tools or reporting forms used across all facilities. As a result, measuring the efficiency of rehabilitation service delivery is a challenge.

10.2.3 Accountability

There are very few mechanisms ensuring accountability for rehabilitation, and there is no systematic and country-wide reporting on outcomes of rehabilitation.

10.2.4 Sustainability

The value of rehabilitation in health care to restore or maintain function has not been well established in Armenia. Identification and recognition of the economic benefits of rehabilitation need further attention. The BBP covers rehabilitation services for individuals under the age of 18 and adults with disability or vulnerable status; this is a positive step towards sustaining rehabilitation service provision within health care. That said, gaps remain in service provision (rehabilitation and AT) for adults who do not have vulnerable status or a disability determination that would make them eligible for care.

11. WHO Rehabilitation Maturity Model scoring

The Rehabilitation Maturity Model is a standard tool used during the STARS process *(1)*. There are 50 components across seven domains in the RMM. Each component has illustrative descriptors that indicate levels of maturity of rehabilitation in the health system. The purpose of using the RMM is to provide an overview on the performance of different rehabilitation components. 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 24 summarizes the seven domains, the components within each domain, and provides space for scores for each component and the rationale for the score. The rationale is taken directly from the description in the RMM associated with each score.

Table 24. RMM scores and justifications

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. The 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 some aspects of rehabilitation.
2	Leadership, coordination and coalition building for rehabilitation	2	There is a small amount of intersectoral coordination for rehabilitation.
3	The capacity and levers for rehabilitation plan implementation	1	Very few management processes and mechanisms are in place.
4	Accountability, reporting and transparency for rehabilitation	1	Accountability for rehabilitation is very low; very little information is collected/collated.
5	Regulation of rehabilitation and AT	2	There are low levels of regulation that apply to rehabilitation and AT.
6	AT policies, plans and leadership	1	AT plans are not integrated in wider health policies.
7	AT programmes and procurement	1	The availability of AP is very limited within government health services.
FINANCING		**SCORE/JUSTIFICATION**	
8	Rehabilitation financing and coverage of the population	2	Integration of rehabilitation into financing mechanisms used for the provision of health care is limited.
9	Scope of rehabilitation included in financing	1	A very small number and limited range of rehabilitation interventions and services are financed.
10	Financing of rehabilitation and OOP costs	1	Financial protection is inadequate; there are high OOP costs.
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	2	The standard of rehabilitation training courses is moderate to low (focusing on passive treatments).
13	Rehabilitation workforce planning and management	1	Rehabilitation workforce planning practices are extremely limited.
14	The rehabilitation workforce mobility, motivation and support	2	There are a few professional associations, though there are limitations.

(Continued)

Table 24. Contd.

	HEALTH INFORMATION SYSTEMS	SCORE/JUSTIFICATION	
15	Rehabilitation infrastructure and equipment	2	Some of the necessary equipment for effective rehabilitation is available.
16	Information about rehabilitation needs, including population functioning and disability	2	Disability questions are reported to have been included in the national census.
17	Information about rehabilitation availability and utilization	3	Health information systems produce a moderate level of reporting on utilization of rehabilitation.
18	Information on rehabilitation outcomes and quality	2	HIS generate a little data regarding outcomes and the quality of rehabilitation.
19	Rehabilitation information used during decision-making	2	Information including international evidence is infrequently used to inform planning.
	SERVICE – ACCESSIBILITY	**SCORE/JUSTIFICATION**	
20	Availability of specialized, high intensity rehabilitation	2	The level of distribution of specialized, high-intensity rehabilitation is low across the country.
21	Availability of community-delivered rehabilitation	1	The level of community-delivered rehabilitation is low.
22	Availability of rehabilitation integrated into tertiary care	2	The number of rehabilitation professions and specialties is low.
23	Rehabilitation integrated into secondary care	2	The level of rehabilitation integrated into medical specialties is low, and there are many gaps.
24	Rehabilitation integrated into primary care	2	A small number of rehabilitation personnel work at this level.
25	Occurrence of informal, self-directed rehabilitation	2	Few opportunities exist for informal, self-directed care.
26	Availability of rehabilitation across acute, sub-acute and long-term phases of care	2	There are few mechanisms supporting access to rehabilitation in the continuum of care.
27	Availability of rehabilitation across mental health, vision and hearing programmes	2	Rehabilitation interventions, including AP, have a low level of integration.
28	Availability of rehabilitation for target population groups based on country need	1	There is very low (to no) understanding of the rehabilitation needs of the population.
29	Early identification and referral to appropriate health and rehabilitation programmes for children with developmental difficulties and disabilities	2	There is a low level of monitoring of developmental milestones in children and many difficulties and disabilities are identified late.
30	Availability of rehabilitation in hospital, clinical settings and the community for children with developmental difficulties and disabilities	2	Early childhood intervention services are established, but at a low level.
31	Availability of AP, including those for mobility, environment, vision, hearing, communication and cognition	1	There are few or no AP available in health services and at different levels of care.
32	Availability of AP and their service delivery	1	There is very little or no health personnel expertise for the delivery of AP.
33	Affordability of rehabilitation	1	There is a low level of affordability of rehabilitation and AP.
34	Acceptability of rehabilitation	1	Services are very often inconvenient to reach.
	SERVICE – QUALITY	**SCORE/JUSTIFICATION**	
35	Extent to which evidence-based rehabilitation interventions are utilized	2	The level of evidence-based interventions utilized is low.
36	Extent to which rehabilitation interventions are of sufficient specialization and intensity to meet needs	2	A small number of specialized rehabilitation personnel are present within the professions and health facilities.

(Continued)

Table 24. Contd.

37	Extent to which rehabilitation interventions empower, educate and motivate people	2	Empowerment, education and motivation are not common goals of rehabilitation.
38	Extent to which rehabilitation interventions are underpinned by appropriate assessment, treatment planning, outcome measurement and note-taking practices	2	There is a low or variable level of quality and consistency in the assessment, treatment planning, outcome measurement and note-taking practices used.
39	Extent to which rehabilitation is timely and delivered along a continuum, with effective referral practices	2	There is a low level of continuum of care between rehabilitation and other facilities; smooth transitions are of low frequency.
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. Rehabilitation is occasionally tailored and adapted to the needs and priorities of the clients.
41	Extent to which health personnel and community members are aware, knowledgeable and seek rehabilitation	2	Across health personnel there is a low level of knowledge regarding rehabilitation; many do not know when and where to refer.
42	Extent to which rehabilitation is safe	2	Quality improvement and quality assurance are not well established across health care.
OUTCOME AND ATTRIBUTES OF REHABILITATION		**SCORE/JUSTIFICATION**	
43	Coverage of rehabilitation interventions for population groups that need rehabilitation	2	Rehabilitation is accessible for some of the population that needs it; with many gaps.
44	Functioning outcomes of rehabilitation for those who receive rehabilitation	2	The level of effective rehabilitation is low; rehabilitation falls short of functioning gains.
45	Equity of rehabilitation coverage across disadvantaged population groups	2	Inequities in rehabilitation coverage are not assessed, understood or addressed.
46	Allocative and technical efficiency of rehabilitation	1	Allocative and technical efficiency is not well understood nor measured.
47	Multi-level accountability for rehabilitation performance	2	There is a low level of accountability for rehabilitation within governing agencies.
48	Financial and institutional sustainability of rehabilitation	2	Rehabilitation financing is somewhat integrated into health financing.
49	Resilience of rehabilitation for crisis and disaster	3	There is some level of experience and capacity in health and rehabilitation services for addressing rehabilitation in a disaster.
50	The functioning of the population	2	There is little measurement and understanding of population functioning.

12. Conclusions and recommendations

12.1 Conclusions

The rehabilitation situation in Armenia is evolving. Although Soviet-era practices and terminology continue to be used, the rehabilitation sector is moving towards contemporary understanding and standards.

It is recognized that Armenia has some of the key foundations that could help establish appropriate governance functions for rehabilitation; however, there is no overarching document or national strategy on rehabilitation to bring relevant departments, ministries and stakeholders together.

Information on rehabilitation financing (rehabilitation services and AP) is directly and indirectly captured across different budget lines and different ministries. The BBP covers services for individuals under the age of 18, but rehabilitation coverage for adults is restricted mainly to vulnerable populations and persons with disabilities.

In Armenia, human resources for rehabilitation are referred to by more than 30 different terms for different occupations or professions – some contemporary, some outdated. Professional associations exist but they are nascent and emerging. Some associations (occupational therapists, and speech and language therapists) have affiliations with international counterparts.

Armenia has an established eHealth system through ArMed, but rehabilitation information (including locations of the workforce, availability and utilization of services, and outcome data) is not yet centralized. Information on disability or functioning was included in the 2022 census, but this information is not yet publicly available.

Information on the outcomes and attributes of rehabilitation services are captured at facility-level in some service sites, but this practice is not yet standard across health providers in Armenia.

12.2 Recommended actions

To address some of the challenges that Armenia faces related to rehabilitation, the recommendations provide opportunities for future engagement and may provide a 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 Government of Armenia:

1.1 formally identify rehabilitation focal points within relevant ministries and their departments, and define specific roles and responsibilities on rehabilitation;

1.2 establish a cross-ministerial national-level rehabilitation and AT committee or working group; and

1.3 develop a national strategy on rehabilitation and AT that actively involves and includes all relevant ministries, departments and stakeholders.

2. Clarify information on rehabilitation and related terminology

It is recommended that the Government of Armenia, together with relevant stakeholders:

2.1 review and amend rehabilitation-related terminology to reflect contemporary and international standards and integrate these amended terms across all education programmes and legal documents;

2.2 utilize contemporary rehabilitation language in any newly developed, revised or updated laws or health policy documents; and

2.3 conduct awareness campaigns to inform the public about contemporary rehabilitation.

3. Review and streamline processes of engagement to strengthen the AT ecosystem in Armenia

It is recommended that the Government of Armenia, the MoLSA, the MoH, UNICEF, UNDP, WHO and relevant stakeholders:

3.1 develop a collective short-term "AT joint action plan" (e.g. December 2022–June 2023) to identify key action items and set out an implementation framework and specific roles and responsibilities; and

3.2 conduct monthly meetings to review the process of engagement, increase transparency and ensure that all stakeholders are working towards the same goals with the same methods.

Financing

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

It is recommended that the MoH and SHA, together with relevant authorities and stakeholders:

4.1 pilot the reimbursement of selected AP within Armenia's BBP;

4.2 consider reimbursement of rehabilitation services for adults (without vulnerability status or a disability determination) through Armenia's BBP;

4.3 explore different ways for people to have timely access to AP, such as through specialists recommending products for adult conditions (bypassing the Medical-Social Expertise Commission) as with the current opportunities that exist for children, and piloting provision of simple AP (crutches, walkers, etc.) within the BBP; and

4.4 (MoH) consider alternative strategies, through the BBP scheme, to ensure that rehabilitation receives a dedicated percentage of health facility budgets, such as health facilities creating a specific budget line for rehabilitation that could "safeguard" these resources to be available throughout the year.

5. Share emerging practices in the European Region on the inclusion of rehabilitation and AT services within essential health-care packages

It is recommended that WHO support the MoH, SHA and other relevant stakeholders in Armenia to:

5.1 facilitate access to information on financing rehabilitation and AT through online forums or exposure visits to other countries to learn from pilot initiatives on integrating rehabilitation and AT into existing health-care packages (e.g. Georgia and Tajikistan); and

5.2 raise awareness of, and explore opportunities to utilize, the existing WHO products and initiatives in financing for rehabilitation, through regional webinars.

Human resources

6. Clarify, strengthen and expand Armenia's rehabilitation workforce

It is recommended that the MoH, MoESCS, MoLSA and other relevant stakeholders:

6.1 establish a formal sub-working group to develop proposed standards for rehabilitation workforce terminology, undergraduate education requirements, post-graduate continuing medical education, worksite eligibility, scope of practice and other regulatory standards, as applicable;

6.2 consider piloting WHO's *Rehabilitation competency framework (6)* and the *Guide for rehabilitation workforce evaluation (7)* to gain a deeper understanding of the existing situation and gaps related to the rehabilitation workforce in Armenia;

6.3 explore opportunities to establish an in-country prosthetics and orthotics education programme in Armenia, going beyond the short courses offered by suppliers (e.g. International Society for Prosthetics and Orthotics (ISPO)-recognized Human Study *(8)* blended learning programme);

6.4 consider rehabilitation staff (including paramedical personnel) in further plans for individual licensing; and

6.5 outline continuing professional development for a wide range of rehabilitation workforce positions (including physical therapists, occupational therapists, speech and language therapists etc.).

7. Engage relevant international associations and facilities in neighbouring countries to share information and experiences that could inform rehabilitation practices in Armenia

It is recommended that the MoH, together with WHO and relevant stakeholders in Armenia:

7.1 create linkages with relevant international bodies – World Physiotherapy, the International Society of Physical and Rehabilitation Medicine and the ISPO – to identify potential synergies and areas of engagement;

7.2 continue engagement with the World Federation of Occupational Therapists and the European Speech and Language Therapy Association to further work on educational standards, practices and regulatory efforts to strengthen these professions in Armenia;

7.3 support a site visit to Tbilisi, Georgia, to observe best practices in rehabilitation service delivery at the Ken Walker University Clinic for Medical Rehabilitation (multidisciplinary team, active treatment techniques and integration of AP within health system service delivery) and best practices for physical therapy, occupational therapy, and speech and language therapy education programmes; and

7.4 facilitate a site visit to Tajikistan to observe provision of AP at PHC levels.

Information

8. Synchronize existing, or develop new, electronic data fields related to rehabilitation

It is recommended that the Government of Armenia, the MoH, NEO, MoLSA and relevant stakeholders:

8.1 examine WHO's *Routine health information systems rehabilitation toolkit (9)* and identify potential indicators for use or potential integration into ArMed;

8.2 develop a "service mapping for rehabilitation and AT" resource and make this publicly available on MoH and MoLSA websites;

8.3 review existing ArMed data fields (e.g. discharge status drop-down menu, health workforce data) and provide guidance on how these should be applied for rehabilitation interventions or updated to capture contemporary workforce data; and

8.4 discuss with Armenia's State Statistical Committee rehabilitation-related content that may be included in future Health and Healthcare Statistical Yearbook data for Armenia.

Rehabilitation service

9. Promote timely and effective rehabilitation interventions across the continuum of health care

It is recommended that the MoH, MoLSA and relevant stakeholders:

9.1 strengthen referral pathways within and between ministries and agencies (including between tertiary and primary health-care settings) to reduce or avoid disruption in care upon discharge;

9.2 develop linkages and alignment with PHC reform initiatives underway in Armenia to enhance opportunities for demonstration projects that integrate rehabilitation and AT into the scope of PHC services;

9.3 review WHO's *Package of Interventions for Rehabilitation* (to be launched in 2023) to stimulate discussion on treatment protocols and standards, and agree prioritization of them within the BBP;

9.4 promote the use of functional outcome measures as the desired outcome for all rehabilitation interventions at all levels of care;

9.5 raise awareness on contemporary rehabilitation and its application at all levels of care; and

9.6 create 3–4 “patient journey” histories to illustrate the existing gaps in the referral and service provision system and help determine protocols and guidance for frontline services on how these gaps in service provision can be addressed to ensure a continuum of care approach.

Emergency preparedness and response

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

It is recommended that the MoH, MES and relevant stakeholders:

10.1 ensure that rehabilitation is included in national and subnational health and emergency policies, strategies and legislation, including disaster risk reduction, as part of the health system response;

10.2 stockpile rehabilitation equipment, such as AP, to meet anticipated surges in emergency needs, and identify supply chains for surge procurement; and

10.3 consider integrating rehabilitation into national EMTs; utilize the publication of detailed Minimum technical standards and recommendations for rehabilitation *(10)*; and continue the integration of rehabilitation standards across all aspects of clinical care in EMTs.

References

1. Rehabilitation in health systems: guide for action. Geneva: World Health Organization; 2019 (https://iris.who.int/handle/10665/325607, accessed 10 August 2022).

2. Kleinitz P, Sabariego C, Cieza A. WHO Systematic Assessment of Rehabilitation Situation (STARS): Results of the field testing in Jordan, Myanmar, Sri Lanka, Solomon Islands, Laos, Haiti and Guyana. Int J Environ Res Public Health. 2021;18(21). doi: 10.3390/ijerph182111549.

3. ՀՀ էկոնոմիկայի նախարարի հրամանը ՀՀ տեխնիկատնտեսական և սոցիալական տեղեկատվության «զբաղմունքների դասակարգիչ» հաստատելու և ՀՀ էկոնոմիկայի նախարարի 2009 թվականի հուլիսի 31-ի N 632-Ն հրամանն ուժը կորցրած ճանաչելու մասին, N873-Ն, հավելված [Order of the Minister of Economy of the Republic of Armenia on establishing the "Occupation Classifier" of the technical, economic and social information of the Republic of Armenia and revoking the order of the Minister of Economy of the Republic of Armenia N 632-N of 31 July 2009, N873-N, 19 September 2013] Yerevan: Ministry of Economy; 2013 (https://www.arlis.am/DocumentView.aspx?DocID=94900, accessed 19 August 2022) (in Armenian).

4. Health and health care statistical yearbook 2021. Yerevan: National Institute of Health named after academician S. Avdalbekyan, Ministry of Health; 2021 (https://nih.am/assets/pdf/atvk/0b0e76b39832ae2244f1522a8581d87cen.pdf, accessed 10 August 2022).

5. Model Disability Survey (MDS): survey manual. Geneva: World Health Organization; 2017 (https://iris.who.int/handle/10665/258513, accessed 10 August 2022).

6. Rehabilitation Competency Framework. Geneva: World Health Organization; 2020 (https://iris.who.int/handle/10665/338782, accessed 10 August 2022).

7. Guide for rehabilitation workforce evaluation: information sheet. Geneva: World Health Organization; 2021 (https://cdn.who.int/media/docs/default-source/documents/health-topics/rehabilitation/2942-dar-r-wep-info-sheet-170221.pdf?sfvrsn=81541771_5&download=true, accessed 10 August 2022).

8. Human Study [website] (https://www.human-study.org, accessed 10 August 2022).

9. Routine Health Information Systems – rehabilitation toolkit: information sheet Geneva: World Health Organization; 2021 (https://www.who.int/publications/m/item/routine-health-information-systems--rehabilitation-toolkit--information-sheet, accessed 10 August 2022).

10. Emergency medical teams: minimum technical standards and recommendations for rehabilitation. Geneva: World Health Organization; 2016 (https://iris.who.int/handle/10665/252809, accessed 10 August 2022).

11. Rehabilitation 2030: a call for action. Geneva: World Health Organization; 2017 (https://iris.who.int/handle/10665/339910, accessed 10 August 2022).

12. Հայաստանի վերափոխման ռազմավարություն 2050 [Armenia's transformation strategy 2050]. Yerevan: Government of Armenia; 2020 (https://www.primeminister.am/u_files/file/Haytararutyunner/Armenia2050_7_5.pdf, accessed 10 August 2022) (in Armenian).

13. Հայաստանի Հանրապետության առողջապահության նախարարի 2022թ. հունիսի 17-ի No 2570 – Լ հրամանը «Վերին և/կամ ստորին վերջույթների անդամահատումներով անձանց վերականգնողական

բուժման կլինիկական ուղեցույցը հաստատելու մասին [Ministry of Health of the Republic of Armenia Order on clinical practice guidelines for rehabilitation of individuals after upper and/or lower limb amputation, N 2570-L , 17 June 2022]. Yerevan: Ministry of Health of the Republic of Armenia; 2022 (https://www.moh.am/uploads/verakangnoxakan123.pdf, accessed 31 August 2022) (in Armenian).

14. Template for rehabilitation information collection (TRIC): a tool accompanying the Systematic Assessment of Rehabilitation Situation (STARS). Geneva: World Health Organization; 2019 (https://apps.who.int/iris/handle/10665/330956, accessed 10 August 2022).

15. Western Pacific Regional framework on rehabilitation. Manila: WHO Regional Office for the Western Pacific; 2019 (https://iris.who.int/handle/10665/325898, accessed 10 August 2022).

16. Demographics. In: Government of the Republic of Armenia e-government [website] (https://www.gov.am/en/demographics/, accessed 15 August 2022).

17. United Nations Sustainable Development Cooperation Framework for Armenia (2021–2025). Yerevan: United Nations Armenia; 2021 (https://unsdg.un.org/sites/default/files/2021-10/UN-Armenia-Cooperation-Framework-2021-2025.pdf, accessed 18 August 2022).

18. Population and housing census in Armenia. 13–22 October 2022. In: United Nations Population Fund (UNFPA) Eastern Europe and Central Asia [website] (https://eeca.unfpa.org/en/events/population-and-housing-census-armenia, accessed 15 August 2022).

19. Human Development Insights. In: Human Development Reports [website] (https://hdr.undp.org/data-center/country-insights#/ranks, accessed 15 August 2022).

20. Interstate Statistical Committee of the Commonwealth of Independent States [website] (http://new.cisstat.org/web/eng, accessed 15 August 2022).

21. The European Union and Armenia #strongertogether [factsheet]. Yerevan: European External Action Service; 2021 (https://www.eeas.europa.eu/eeas/eu-armenia-relations-factsheet_en, accessed 18 August 2022).

22. How the UN is supporting SDGs in Armenia. In: United Nations Armenia [website] (https://armenia.un.org/en/sdgs, accessed 18 August 2022).

23. Innovative solutions for SDG implementation in Armenia. In: United Nations Development Programme Armenia [website] (https://www.undp.org/armenia/projects/innovative-solutions-sdg-implementation-armenia, accessed 18 August 2022).

24. Sustainable Development Report 2022, Armenia [website] (https://dashboards.sdgindex.org/profiles/armenia, accessed 18 August 2022).

25. Statistical Yearbook of Armenia 2021. Yerevan: Statistical Committee of the Republic of Armenia; 2021 (https://armstat.am/en/?nid=586&year=2021, accessed 16 August 2022).

26. Armenia Health System Performance Assessment 2018. Yerevan: National Institute of Health named after academician S. Abdalbekyan, Ministry of Health; 2018 (http://nih.am/assets/pdf/atvk/1bba53467ef0edf211c317cc59c0ac2b.pdf, accessed 10 August 2022).

27. Population Pyramid for Armenia 2022. In: United Nations Population Fund [website] (https://www.unfpa.org/data/demographic-dividend/AM, accessed 16 August 2022).

28. Prevention and control of noncommunicable diseases in Armenia: the case for investment. Copenhagen: WHO Regional Office for Europe; 2019 (https://iris.who.int/handle/10665/346420, accessed 16 August 2022).

29. STEPS 2016. Armenia 2016. In: NCD Microdata Repository [database]. Geneva: World Health Organization; 2016 (https://extranet.who.int/ncdsmicrodata/index.php/catalog/102, accessed 16 August 2022).

30. Armenia: How is the population forecasted to change? In: Institute for Health Metrics Evaluation (IHME) [website] (https://www.healthdata.org/armenia, accessed 16 August 2022).

31. Ashgabat Declaration on the Prevention and Control of NCDs in the context of Health 2020. Geneva: World Health Organization; 2014 (https://iris.who.int/handle/10665/337273, accessed 18 August 2022).

32. ՀՀ ԱԺ, Հայաստանի Հանրապետության օրենքը հաշմանդամություն ունեցող անձանց իրավունքների մասին, ՀՕ-194-Ն [Law on the rights of persons with disabilities 2021: National Assembly of the Republic of Armenia, HO-194-N, 24 May 2021] Yerevan: Government of Armenia; 2021 (https://www.arlis.am/documentview.aspx?docID=152960, accessed 19 August 2022) (in Armenian).

33. Census Programme (Content of Questionnaire). 2011 Census of the Republic of Armenia. Yerevan: Statistical Committee of the Republic of Armenia; 2011 (https://armstat.am/file/doc/99486563.pdf, accessed 31 August 2022).

34. Washington Group on Disability Statistics [website] (https://www.washingtongroup-disability.com, accessed 19 August 2022).

35. ՀՀ վիճակագրական կոմիտե, Հաշվառված հաշմանդամություն ունեցող անձանց թվաքանակը 2022 թվականի հուլիսի 1-ի դրությամբ [Socioeconomic situation of the Republic of Armenia, January–June 2022. Number of persons with disabilities counted as of 1 July 2022. Section 5.4]. Yerevan: Statistical Committee of the Republic of Armenia; 2022 (https://armstat.am/en/?nid=82&id=2497, accessed 26 August 2022) (in Armenian).

36. Հարց ու պատասխան: ՀՀ բժշկասոցիալական փորձաքննության գործակալություն: [Questions and answers on determining group of disability in Armenia]. In: Medical-Social Expertise Commission (in Armenian).

37. Cieza A, Causey K, Kamenov K, Wulf Hanson S, Chatterji S, Vos T. Global estimates of the need for rehabilitation based on the Global Burden of Disease study 2019: a systematic analysis for the Global Burden of Disease Study 2019. The Lancet. 2020;396(10267):2006–17. doi: 10.1016/S0140-6736(20)32340-0.

38. WHO Rehabilitation Need Estimator/Viz Hub [website] (https://vizhub.healthdata.org/rehabilitation/, accessed 18 August 2022).

39. Around 11,000 Armenian soldiers wounded and got sick in recent Artsakh war, military official says. Panorama.am. 29 March 2021 (https://www.panorama.am/en/news/2021/03/29/soldiers-Artsakh-war/2477195, accessed 25 August 2022).

40. Armenia impact. In: Landmine and Cluster Munition Monitor [website]. Last updated 9 February 2021 (http://www.the-monitor.org/en-gb/reports/2021/armenia/impact.aspx, accessed 27 August 2022).

41. Gratsia International Rehabilitation Center. In: Armenian Red Cross Society [website]. (https://www.redcross.am/en/what-we-do/gratsia-rehabilitation-center.html, accessed 27 August 2022).

42. ՀՀ կառավարության որոշման նախագիծ Հայաստանի Հանրապետության առողջապահական համակարգի հնգամյա (2020-2025 թվականներ) զարգացման ռազմավարությունը հաստատելու մասին: [Government of the Republic of Armenia Decision on approval of the five-year (2020–2025) development strategy of the health-care system of the Republic of Armenia (draft)]. Yerevan: Government of Armenia; 2019 (https://www.e-draft.am/projects/1958/about, accessed 27 August 2022) (in Armenian).

43. Richardson E. Armenia: Health system review. Health Syst Transit. 2013;15(4):1–99 (https://pubmed.ncbi.nlm.nih.gov/24334656/, accessed 10 August 2022).

44. ՀՀ վարչապետի որոշումը ՀՀ առողջապահության նախարարության կանոնադրությունը հաստատելու մասին, N 728-Լ, 23.06.2018 [Statute of the Ministry of Health of the Republic of Armenia: Armenian Legal Information System. 11 June 2018, N 728-L]. Yerevan: Ministry of Health of Armenia; 2018 (https://www.arlis.am/documentview.aspx?docid=143473, accessed 25 August 2022) (in Armenian).

45. Mission. In: Ministry of Health of the Republic of Armenia [website] (https://www.moh.am/#3/47, accessed 25 August 2022).

46. Կառուցվածքի գծապատկեր. ՀՀ առողջապահության նախարարության վեբկայք [Organizational chart: Ministry of Health of the Republic of Armenia]. In: Ministry of Health of Armenia [website] (https://www.moh.am/images/MOH.html, accessed 25 August 2022) (in Armenian).

47. Evaluation of rehabilitation services for children in Armenia: rapid assessment analysis and mapping. Yerevan: United Nations Children's Fund (UNICEF); 2019 (https://www.unicef.org/armenia/media/7421/file/Report%20on%20Evaluation%20of%20Rehabilitation%20Services%20for%20Children%20in%20Armenia.pdf, accessed 17 August 2022)

48. Ստացիոնար բուժօգնություն իրականացնող կազմակերպություններ [Facilities providing inpatient health care]. In: Ministry of Health of the Republic of Armenia [website] (https://www.moh.am/#1/1446, accessed 15 August 2022) (in Armenian).

49. Global Health. In: United States Agency for International Development (USAID) Armenia [website]. (https://www.usaid.gov/armenia/our-work/global-health, accessed 15 August 2022).

50. Disability-led Independent Living Resource Centers established in Armenia. In: Mobility International USA [website] (https://www.miusa.org/news/independent-living-resource-centers-ilrc-established-in-armenia/, accessed 25 August 2022).

51. ՀՀ օրենքը բնակչության բժշկական օգնության և սպասարկման մասին, ՀՕ-42, 4.03.1996 [Republic of Armenia Law on medical aid and service to the population, HO-42, 4 March 1996]. Yerevan: Government of Armenia; 1996 (https://www.arlis.am/documentview.aspx?docid=166127, accessed 31 August 2022) (in Armenian).

52. ՀՀ առողջապահության նախարարի հրամանը հարբժշկական ծառայությունների ցանկը հաստատելու մասին, N 29-Ն, 06.05.2021 [Order of the Minister of Health of the Republic of Armenia on approving the list of paramedical services, N 29-N, 6 May 2021]. Yerevan: Ministry of Health of the Republic of Armenia; 2021 (https://www.arlis.am/documentview.aspx?docid=152474, accessed 31 August 2022) (in Armenian).

53. ՀՀ կառավարության որոշումը պետության կողմից երաշխավորված անվճար և արտոնյալ պայմաններով բժշկական օգնության և սպասարկման մասին, N 318-Ն, 23.03.2004 [Government of the Republic of Armenia Decision on state-guaranteed medical assistance and services with free and

privileged conditions, N 318-N, 23 March 2004]. Yerevan: Government of Armenia; 2004 (https://www.arlis.am/DocumentView.aspx?docid=161118, accessed 31 August 2022) (in Armenian).

54. ՀՀ օրենքը սոցիալական աջակցության մասին, ՀՕ-231-Ն, 01 հունվար 2015 [Republic of Armenia Law on social assistance, HO-231-N, 1 January 2015]. Yerevan: Government of Armenia; 2015 (https://www.arlis.am/documentview.aspx?docid=165185, accessed 31 August 2022) (in Armenian).

55. ՀՀ կառավարության որոշումը վերականգնողական օգնության տրամադրման կարգը և պայմանները սահմանելու մասին, N 1035-Հ, 10.09.2015թ. [Government of the Republic of Armenia Decision on determining the procedure and conditions for providing rehabilitation assistance, N 1035-H, 27 August 2021]. Yerevan: Government of Armenia; 2015 (https://www.arlis.am/DocumentView.aspx?docid=155598, accessed 31 August 2022) (in Armenian).

56. ՀՀ կառավարության որոշումը պոլիկլինիկաների (խառը, մեծահասակների և մանկական), առանձին մասնագիտացված կաբինետների, ընտանեկան ավագ բուժաշխատողի գրասենյակների, բժշկական ամբուլատորիաների, գյուղական առողջության կենտրոնների, բուժակ-մանկաբարձական կետերի, կանանց կոնսուլտացիաների և հիվանդանոցային պայմաններում բժշկական օգնության ու սպասարկման համար անհրաժեշտ տեխնիկական եվ մասնագիտական որակավորման պահանջներն ու պայմանները հաստատելու մասին, N 1936-Ն, 02.06.2022 [Government of the Republic of Armenia Decision on approval of necessary technical and professional qualification requirements and conditions for medical aid and polyclinic services (mixed, for adults and for children), separate specialized offices, family senior nursing offices, inpatient and outpatient services, rural health-care facilities, midwifery points, women's consultation services, N 1936-N, 2 June 2022] Yerevan: Government of Armenia; 2002 (https://www.arlis.am/documentview.aspx?docid=163521, accessed 23 November 2022) (in Armenian).

57. ՀՀ սահմանադրություն, հոդված 83, սոցիալական ապահովությունը [Constitution of Armenia, Article 83, Social Protection]. Yerevan: Government of Armenia; 2015 (https://www.arlis.am/documentview.aspx?docID=102510, accessed 23 November 2022) (in Armenian).

58. United Nations Human Rights Treaty Bodies: Armenia. In: UN Treaty Body Database [online database] (https://tbinternet.ohchr.org/_layouts/15/TreatyBodyExternal/Treaty.aspx?CountryID=8&Lang=en, accessed 18 August 2022).

59. Consideration of reports submitted by States parties under article 35 of the Convention. Initial report of State party due in 2012: Armenia. Committee on the Rights of Persons with Disabilities; 2015 (https://www.refworld.org/docid/57c97e424.html, accessed 19 August 2022).

60. Armenia's legal framework for persons with disabilities. In: Social Protection Toolbox [website] (https://www.socialprotection-toolbox.org/practice/armenias-legal-framework-persons-disabilities, accessed 19 August 2022).

61. Chilingaryan A. Important progress for people with disabilities in Armenia. Human Rights Watch. 11 May 2021 (https://www.hrw.org/news/2021/05/11/important-progress-people-disabilities-armenia, accessed 19 August 2022).

62. Convention on the Rights of Persons with Disabilities (CRPD). In: United Nations Department of Economic and Social Affairs [website] (https://social.desa.un.org/issues/disability/crpd/convention-on-the-rights-of-persons-with-disabilities-crpd, accessed 19 August 2022).

63. Ireton H. Child Development Inventory manual. Minneapolis: Behavior Science Systems; 1992 (https://static1.squarespace.com/static/562e8e0ae4b09db47d931eb9/t/565cd590e4b0c6e18e583427/1448924560903/cdi+manual.pdf, accessed 19 August 2022).

64. Աջակցող միջոցների տրամադրում [Provision of Assistive Products]. In: Ministry of Labour and Social Affairs of the Republic of Armenia [website] (https://www.mlsa.am/?page_id=10999, accessed 19 August 2022) (in Armenian).

65. ՀՀ աշխանքի և սոցիալական հարցերի նախարարի 2021 թվականի սեպտեմբերի 23-ի N152-Ա/1 հրամանում փոփոխություն կատարելու մասին 2022 թվականի սեպտեմբերի 28-ի հրամանը [Order of 28 September 2022 on making amendments to Order N 152-A/1 of 23 September 2021 of the Minister of Labour and Social Affairs of the Republic of Armenia]. Yerevan: Ministry of Labour and Social Affairs of Armenia; 2022 (https://www.mlsa.am/wp-content/uploads/2022/10/126-A-1-hraman-Havasar-hnaravorutyunner_compressed.pdf, accessed 01 October 2022) (in Armenian).

66. ՀՀ աշխանքի և սոցիալական հարցերի նախարարի 2022թ.-ի հունվարի 11-ի հրամանը 2022 թվականի ընթացքում աջակցող միջոցների ձեռքբերման պետական հավաստագրի, ինչպես նաև առանց պետական հավաստագրի տրամադրվող աջակցող միջոցների գնային արժեքը սահմանելու մասին [Order of the Minister of Labour and Social Affairs of the Republic of Armenia dated 11 January 2022 on setting the price of the state certificate for the acquisition of assistive products during 2022, as well as the price of assistive products provided without a state certificate] Yerevan: Ministry of Labour and Social Affairs of Armenia; 2022 (https://www.mlsa.am/wp-content/uploads/2022/02/4-A-1-hraman-Havasar-hnaravorutyun_compressed.pdf, accessed 1 October 2022) (in Armenian).

67. Building an ecosystem to support assistive technology access in Armenia. Yerevan: United Nations Children's Fund (UNICEF); 2022. (https://www.unicef.org/eca/media/22061/file/Case%20study%203.pdf, accessed 15 August 2022).

68. Press release: Almost one billion children and adults with disabilities and older persons in need of assistive technology denied access, according to new report. Yerevan: United Nations Children's Fund (UNICEF); 2022 (https://www.unicef.org/armenia/en/press-releases/almost-one-billion-children-and-adults-disabilities-and-older-persons-need-assistive, accessed 15 August 2022).

69. Tech2life Program. In: Assistive Technology Design Engineering Contest.

70. Ինտերակտիվ բյուջե 2022 [Interactive Budget 2022]. In: Electronic Government of the Republic of Armenia [website] (https://www.e-gov.am/interactive-budget/2022/, accessed 29 August 2022) (in Armenian).

71. Out-of-pocket expenditures (2014). In: European Health Information Gateway [website] (https://gateway.euro.who.int/en/indicators/h2020_29-out-of-pocket-expenditures/, accessed 30 August 2022).

72. Health Expenditure Profile – Armenia. In: Global Health Expenditure Database [website] (https://apps.who.int/nha/database/country_profile/Index/en, accessed 30 August 2022).

73. Karapetyan A. Armenia's Basic Benefits Package and Universal Health Insurance Systems. In: EVN Report [website] (https://evnreport.com/magazine-issues/armenia-s-basic-benefits-package-and-universal-health-insurance-systems/, accessed 30 August 2022).

74. Հայաստանի Հանրապետության կառավարության որոշման նախագիծը Հայաստանի Հանրապետությունում առողջության համապարփակ ապահովագրության ներդրման հայեցակարգին հավանություն տալու մասին [Government of the Republic of Armenia Draft Decision on

approving the concept of introduction of universal health insurance in the Republic of Armenia]. Yerevan: Government of Armenia; 2019 (https://www.e-draft.am/projects/2137/about, accessed 30 August 2022) (in Armenian).

75. Health Systems in Action: Armenia (2022). Copenhagen: WHO Regional Office for Europe and the European Observatory on Health Systems and Policies; 2022 (https://iris.who.int/handle/10665/362322, accessed 30 October 2022).

76. Պետության կողմից երաշխավորված անվճար և արտոնյալ պայմաններով բժշկական օգնություն և սպասարկում իրականացնող բժշկական կազմակերպություններում փաստացի կատարված աշխատանքները, առկա տեղերը և հերթագրումները, Արմեդ վեբկայք [Actual work, available places and waiting lists in medical organizations providing medical care and service under free and preferential conditions guaranteed by the state]. In: ArMed [website] (https://www.armed.am/publicdata/?pg=govlimits, accessed 30 October 2022) (in Armenian).

77. Lohman D, Abidjanova N, Amiryan D, Gherman L, Kiknadze N, Mayilyan Z et al. Progress update: Development of palliative care from 2017 to 2020 in five countries in Eurasia. J Pain Symptom Manage. 2002:64(2):100–109. doi: 10.1016/j.jpainsymman.2022.04.177.

78. Post-Conflict Rehabilitation Symposium. In: International Center for Professional Development [website] (https://icpd.am/conference/18, accessed 29 August 2022).

79. «Բնակչության բժշկական օգնության և սպասարկման մասին» օրենքում փոփոխություններ և լրացումներ կատարելու մասին», «Պետական տուրքի մասին» Հայաստանի Հանրապետության օրենքում լրացումներ կատարելու մասին» և «Լիցենզավորման մասին» Հայաստանի Հանրապետության օրենքում լրացումներ կատարելու մասին» նախագիծ, 2022 [Draft of amendments to the "Law on medical aid and service for the population", on amendments to the "Law on state tax" and addendums to the "Law on Licensing"]. Yerevan: Government of Armenia; 2022 (https://www.e-draft.am/projects/4145/justification, accessed 29 August 2022) (in Armenian).

80. Տեղեկատվություն՝ բուժաշխատողների հավաստագրում [Information: Certification of medical workers]. In: National Institute of Health [website] (https://nih.am/am/subdivisions/certificate_national_center_news, accessed 15 August 2022) (in Armenian).

81. ՀՀ կառավարության որոշումը ՀՀ 2022 թվականի մարդահամարի ծրագիրը (հարցաշարը) հաստատելու մասին, հարցեր 32-37, N 1149-Ն, 28.07.2022 [Government of the Republic of Armenia Decision on approving the Republic of Armenia 2022 census programme (questionnaire), questions 32–37, N 1149-N, 28 July 2022] Yerevan: Government of Armenia; 2022 (https://www.arlis.am/DocumentView.aspx?DocID=166588, accessed 1 October 2022) (in Armenian).

82. ՀՀ օրենքը անձի ֆունկցիոնալության գնահատման մասին, ՀՕ-195-Ն, 05.05.2021 [Republic of Armenia Law on evaluation of personal functionality, HO-195-N, 5 May 2021] Yerevan: Government of Armenia; 2021 (https://www.arlis.am/documentview.aspx?docID=152964, accessed 17 August 2022) (in Armenian).

83. Հաշվառված հաշմանդամների թվաքանակը և բժշկասոցիալական փորձաքննական հանձնաժողովների գործունեությունը 2020 թվականին, ՀՀ վիճակագրական կոմիտե [Social demographic info: the number of people with disabilities and the activities of Medical-Social Expertise Commissions in 2020]. Yerevan: Republic of Armenia Statistical Committee; 2020 (https://www.armstat.am/file/article/sv_01_21a_530.pdf, accessed 19 August 2022) (in Armenian).

84. E-Health in Armenia. In: ArMed [website] (https://corporate.armed.am/en/about-system/ehealth-in-armenia, accessed 31 August 2022).

85. Analysis of the current state of e-Health in the Eastern Partner Countries. Brussels: EU4Digital; 2020 (https://eufordigital.eu/wp-content/uploads/2021/02/Analysis-of-the-current-state-of-eHealth-in-the-Eastern-partner-countries.pdf, accessed 31 August 2022).

86. Հայաստանի Հանրապետության կառավարության ծրագիր 2017-2022: Հավելված ՀՀ կառավարության 2017 թվականի հունիսի 19-ի N 646 - Ա որոշման [Government Programme of Republic of Armenia 2017–2022. Yerevan 2017. Annex of the Republic of Armenia Government, 19 June 2017, N 646-A]. Yerevan: Government of Armenia; 2017 (https://www.gov.am/files/docs/2207.pdf, accessed 30 August 2022) (in Armenian).

87. Armenia: ArMed national digital health system. Copenhagen: WHO Regional Office for Europe; 2021 (https://www.who.int/europe/publications/m/item/armenia-armed-national-digital-health-system-(2021), accessed 31 August 2022).

88. About us. In: Republican Pedagogical-Psychological Center (SNCO) [website] (https://hmk.am/en/mer-masin-en/, accessed 31 August 2022).

89. Integrated community-based home care service provision and healthy ageing. In: Armenian Red Cross Society [website] (https://www.redcross.am/en/what-we-do/social/social_current_projects/integrated-community-based-home-care-service-provision-and-healt.html, accessed 19 August 2022).

90. Chekijian S, Truzyan N, Stepanyan T, Bazarchyan A. Healthcare in transition in the Republic of Armenia: the evolution of emergency medical systems and directions forward. Int J Emerg Med. 2021;14(5). doi: 10.1186/s12245-020-00328-3.

91. Disaster management. In: Armenian Red Cross Society (https://www.redcross.am/en/what-we-do/disaster-management.html, accessed 31 August 2022).

92. Government of the Republic of Armenia Decision on approving the 2021–2026 Action Plan of the Government of the Republic of Armenia, No 1902-L, 18 November 2021. Yerevan: Government of Armenia; 2021 (https://www.gov.am/en/Five-Year-Action-Program, accessed 31 August 2022).

93. Justifications for the 2021–2026 Action Plan of the Government of the Republic of Armenia. Annex No 2 to Decision of the Government of the Republic of Armenia, No 1902-L, 18 November 2021. Yerevan: Government of Armenia; 2021 (https://www.gov.am/files/docs/4901.pdf, accessed 31 August 2022).

94. Armenia overview. In: Johns Hopkins Corona Virus Resource Center [website] (https://coronavirus.jhu.edu/region/armenia, accessed 1 September 2022).

95. Առաջարկություններ COVID-19-ով պայմանավորված հիվանդությունից հետո ինքնուրույն վերականգնման վերաբերյալ: Երկրորդ հրատարակություն [Support for rehabilitation: self-management after COVID-19-related illness, second edition]. Copenhagen: WHO Regional Office for Europe; 2021 (https://apps.who.int/iris/handle/10665/352308, accessed 31 August 2022) (in Armenian).

Annex 1. Rehabilitation in health systems: guide for action

Overview

Rehabilitation in health systems: guide for action (1) (the Guide) assists governments to strengthen the health system to provide rehabilitation.

This initiative is a result of the February 2017 "Rehabilitation 2030: a call for action" meeting in Geneva.

The Guide is 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.

In general, the process starts when the health ministry expresses interest in the process 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 A1.1. outlines the four-phase process, describing the objectives, WHO guidance, tools and timeline of activities for each phase of this process for Armenia.

Table A1.1. The four-phase process

Objective	WHO guidance	Tools	Activity timeline
1. Assess the situation	Systematic Assessment of Rehabilitation Situation (STARS)	Template for Rehabilitation Information Collection (TRIC): 8 domains, 97 questions; health ministry self-assessment Rehabilitation Maturity Model (RMM): 7 domains, 50 questions; consultant-supported scoring	TRIC: May–July 2022 Desk review: July–August 2022 In-country visit: 8–15 November 2022 Pre-zero draft (English): 30 November 2022 Zero draft (Armenian): 1 January 2023 First draft: 1 March 2023
2. Develop a rehabilitation strategic plan	Guidance for Rehabilitation Strategic Planning (GRASP)	Results from STARS report contributes to development of strategic plan	Anticipated dates: April–May 2023
3. Establish monitoring, evaluation and review process	Framework for Rehabilitation Monitoring and Evaluation (FRAME)	FRAME guidance assists in establishing a monitoring framework including the selection of indicators	To happen simultaneously with development of strategic plan
4. Implement the strategic plan	Action on Rehabilitation (ACTOR)	Planning, action and evaluation cycle	After strategic plan and monitoring framework are in place

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 A1.2. illustrates the health system building blocks and corresponding rehabilitation components. The assessment and measurement of these rehabilitation components is facilitated by the tools in the Guide.

Table A1.2. 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 primary care facilities and other community settings. The availability and quality of rehabilitation are considered
5. Medicines and technology	• Medicines and technology commonly utilized by people accessing rehabilitation, primarily assistive products
6. Health information systems	• Data relevant and inclusive of rehabilitation in health information systems; for example, population functioning data, rehabilitation availability and utilization data, rehabilitation outcomes data

Reference

1. Rehabilitation in health systems: guide for action. Geneva: World Health Organization; 2019 (https://www.who.int/publications/i/item/9789241515986, accessed 10 August 2022).

Annex 2. Visit schedule

Date	Activity	Location
Monday 7 November 2022	Ms Eitel and Dr Morgan arrive in Armenia	Yerevan
Tuesday 8 November 2022	Introduction meeting with Ministry of Health (MoH)	MoH, Yerevan
	Topic-specific meeting: governance/emergency	Yerevan
	Topic-specific meeting: finance	Yerevan
	Meeting with United Nations Children's Fund (UNICEF) Armenia	Yerevan
Wednesday 9 November 2022	Meeting with United States Agency for International Development (USAID) Armenia	Yerevan
	Topic-specific meeting: human resources (training and workforce)	Yerevan
	Topic-specific meeting: service delivery	Yerevan
	Focus group discussion: professional societies	Yerevan
	Meeting with United Nations Development Programme (UNDP) Armenia	Yerevan
Thursday 10 November 2022	Polyclinic No. 8, state closed joint-stock company (CJSC) – site visit	Yerevan
	Scientific Research Institute of Spa Treatment and Physical Medicine – site visit	Yerevan
	Interorto German Prosthesis Center limited liability company (LLC) – site visit	Yerevan
	Artmed Medical Rehabilitation Center CJSC – site visit	Yerevan
Friday 11 November 2022	Gratsia International Rehabilitation Center, of the Armenian Red Cross Society LLC – site visit	Yerevan
	ArBeS Health Care Center, Rehabilitation Branch of Arabkir Joint Medical Center and Institute of Child and Adolescent Health – site visit	Yerevan
	Ortez Prosthesis and Orthosis Center LLC – site visit	Yerevan
	Surb Grigor Lusavorich Medical Center, state CJSC – site visit	Yerevan
	Topic-specific meeting: information systems National Electronic Healthcare Operator CJSC	ArMed, Yerevan
	Dr Cathal Morgan's departure to Copenhagen	
Saturday 12 November 2022	Focus group discussion: service users	Yerevan
	Meeting with State Health Agency	Yerevan
Monday 14 November 2022	Meeting With Unified Social Service	USS/Yerevan
	Rehabilitation Maturity Model assessment, MoH debrief with slideshow (5 participants)	Yerevan
Tuesday 15 November 2022	Multistakeholder debrief with slideshow (35 participants)	Yerevan
	Ms. Sue Eitel's departure to Tbilisi	

Annex 3. Participants

NO	NAME	ORGANIZATION
MINISTRY OF HEALTH (MoH) INTRODUCTION MEETING (8 NOVEMBER 2022)		
1	Armen Nazaryan	Deputy Minister of Health, MoH
2	Knar Ghonyan	Head of the Health Care Policy Department, MoH
3	Liana Barseghyan	Head of Inpatient Medical Assistance Policy Division under the Health Care Policy Department, MoH
4	Maria Hovakimyan	Advisor, Department of International Relations, MoH
5	Anahit Petrosyan	Advisor to the Minister of Health on Physical and Rehabilitation Treatment
6	Liana Aghajanyan	Advisor to the Minister of Health on Paediatric Rehabilitation
*	Assessment team: Cathal Morgan, Sue Eitel, Zhanna Harutyunyan	
TOPIC-SPECIFIC MEETING: GOVERNANCE/EMERGENCY (8 NOVEMBER 2022)		
1	Knar Ghonyan	Head of the Health Care Policy Department, MoH
2	Nune Pashayan	Head of the Maternal and Child Health Protection Department, MoH
3	Liana Barseghyan	Head of Inpatient Medical Assistance Policy Division under the Health Care Policy Department, MoH
4	Artur Kesoyan	Deputy Head of the Equal Opportunities Department, Ministry of Labor and Social Affairs (MoLSA)
5	Lusine Grigoryan	Head of the Higher and Postgraduate Professional Education Department, Ministry of Education, Science, Culture and Sport (MoESCS)
6	Lusine Grigoryan	Chief Specialist of the Student Support Unit of Higher and Postgraduate Professional Education Department, MoESCS
7	Armen Karapetyan	Head of the Development of Disaster Risk Reduction Policy Department, Ministry of Emergency Situations (MES)
8	Gegham Gevorgyan	Lieutenant Colonel of the Medical Service, Senior Officer of Social-Legal Assistance and Counselling Unit, Department of Social Protection of Servicemen, Ministry of Defence
*	Assessment team: Cathal Morgan, Sue Eitel, Zhanna Harutyunyan	
TOPIC-SPECIFIC MEETING: FINANCE (8 NOVEMBER 2022)		
1	Anna Ananikyan	Chief Specialist of the Budget Process Organization Department, Financial Programming of Ongoing Social Programmes Division, Ministry of Finance
2	Karen Mikayelyan	Deputy Head of State Health Agency, MoH
3	Artur Kesoyan	Deputy Head of the Equal Opportunities Department, MoLSA
4	Armenuhi Mkoyan	Head of Financial and Economic Department, MES
5	Samvel Kharazyan	Health Care Expert and Member of the Task Force for Universal Insurance, MoH
*	Assessment team: Cathal Morgan, Sue Eitel, Zhanna Harutyunyan	
MEETING WITH UNITED NATIONS CHILDREN'S FUND (UNICEF) ARMENIA (8 NOVEMBER 2022)		
1	Hasmik Arakelyan	Education Officer, Children with Disability, UNICEF Armenia
2	Alvard Poghosyan	Education Specialist, UNICEF Armenia
*	Assessment team: Cathal Morgan, Sue Eitel, Zhanna Harutyunyan	

(Continued)

Contd.

NO	NAME	ORGANIZATION
MEETING WITH UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT (USAID) ARMENIA (9 NOVEMBER 2022)		
1	Ani Manukyan	Project Management Specialist, Democracy and Governance Office, USAID
2	Mary Karapetyan	Project Management Assistant, Democracy and Governance Office, USAID
*	Assessment team: Cathal Morgan, Sue Eitel, Zhanna Harutyunyan	
TOPIC-SPECIFIC MEETING: HUMAN RESOURCES (TRAINING AND WORKFORCE) (9 NOVEMBER 2022)		
1	Kristina Gyurjyan	Head of the Human Resources Management Department, MoH
2	Gohar Yerimyan	Dean of the Faculty of Postgraduate Education, National Institute of Health (NIH)
3	Nune Ter-Margaryan	Chair of Adaptive Sport and Sport Medicine, Yerevan State Medical University (YSMU)
4	Lusine Poghosyan	Visiting lecturer of the Professional and Continuous Education Center, YSMU, General Physical Medicine and Rehabilitation (PMR) Doctor at Zinvori Tun Rehabilitation Center
4	Gohar Hovyan	Dean of the Faculty of Special and Inclusive Education, Armenian State Pedagogical University (ASPU)
5	Stepan Grigoryan	Chair of Speech and Rehabilitation Therapy, ASPU
6	Gevorg Nalbandyan	Chair of Physical Rehabilitation, Armenian State Institute of Physical Culture and Sport
7	Ara Babloyan	Head of International Center of Professional Development, Chairman of the Board of Directors, Scientific Director of the Arabkir Joint Medical Center and Institute of Child and Adolescent Health
8	Laura Movsisyan	Coordinator of Interdisciplinary Rehabilitation Fellowship, NIH
*	Assessment team: Cathal Morgan, Sue Eitel, Zhanna Harutyunyan	
TOPIC-SPECIFIC MEETING: SERVICE DELIVERY (9 NOVEMBER 2022)		
1	Knar Ghonyan	Head of the Health Care Policy Department, MoH
2	Liana Barseghyan	Head of Inpatient Medical Assistance Policy Division under the Health Care Policy Department, MoH
3	Artyom Petrosyan	Representative of Social and Healthcare Department, Headquarters, Armenian Red Cross Society
4	Gagik Muradyan	General Doctor of Gratsia International Rehabilitation Center of Armenian Red Cross Society
5	Anahit Petrosyan	Advisor to the Minister of Health on Physical and Rehabilitation Treatment
6	Liana Aghajanyan	Advisor to the Minister of Health on Paediatric Rehabilitation
*	Assessment team: Cathal Morgan, Sue Eitel, Zhanna Harutyunyan	
FOCUS GROUP DISCUSSION: PROFESSIONAL SOCIETIES		
1	Anahit Isakhanyan	President of Armenian Association of Clinical Rehabilitators
2	Arman Manukyan	President of Armenian National Federation of Physical and Massage Therapy
3	Hayk Mkrtchyan	President of Armenian Paramedical Association
4	Gayane Hovhannisyan	Member of Armenian Ergotherapists Association
5	Anahit Petrosyan	Advisor to the Minister of Health on Physical and Rehabilitation Treatment
6	Liana Aghajanyan	Advisor to the Minister of Health on Paediatric Rehabilitation
*	Assessment team: Cathal Morgan, Sue Eitel, Zhanna Harutyunyan	

(Continued)

Contd.

NO	NAME	ORGANIZATION
MEETING WITH UNITED NATIONS DEVELOPMENT PROGRAMME (UNDP) (9 NOVEMBER 2022)		
1	Lilit Hovhannisyan	Impact Investment and Fundraising Expert, UNDP Armenia
2	Goharine Avetyan	Programme Associate, UNDP Armenia
*	Assessment team: Cathal Morgan, Sue Eitel, Zhanna Harutyunyan	
POLYCLINIC NO. 8 – PHYSIOTHERAPEUTIC UNIT – SITE VISIT (10 NOVEMBER 2022)		
1	Armine Harutyunyan	Executive Director, Polyclinic No. 8 closed joint-stock company (CJSC), Yerevan
2	Varduhi Hayrapetyan	Physiotherapist Doctor, Polyclinic No. 8 CJSC, Yerevan
3	Shant Grigoryan	Massage Therapist, Polyclinic No. 8 CJSC, Yerevan
*	Assessment team: Cathal Morgan, Sue Eitel, Zhanna Harutyunyan	
SCIENTIFIC RESEARCH INSTITUTE OF SPA TREATMENT AND PHYSICAL MEDICINE – SITE VISIT (10 NOVEMBER 2022)		
1	Armine Hovakimyan	Deputy Director of Scientific Research Institute of Spa Treatment and Physical Medicine
2	Anahit Isakhanyan	Scientific-Educational Coordinator, PMR Doctor, Associate Professor at the Department of Medical Rehabilitation and Physical Therapy, YSMU
3	Karine Maysuryan	Head of Experimental Unit, Natural Medicinal Recourse Research and Ecological Medicine, Scientific Research Institute of Spa Treatment and Physical Medicine
4	Armen Abrahamyan	PMR Doctor, Lecturer at the Department of Medical Rehabilitation and Physical Therapy, YSMU
5	Nune Akunts	Head of Unit of Rehabilitation and Hydrotherapy, Scientific Research Institute of Spa Treatment and Physical Medicine
6	Asbed Kelkhacherian	Physical Therapist
7	Lyudmila Hovhannisyan	Instructor of Exercise Therapy
8	Martiros Harutyunyan	Instructor of Exercise Therapy
*	Assessment team: Cathal Morgan, Sue Eitel, Zhanna Harutyunyan	
INTERORTO GERMAN PROSTHESIS CENTER – SITE VISIT (10 NOVEMBER 2022)		
1.	Artur Petrosyan	Executive Director, Interorto German Prosthesis Center
2	Karen Mnatsakanyan	Prosthetist, Interorto German Prosthesis Center
*	Assessment team: Cathal Morgan, Sue Eitel, Zhanna Harutyunyan	
ARTMED MEDICAL REHABILITATION CENTER CJCS – NEUROREHABILITATION UNIT – SITE VISIT (10 NOVEMBER 2022)		
1	Hayk Abgaryan	Director, Artmed Medical Rehabilitation Center
2	Arayik Gharibyan	Deputy Director for Medical Affairs, Artmed Medical Rehabilitation Center
3	Anna Abgaryan	Deputy Director, Artmed Medical Rehabilitation Center
4	Hakob Atanesyan	PMR Doctor, Head of Neurorehabilitation Department, Artmed Medical Rehabilitation Center
5	Armen Melikyan	Physical Therapist, Rehabilitation Department, Artmed Medical Rehabilitation Center
6	Artur Grigoryan	Physical Therapist, Rehabilitation Department, Artmed Medical Rehabilitation Center
7	Ruzanna Petrosyan	Medical Massage and Occupational Therapist, Rehabilitation Department, Artmed Medical Rehabilitation Center
8	Karine Melkonyan	Senior Nurse, Rehabilitation Department, Artmed Medical Rehabilitation Center
*	Assessment team: Cathal Morgan, Sue Eitel, Zhanna Harutyunyan	

(Continued)

Contd.

NO	NAME	ORGANIZATION
GRATSIA INTERNATIONAL REHABILITATION CENTER OF ARMENIAN RED CROSS SOCIETY LIMITED LIABILITY COMPANY (LLC) – SITE VISIT (11 NOVEMBER 2022)		
1	Gagik Muradyan	General Doctor of Gratsia Rehabilitation Center
2	Narine Zalibekyan	Head of Spine Rehabilitation Department, Gratsia Rehabilitation Center
3	Madlena Arakelova	Clinical Psychologist, Gratsia Rehabilitation Center
4	Gohar Minasyan	Kinesiotherapist
*	Assessment team: Cathal Morgan, Sue Eitel, Zhanna Harutyunyan	
ArBeS HEALTH CARE CENTER, REHABILITATION BRANCH OF ARABKIR JOINT MEDICAL CENTER AND INSTITUTE OF CHILD AND ADOLESCENT HEALTH – SITE VISIT (11 NOVEMBER 2022)		
1	Ara Babloyan	Chairman of the Board of Directors, Scientific Director, Arabkir Joint Medical Center and Institute of Child and Adolescent Health, Paediatric Surgeon – Urologist
2	Gayane Zakaryan	PMR Doctor, Head of Paediatric Rehabilitation Service, ArBeS Health Care Center
3	Irina Tovmasyan	Head of Paediatric Service, ArBeS Health Care Center
4	Liana Aghajanyan	PMR Doctor, Head of Adult Rehabilitation Service, “ArBes Plus” Unit for Adults, ArBes Health Care Center
5	Shushanik Titanyan	Chief Speech Therapist, ArBeS Health Care Center
6	Karine Margaryan	Physical Therapist, ArBeS Health Care Center
7	Anahit Ghukasyan	Physical Therapist, ArBeS Health Care Center
8	Tatevik Nersisyan	Occupational Therapist, ArBeS Health Care Center
9	Ofelya Ghevenyan	Occupational Therapist, ArBeS Health Care Center
10	Nayruhi Mkrtchyan	Special Pedagogue, ArBeS Health Care Center
11	Anahit Voskanyan	Special Pedagogue, ArBeS Health Care Center
*	Assessment team: Cathal Morgan, Sue Eitel, Zhanna Harutyunyan	
ORTEZ PROSTHESIS AND ORTHOSIS CENTER LLC – SITE VISIT (11 NOVEMBER 2022)		
1	Ara Tekyozyan	Executive Director, Ortez Prosthesis and Orthosis Center
2	Liana Aghajanyan	PMR Doctor, Head of Rehabilitation Service, “ArBes Plus”, Advisor to the Minister of Health on Paediatric Rehabilitation
*	Assessment team: Cathal Morgan, Sue Eitel, Zhanna Harutyunyan	
SAINT GREGORY THE ILLUMINATOR MEDICAL CENTER, STATE CJSC – SITE VISIT (11 NOVEMBER 2022)		
1	Petros Manukyan	Deputy Director for Medical Affairs, Saint Gregory the Illuminator Medical Center
2	Avetis Avetisyan	Deputy Director of General Affairs, Saint Gregory the Illuminator Medical Center
3	Zina Lskavyan	Head Nurse, Saint Gregory the Illuminator Medical Center
4	Marieta Tumyans	Quality Management Officer, Saint Gregory the Illuminator Medical Center
5	Ani Petrosyan	PMR Doctor, Saint Gregory the Illuminator Medical Center
6	Tigran Mkrtchyan	Kinesiotherapist, Saint Gregory the Illuminator Medical Center
7	Heghine Petrosyan	Head of Polyclinic under the Saint Gregory the Illuminator Medical Center
8	Marine Tarakhchyan	Deputy Director of Medical Affairs, Polyclinic under the Saint Gregory the Illuminator Medical Center
*	Assessment team: Cathal Morgan, Sue Eitel, Zhanna Harutyunyan	

(Continued)

Contd.

NO	NAME	ORGANIZATION
TOPIC-SPECIFIC MEETING: INFORMATION SYSTEMS (11 NOVEMBER 2022)		
1	Anna Artsruni	Head of the Medical Process Management Division, ArMed National eHealth Operator
*	Assessment team: Cathal Morgan, Sue Eitel, Zhanna Harutyunyan	
FOCUS GROUP DISCUSSION: SERVICE USERS (12 NOVEMBER 2022)		
1	Armen Alaverdyan	Unison, nongovernmental organization (NGO)
2	Sipan Asatryan	Coalition for Inclusive Legal Reforms, NGO
3	Vahan Dishlanyan	Coalition for Inclusive Legal Reforms, NGO
4	Mushegh Hovsepyan	Disability Rights Agenda, NGO
5	Kristine Kirakosyan	Agate Rights Defense Center for Women with Disabilities, NGO
*	Assessment team: Sue Eitel, Zhanna Harutyunyan	
MEETING WITH STATE HEALTH AGENCY (12 NOVEMBER 2022)		
1	Karen Mikayelyan	Deputy Head of State Health Agency, MoH
2	Tatev Minasyan	Project Assistant, WHO Country Office in Armenia
*	Assessment team: Sue Eitel, Zhanna Harutyunyan	
MEETING WITH UNIFIED SOCIAL SERVICE (USS) (14 NOVEMBER 2022)		
1	Ani Chilingaryan	First Deputy Head of USS
*	Assessment Team: Sue Eitel, Zhanna Harutyunyan	
REHABILITATION MATURITY MODEL ASSESSMENT, MoH DEBRIEF WITH SLIDESHOW (14 NOVEMBER 2022)		
1	Liana Barseghyan	Head of Inpatient Medical Assistance Policy Division under the Health Care Policy Department, MoH
2	Anahit Petrosyan	Advisor to the Minister of Health on Physical and Rehabilitation Treatment
3	Liana Aghajanyan	Advisor to the Minister of Health on Paediatric Rehabilitation
*	Assessment team: Cathal Morgan, Sue Eitel, Zhanna Harutyunyan	
MULTISTAKEHOLDER DEBRIEF WITH SLIDESHOW (15 NOVEMBER 2022)		
1	Liana Barseghyan	Head of Inpatient Medical Assistance Policy Division under the Health Care Policy Department, MoH
2	Anahit Petrosyan	Advisor to the Minister of Health on Physical and Rehabilitation Treatment
3	Liana Aghajanyan	Advisor to the Minister of Health on Paediatric Rehabilitation
4	Karen Mikayelyan	Deputy Head of State Health Agency, MoH
5	Artur Kesoyan	Deputy Head of the Equal Opportunities Department, MoLSA
6	Gegham Gevorgyan	Lieutenant Colonel of the Medical Service, Senior Officer of Social-Legal Assistance and Counselling Unit, Department of Social Protection of Servicemen, Ministry of Defence
7	Armen Avetyan	Ministry of Defence
8	Artyom Petrosyan	Representative of Social and Healthcare Department, Headquarters, Armenian Red Cross Society
9	Gagik Muradyan	General Doctor of Gratsia Rehabilitation Center of Armenian Red Cross Society

(Continued)

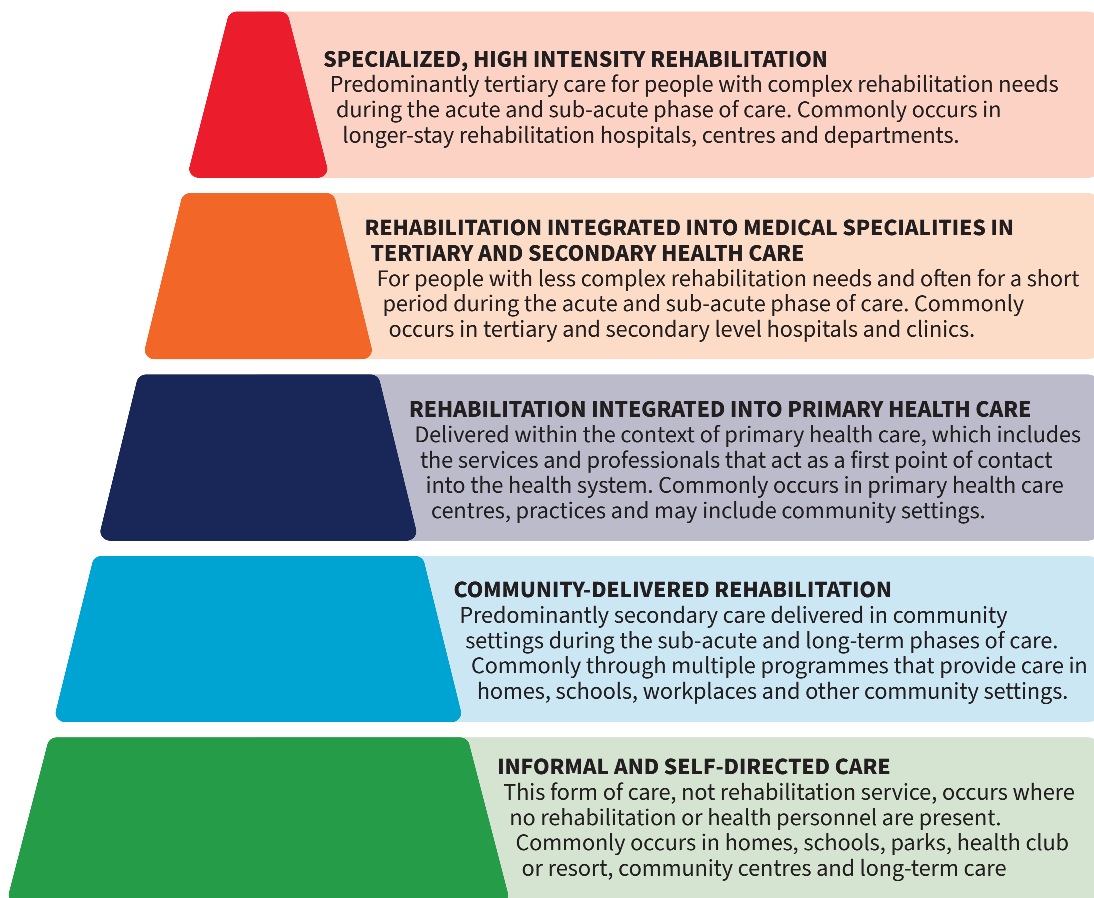
Contd.

NO	NAME	ORGANIZATION
10	Nune Ter-Margaryan	Chair of Adaptive Sport and Sport Medicine, YSMU
11	Lusine Poghosyan	Visiting lecturer of the Professional and Continuous Education Center, YSMU, General PMR Doctor at Zinvori Tun Rehabilitation Center
12	Stepan Grigoryan	Chair of Speech and Rehabilitation Therapy, Armenian State Pedagogical University
13	Armine Harutyunyan	Executive Director, Polyclinic No. 8 CJSC, Yerevan
14	Alvard Poghosyan	Education Specialist, UNICEF Armenia
15	Ara Babloyan	Head of International Center of Professional Development, Chairman of the Board of Directors, Scientific Director of the Arabkir Joint Medical Center and Institute of Child and Adolescent Health
16	Shushan Davtyan	Director of Arabkir United Children's Charity Foundation
17	Laura Movsisyan	Coordinator of Interdisciplinary Rehabilitation Fellowship, NIH
18	Anahit Isakhanyan	President of Armenian Association of Clinical Rehabilitators
19	Arman Manukyan	President of Armenian National Federation of Physical and Massage Therapy
20	Hayk Mkrtchyan	President of Armenian Paramedical Association
21	Gayane Hovhannisyan	Member of Armenian Ergotherapists Association
22	Zaruhi Harutyunyan	Member of Armenian Ergotherapists Association
23	Anush Babayan	President of Armenian Speech Therapists Association
24	Armine Hovakimyan	Deputy Director of Scientific Research Institute of Spa Treatment and Physical Medicine
25	Hakob Atanesyan	PMR Doctor, Head of Neurorehabilitation Department and HEAP Research, Artmed Medical Rehabilitation Center
26	Hayk Abgaryan	Director, Artmed Medical Rehabilitation Center
27	Ara Tekyozyan	Executive Director, Ortez Prosthesis and Orthosis Center
28	Anna Artsruni	Head of the Medical Process Management Division, ArMed National eHealth Operator
29	Avetis Avetisyan	Deputy Director of General Affairs, Saint Gregory the Illuminator Medical Center, Founder and President of National Association of Pain Medicine
30	Ani Petrosyan	PMR Doctor, Saint Gregory the Illuminator Medical Center
31	Armen Alaverdyan	President, Unison, NGO
32	Mushegh Hovsepyan	President, Disability Rights Agenda, NGO
*	Assessment team: Cathal Morgan, Sue Eitel, Zhanna Harutyunyan	

Annex 4. Overview of rehabilitation

Rehabilitation is an essential health service, alongside prevention, promotion, treatment and palliation. The ideal way to ensure that rehabilitation services reach all those who need them is by integrating rehabilitation across all levels of the health system, as part of universal health coverage *(1)*. Rehabilitation covers multiple areas of health and functioning, including physical health, mental health, vision and hearing. Rehabilitation interventions[1] primarily focus on improving the functioning of an individual and reducing disability. Rehabilitation is a highly integrated form of health care, with most rehabilitation delivered within the context of other (not rehabilitation specific) health programmes, for example orthopaedic, neurological, cardiac, mental health and paediatric. Rehabilitation improves people's every day functioning and increases their inclusion and participation in society, by doing so it is an investment in human capital.

Fig. A4.1. Rehabilitation in health framework



Source: WHO *(2)*.

1 Rehabilitation interventions are a form of health intervention. A health intervention is 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, 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.[2] As well as being delivered in health facilities, rehabilitation interventions are delivered in the community, such as in homes, schools and workplaces. Rehabilitation is a highly person-centred form of health care, it is goal orientated (i.e. very individually tailored), time bound and an active rather than passive process. Rehabilitation is most commonly delivered through a multidisciplinary team including therapy personnel, such as physiotherapists, occupational therapists, speech and language therapists, prosthetists and orthotists, psychologists and specialist rehabilitation medicine doctors and nurses. It can also be delivered through appropriately trained community-based rehabilitation personnel and other health personnel.

In this report, as with other WHO documents, the term rehabilitation also includes habilitation.[3] Rehabilitation is for the whole population; this includes people with disabilities as defined by the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD),[4] as well as many others. 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 re-admissions 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, their participation in education, their attainment of a livelihood or their 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 align with the mandate of that ministry.

References

1. Universal health coverage (UHC) (fact sheet). In: World Health Organization [website]. Geneva: World Health Organization; 2021 (http://www.who.int/news-room/fact-sheets/detail/universal-health-coverage-(UHC), accessed 20 August 2022).

2. Rehabilitation in health systems: guide for action. Geneva: World Health Organization; 2019 (https://apps.who.int/iris/handle/10665/325607, accessed 20 August 2022).

2 The Services Framework for Rehabilitation reflects the distribution of rehabilitation required to meet community needs.

3 Article 26 of the United Nations Convention on the Rights of Persons with Disabilities refers to both rehabilitation and habilitation. Habilitation refers to rehabilitation in the context of people who were born with congenital health conditions.

4 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". However, rehabilitation is for all the population, for example people with short-term functioning difficulties, as well and for many people who do not identify as having a disability or are legally acknowledged as disabled by government processes.

Annex 5. Licensed providers of assistive products and technology in Armenia

Organization	Branches in regions	AP types covered by state budget
Achq limited liability company (LLC)	Tavush	Ocular prosthesis
Nor Vorak LLC	Lori	Inguinal hernia support belt Wheelchair Armrest support device Woollen/cotton socks Armpit crutch Bathroom chair Hearing aid (> 65 year olds) Hearing aid earbuds Knee brace Breast exoprosthesis Cane White cane Abdominal belt Prosthesis shoe Reclinator Corset, semi-rigid Corset, soft Walker Orthotic shoes Orthosis Orthopaedic shoes
Planta Sana LLC	Shirak	Inguinal hernia support belt Wheelchair Armrest support device Armpit crutch Bathroom chair Knee brace Breast exoprosthesis Cane White cane Abdominal belt Prosthesis shoe Reclinator Corset, semi-rigid Corset, soft Walker Orthotic shoes Orthosis Orthopaedic shoes
Ortez LLC	Shirak	Inguinal hernia support belt Woollen/cotton socks Stroller Knee brace Abdominal belt Prosthesis shoe Reclinator Corset, semi-rigid Corset, soft Silicone socks Lower-limb prosthesis Upper-limb prosthesis Orthotic shoes Orthopaedic shoes

Organization	Branches in regions	AP types covered by state budget
Barry Trade LLC	Kotayk Shirak Lori	Inguinal hernia support belt Wheelchair Armrest support device Stroller Armpit crutch Bathroom chair Hearing aid (12–64 year olds) Hearing aid (> 65 year olds) Breast exoprosthesis Cane White cane Abdominal belt Reclinator Corset, semi-rigid Corset, soft Lower-limb prosthesis Upper-limb prosthesis Walker Orthotic shoes Orthosis Orthopaedic shoes
Kamar closed joint-stock company (CJSC)	Lori Shirak	Inguinal hernia support belt Wheelchair Armrest support device Woollen/cotton socks Stroller Armpit crutch Bathroom chair Knee brace Breast exoprosthesis Cane Abdominal belt Prosthesis shoe Reclinator Corset, semi-rigid Corset, soft Silicone socks Lower-limb prosthesis Upper-limb prosthesis Small calibre wheelchair Orthotic shoes Orthosis
Danini LLC	Gegharkunik	Wheelchair Armrest support device Armpit crutch Bathroom chair Hearing aid (> 65 year olds) Cane White cane Walker
Full Life – nongovernmental organization (NGO)	Lori	Wheelchair Armrest support device Armpit crutch Cane White cane
Activ Life Group LLC	Lori	Wheelchair

Organization	Branches in regions	AP types covered by state budget
Nano Pro LLC	Lori Tavush	Armrest support device Woollen/cotton socks Armpit crutch Bathroom chair Breast exoprosthesis Cane Prosthesis shoe Silicone socks Lower-limb prosthesis Upper-limb prosthesis Small calibre wheelchair Orthosis
Interorto LLC	Shirak	Woollen/cotton socks Silicone socks Lower-limb prosthesis Upper-limb prosthesis Orthosis
Kind Art LLC	Shirak Lori	Hearing aid (12–64 year olds) Hearing aid (> 65 year olds)
Arabkir Joint Medical Center and Institute of Child and Adolescent Health LLC	Gegharkunik	Hearing aid (12–64 year olds) Hearing aid (> 65 year olds)
Arpha Med LLC	Lori	Hearing aid (12–64 year olds) Hearing aid (> 65 year olds)
SVS-Medical LLC	Syunik	Hearing aid (12–64 year olds) Hearing aid (> 65 year olds)
Lorauri LLC	Syunik Shirak	Hearing aid (12–64 year olds) Hearing aid (> 65 year olds)
International Medical Foundation in Armenia	Shirak	Cochlear implant speech processor parts
Association of the People with Removed Vocal Chords – NGO	Gegharkunik	Sound producing devices and prosthesis
Support to the Injured Soldiers and the Military Cripples – charity NGO	Tavush	Lower-limb prosthesis
Luys Barri LLC	Shirak	Lower-limb prosthesis Upper-limb prosthesis Orthotic shoes Orthosis Orthopaedic shoes
Scientific Center of Traumatology and Orthopaedy CJSC	Lori	Orthosis

Source: Ministry of Labor and Social Affairs *(1)*.

Reference

1. Ministry of Labor and Social Affairs [website] (https://www.mlsa.am/?page_id=10837, accessed 20 August 2022) (in Armenian).

The WHO Regional Office for Europe

The World Health Organization (WHO) is a specialized agency of the United Nations created in 1948 with the primary responsibility for international health matters and public health. The WHO Regional Office for Europe is one of six regional offices throughout the world, each with its own programme geared to the particular health conditions of the countries it serves.

Member States

Albania
Andorra
Armenia
Austria
Azerbaijan
Belarus
Belgium
Bosnia and Herzegovina
Bulgaria
Croatia
Cyprus
Czechia
Denmark
Estonia
Finland
France
Georgia
Germany
Greece
Hungary
Iceland
Ireland
Israel
Italy
Kazakhstan
Kyrgyzstan
Latvia
Lithuania
Luxembourg
Malta
Monaco
Montenegro
Netherlands (Kingdom of the)
North Macedonia
Norway
Poland
Portugal
Republic of Moldova
Romania
Russian Federation
San Marino
Serbia
Slovakia
Slovenia
Spain
Sweden
Switzerland
Tajikistan
Türkiye
Turkmenistan
Ukraine
United Kingdom
Uzbekistan

WHO/EURO:2024-9294-49066-73155

World Health Organization
Country Office in Armenia
United Nations House, P. Adamyan 14,
0010 Yerevan, Armenia
Tel.: +374 60 61 20 04
Email: eurowhoarm@who.int
Website: www.who.int/armenia