World Health Organization

European Region

Rehabilitation workforce in Armenia

Evaluation report

2024–2025

World Health Organization

European Region

Rehabilitation workforce in Armenia

Evaluation report

2024–2025

Abstract

The rehabilitation workforce is essential for optimizing functioning and reducing disability in diverse health settings. Globally, challenges like workforce shortages and uneven distribution hinder effective service delivery. This report evaluates the rehabilitation workforce in Armenia, focusing on seven key professions and collating data to inform policies and practices that improve workforce effectiveness. Conducted using the WHO Guide for Rehabilitation Workforce Evaluation, the assessment includes various data collection methods such as workshops and interviews. Key focus areas for improvement include workforce availability, accessibility, acceptability, and quality. Education for rehabilitation workers in Armenia is advancing, with degree programs available, but issues such as inconsistent terminology and lack of formal recognition remain. This evaluation recognizes the Government's commitment to strengthen the workforce. Detailed findings and recommendations are presented alongside collected data and methodology. By embedding rehabilitation workforce actions within the national strategy and reinforcing advocacy, Armenia can promote synergy across health disciplines, ensure efficient use of resources and build a unified vision for health workforce development – ultimately strengthening health system resilience and responsiveness to evolving population needs.

Keywords

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

Document number:
WHO/EURO:2025-12653-52427-80870 (PDF)
WHO/EURO:2025-12653-52427-80938 (print)

Suggested citation. Rehabilitation workforce in Armenia: evaluation report 2024–2025. Copenhagen: WHO Regional Office for Europe; 2025. Licence: CC BY-NC-SA 3.0 IGO.

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

Contents

Acknowledgements

This evaluation was a joint effort between the Armenian Ministry of Health and WHO.

The document was written by Zhanna Harutyunyan (WHO Country Office in Armenia) and Weronika Krzepkowska (Consultant to the World Health Organization, Geneva, Switzerland, from March 2024 to February 2025) with editorial guidance from Shirin Kiani (WHO Regional Office for Europe) and Maria Ramiro (Consultant to the World Health Organization, Geneva, Switzerland, from February to July 2025).

Peer review was provided by Sulakshana Nandi (WHO Regional Office for Europe).

Special thanks are extended to the members of the Rehabilitation Workforce Task Team, who provided valuable contributions to the evaluation, for clinical psychology Naira Azatyan, Lilit Baghdasaryan, Lusine Babayan, Lilit Karapetyan and Narine Khachatryan; for occupational therapy: Mery Avetisyan, Inessa Harutyunyan and Zaruhi Harutyunyan; for physical and rehabilitation medicine: Liana Aghajanyan, Lala Gevorgyan, Anahit Isakhanyan and Mariam Mkhitaryan; for physiotherapy: Andranik Harutyunyan, Sirun Hayrapetyan, Gevorg Nalbandyan and Armenuhi Poghosyan; for prosthetics and orthotics: Sos Petrosyan, Artak Mkrtchyan and Aram Tokatyan; for social work: Nakhsun Afanesyan, Tatevik Karapetyan, Anna Martirosyen and Margarita Ter-Hovhannisyan; and for speech and language therapy: Anush Babayan, Anna Malkhasyan, Anahit Mayilyan and Emilya Tadevosyan.

Additional thanks go to the representatives of key stakeholders from the Ministry of Education, Science, Culture and Sports and the Ministry of Labour and Social Affairs, who provided data and insight to support this evaluation.

WHO would like to express sincere gratitude to the United States Agency for International Development for its valuable contribution to this evaluation.

Abbreviations

ANQA	National Centre for Professional Education Quality Assurance Foundation
ASIPCS	Armenian State Institute of Physical Culture and Sport
ASPU	Armenian State Pedagogical University named after Khachatur Abovyan
BBP	basic benefits package
COVID-19	coronavirus disease
FTE	full-time equivalent
GDP	gross domestic product
GROWE	Guide for Rehabilitation Workforce Evaluation
PHC	primary health care
RWTT	Rehabilitation Workforce Task Team
YSMU	Yerevan State Medical University after Mkhitar Heratsi
YSU	Yerevan State University

Glossary

Absorption. The employment of workers expressed as the number of workers employed or the proportion of positions that are occupied. Absorption reflects how well demand is met, how effectively services are attracting workers to positions (i.e. whether conditions are perceived as adequate) and the supply of workers (i.e. whether there are sufficient workers to fill job positions), among other factors.

Acceptability. The characteristics and ability of the workforce to treat all patients with dignity, create trust and enable or promote demand for services. Acceptability may take different forms, such as ensuring availability of a same-sex health worker or a worker who understands and speaks the same language as the patient and whose behaviour is respectful according to age, religion or social and cultural values *(1)*.

Accessibility. The equitable distribution of health workers in terms of travel time and transport (spatial accessibility), opening hours and corresponding workforce attendance (temporal accessibility), the infrastructure's attributes (physical accessibility, such as disability-friendly buildings), referral mechanisms (organizational accessibility) and the direct and indirect cost of services, both formal and informal (financial accessibility) *(1)*.

Accreditation (in professional education). The process of evaluation of education programmes against predefined standards or guidelines required for the delivery of education. The outcome of the process is the certification of the suitability of education programmes and of the competence of education institutions in the delivery of education *(2)*.

Attrition. Refers to exits from the workforce for a variety of reasons including migration, voluntary exits (e.g. to other sectors of employment), illness, death or retirement *(3)*.

Availability. The sufficient supply of an appropriate stock of health workers with the relevant competencies and skills mix that corresponds to the health needs of the population *(1)*.

Certification. The official recognition that an individual has met certain qualification requirements *(4)*.

Competency. The observable ability of a person, integrating knowledge, skills, values and beliefs in their performance of tasks. Competencies are durable, trainable and, through the expression of behaviours, measurable *(5)*.

Decent work. Decent work is defined by the International Labour Organization as "the aspirations of people in their working lives. It involves opportunities for work that is productive and delivers a fair income, security in the workplace and social protection for families, better prospects for personal development and social integration, freedom for people to express their concerns organize and participate in the decisions that affect their lives and equality of opportunity and treatment for all women and men" *(6)*.

Demand (for health workers). The demand for health workers corresponds to the number of health workers that a health system can support in terms of positions or economic demand for services. In other words, it reflects the capacity and willingness to pay in the purchasers of health care (e.g. government, private sector firms) which, in turn, drives the demand for employing health workers in public or private hospitals, public health centres and other parts of the health system, including self-employed health workers.

Full-time equivalent employment. Employment defined as the total hours worked divided by the average annual hours worked in a full-time job *(7)*.

Health labour market. The structure that allows services of health workers to be sought (demanded) and offered (supplied) *(4)*.

Performance. The ability to achieve goals through competence, responsiveness, productivity and effectiveness of health workers, in interaction with their environment.

Policy dialogue. The social debate and interaction between stakeholders that leads to translation of general policy principles into strategies and plans *(8)*.

Productivity (technical efficiency). The outputs extracted from given inputs, such as people seen or interventions implemented per worker *(4)*.

Quality. The delivery of a standard of health care determined to be acceptable, desirable and capable of achieving optimal health outcomes.

Regulation (for health workers). The definition of rules that will govern the structure and functioning of education institutions and of service provider organizations and the professional activities of individual health workers *(4)*.

Rehabilitation. Rehabilitation is a set of interventions designed to optimize functioning and reduce disability in individuals with health conditions in interaction with their environment. 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 *(9)*.

Retention (of health workers). Maintenance of health personnel in a specific position or organization, the health sector, region or country *(4)*.

Task sharing. The rational redistribution and sharing of tasks among the health workforce *(4)*.

Working conditions. The environment in which an individual works, including terms of employment, benefits, physical and social climate *(4)*.

References[1]

1. Campbell J, Dussault G, Buchan J, Pozo-Martin F, Guerra Arias M, Leone C et al. A universal truth: no health without a workforce. Geneva: Global Health Workforce Alliance and World Health Organization; 2014 (https://www.who.int/publications/m/item/hrh_universal_truth). Licence: CC BY-NC-SA 3.0 IGO.
2. State of the world's nursing 2020: investing in education, jobs and leadership. Geneva: World Health Organization; 2020 (https://iris.who.int/handle/10665/331677). Licence: CC BY-NC-SA 3.0 IGO.
3. Castro Lopes S, Guerra-Arias M, Buchan J, Pozo-Martin F, Nove A. A rapid review of the rate of attrition from the health workforce. Hum Resour Health. 2017;15:21 (https://doi.org/10.1186/s12960-017-0195-2).
4. Health labour market analysis guidebook. Geneva: World Health Organization; 2021 (https://iris.who.int/handle/10665/348069). Licence: CC BY-NC-SA 3.0 IGO.
5. Rehabilitation competency framework. Geneva: World Health Organization; 2020 (https://iris.who.int/handle/10665/338782). Licence: CC BY-NC-SA 3.0 IGO.
6. Decent work. Geneva: International Labour Organization; 2021 (https://www.ilo.org/global/topics/decent-work/lang--en/index.htm). Licence: CC BY-4.0.
7. National health workforce accounts: a handbook. Geneva: World Health Organization; 2017 (https://iris.who.int/handle/10665/374320). Licence: CC BY-NC-SA 3.0 IGO.
8. Health systems strengthening glossary. Geneva: World Health Organization; 2011 (https://cdn.who.int/media/docs/default-source/documents/health-systems-strengthening-glossary.pdf). Licence: CC BY-NC-SA 3.0 IGO.
9. Rehabilitation in health systems. Geneva: World Health Organization; 2017 (https://iris.who.int/handle/10665/254506). Licence: CC BY-NC-SA 3.0 IGO.

[1] All references were accessed 15 July 2025.

Executive summary

The rehabilitation workforce provides care across all levels of the health system and in various settings. The goal is to optimize a person's functioning and reduce disability by addressing physical, cognitive or sensory impairments and by modifying environments or utilizing assistive products.

Rehabilitation workers are essential to the health system, significantly impacting care quality and service demand *(1)*. For health systems to be truly effective and responsive, they require an appropriate supply and mix of rehabilitation workers, tailored to population health needs and the roles of health, social and education systems. Underinvestment in the rehabilitation workforce comes at a high cost to society: a shortage of rehabilitation workers can result in prolonged hospital stays, preventable readmissions, complications and suboptimal outcomes. In some cases, lack of or insufficient access to rehabilitation workers can lead to unnecessary confinement at home, needless suffering or even premature death *(1,2)*. However, all countries face challenges in the provision of rehabilitation services, such as workforce shortages, uneven distribution and productivity issues, mirroring the broader health and care issues *(3)*. Strengthening the rehabilitation workforce is crucial for achieving universal health coverage and addressing population health needs.

This report details the findings of an evaluation of the rehabilitation workforce in Armenia, with a specific focus on seven occupational groups:[1] clinical psychologists, occupational therapists, physical medicine and rehabilitation doctors, physiotherapists (including physiotherapy, physical therapy and kinesiotherapy), prosthetists and orthotists, social workers and speech and language therapists.

The evaluation sought to gather comprehensive information about the rehabilitation workforce in order to guide policies and practices that will enhance, equip and support the workforce in better addressing the needs of the population.

The evaluation was conducted using the tools and methodologies outlined in the WHO Guide for Rehabilitation Workforce Evaluation *(4)*. The evaluation encompassed a rehabilitation workforce coverage assessment, labour market analysis and competency analysis. The evaluation process involved a combination of desk-based data collection, quantitative data requested from the key participating ministries and institutions, consensus-driven data generation, stakeholder workshops and key informant interviews.

Data were gathered based on the need for availability, accessibility, acceptability and quality of the rehabilitation workforce. Findings were analysed to establish conclusions and recommendations relevant to a broad range of stakeholders. These findings can serve as a basis for the country's national rehabilitation or a broader health workforce action plan.

The education of rehabilitation workers in Armenia is advancing, with bachelor's and master's degree programmes available at universities for most common occupations in the field. Despite inconsistent terminology and a lack of formal recognition of the field within the health-care system generally, unemployment remains relatively low, indicating that the health, education and social sectors effectively absorb the workforce.

While a solid foundation exists, significant challenges remain in addressing workforce shortages, regulation and quality concerns as the need for rehabilitation services grows. The evaluation identified key priority areas for improvement, focusing on workforce availability, accessibility, acceptability and quality.

The evaluation recognized the commitment within the Ministry of Health to strengthen overall human resources for health, including rehabilitation workers across the health-care system. The Ministry of Labour and Social Affairs is also committed to reforms in the rehabilitation workforce, which plays a critical role in providing social services to special groups within the population, such as people with disabilities, older adults

[1] Note that throughout, professions are listed in alphabetical order to avoid hierarchy, in the original report language, English.

and other citizens with long-term care needs. The Ministry of Education, Science, Culture and Sports is primarily focused on enhancing higher education programmes for rehabilitation but also highlights the importance of rehabilitation workers in the general education system to support the inclusion and participation of children with special needs.

The evaluation highlighted the need to establish a systematic approach to collecting and compiling rehabilitation data for effective monitoring and assessment. It also underscored the importance of expanding recognition of the rehabilitation workforce within health care and clearly defining their education pathways and scope of practice. Detailed evaluation results and recommended actions are presented further in the report.

Key strengths

Armenia demonstrates strong Government commitment to rehabilitation workforce development, with active and coordinated support from the Ministry of Health, the Ministry of Education, Science, Culture and Sports and the Ministry of Labour and Social Affairs. These ministries are jointly developing a national strategy and action plan on rehabilitation and assistive technology for 2025–2030.

New Ministry of Health regulations defining rehabilitation specializations further highlight the Ministry's leadership and dedication to formalizing and strengthening the professional landscape. These efforts mark an important step towards building a competent, well-regulated rehabilitation workforce aligned with international standards and capable of meeting the growing needs of the population. The Armenian rehabilitation workforce is increasingly adopting evidence-informed practices and gaining recognition as an integral part of the health-care system. Leadership from physical medicine and rehabilitation doctors, active professional associations with international ties and targeted outreach initiatives all contribute to a relatively high employment rate, including in remote areas.

Main challenges

Despite progress, several challenges remain. Inconsistent terminology and lack of formal recognition hinder workforce planning and regulation. Rehabilitation workers are unevenly distributed, heavily concentrated in Yerevan, with limited integration into primary care. Public and professional understanding of rehabilitation roles remains limited, affecting service acceptability. Education and training pathways vary widely, leading to inconsistent competencies. Research, management and use of clinical guidelines remain underdeveloped.

Recommended actions

Strengthening recognition and capacity

- Integrate the draft action plan on rehabilitation and assistive technology into Armenia's broader health workforce strategy.
- Establish clear terminology and formal recognition of rehabilitation professions through inclusion in official registers and workforce data systems.
- Standardize education pathways, introduce continuing professional development and enhance leadership and management capacity.
- Promote interprofessional collaboration, raise awareness among health professionals and service users and strengthen professional identities through associations.
- Establish a multistakeholder team to guide workforce development and advocacy.

Attracting and retaining talent

- Combat stigma against rehabilitation occupations by promoting awareness in educational settings, engaging professional associations and ensuring early exposure to rehabilitation roles in medical and allied health training.
- Improve the visibility of rehabilitation occupations in medical and nonmedical educational institutions through advocacy and engagement. Track graduate employment trends and create structured career pathways, particularly within primary health care.
- Expand access to internships and mentorships. Introduce financial and nonfinancial incentives, including rural-focused strategies, to enhance job attractiveness and retention and ensure equitable workforce distribution across the country.

Organizing and regulating the rehabilitation workforce

- Implement a national licensing system and establish entry and training standards aligned with international benchmarks.
- Develop standardized practice guidelines defining roles and competencies. Improve rural access by applying targeted placement strategies and expanding the use of tele-health solutions.

Enabling a sustainable rehabilitation workforce

- Empower professional associations to lead in advocacy, guideline development and public engagement. Update service lists to reflect evidence-informed practices and invest in continuing education, research capacity and management skills.
- Promote understanding and trust in rehabilitation across the broader health-care system, strengthening interdisciplinary collaboration and referral networks.

References[1]

1. Araujo EC, Evans TG, Maeda A. Using economic analysis in health workforce policy-making. Oxford Rev Econ Policy. 2016;32*(1)*:41–63 (http://dx.doi.org/10.1093/oxrep/grw001).
2. Mills J-A, Marks E, Reynolds T, Cieza A, Jamison DT, Gelband H et al. Rehabilitation: essential along the continuum of care. In: Jamison DT, Gelband H, Horton S, Jha P, Laxminarayan R, Mock CN. Nugent R, editors. Disease control priorities: improving health and reducing poverty (3rd edition). Washington, DC: World Bank; 2017. Licence: CC BY-4.0.
3. Health and care workforce in Europe: time to act [news release]. World Health Organization; 14 September 2022 (https://iris.who.int/handle/10665/362379). Licence: CC BY-NC-SA 3.0 IGO.
4. Guide for rehabilitation workforce evaluation. Geneva: World Health Organization; 2023 (https://iris.who.int/handle/10665/369346). Licence: CC BY-NC-SA 3.0 IGO.

[1] All references were accessed 15 July 2025.

1. Introduction

The Ministry of Health is committed to advancing comprehensive health reforms that pave the way towards universal health coverage *(1,3)*. In line with World Health Assembly resolution WHA76.6, Strengthening rehabilitation in health systems, adopted in May 2023 *(4)*, these efforts should be further strengthened within the country's health system. Within this broader agenda, the Ministry is actively steering development of the rehabilitation sector to align with national health priorities *(5)*.

Several situational assessments have been conducted regarding rehabilitation, assistive technologies and population needs.

- A situation assessment of rehabilitation in Armenia was conducted in 2022. It included the analysis of the rehabilitation system, including governance, financing, infrastructure, services and health information systems *(6)*.
- A national rehabilitation and assistive technology strategy and associated action plan started development in 2023 and 2024. This is under ongoing development and review by a technical interministerial and multistakeholder working group with the support of WHO. The strategy was aligned with country priorities and the Rehabilitation 2030 global initiative *(7)*.

One of the main conclusions of the situation assessment was to "clarify all aspects of the rehabilitation and assistive technology workforce". Accordingly, the WHO Guide for Rehabilitation Workforce Evaluation (GROWE) was used "to gain a deeper understanding of the existing situation and gaps related to the rehabilitation workforce in Armenia".

The GROWE is a guide to assist countries to systematically evaluate the different elements and factors underpinning the rehabilitation workforce. An evaluation encompasses the rehabilitation needs of the population, the rehabilitation workforce availability and accessibility, scopes of practice and quality of care, all within the structure and functions of the health system *(8)*.

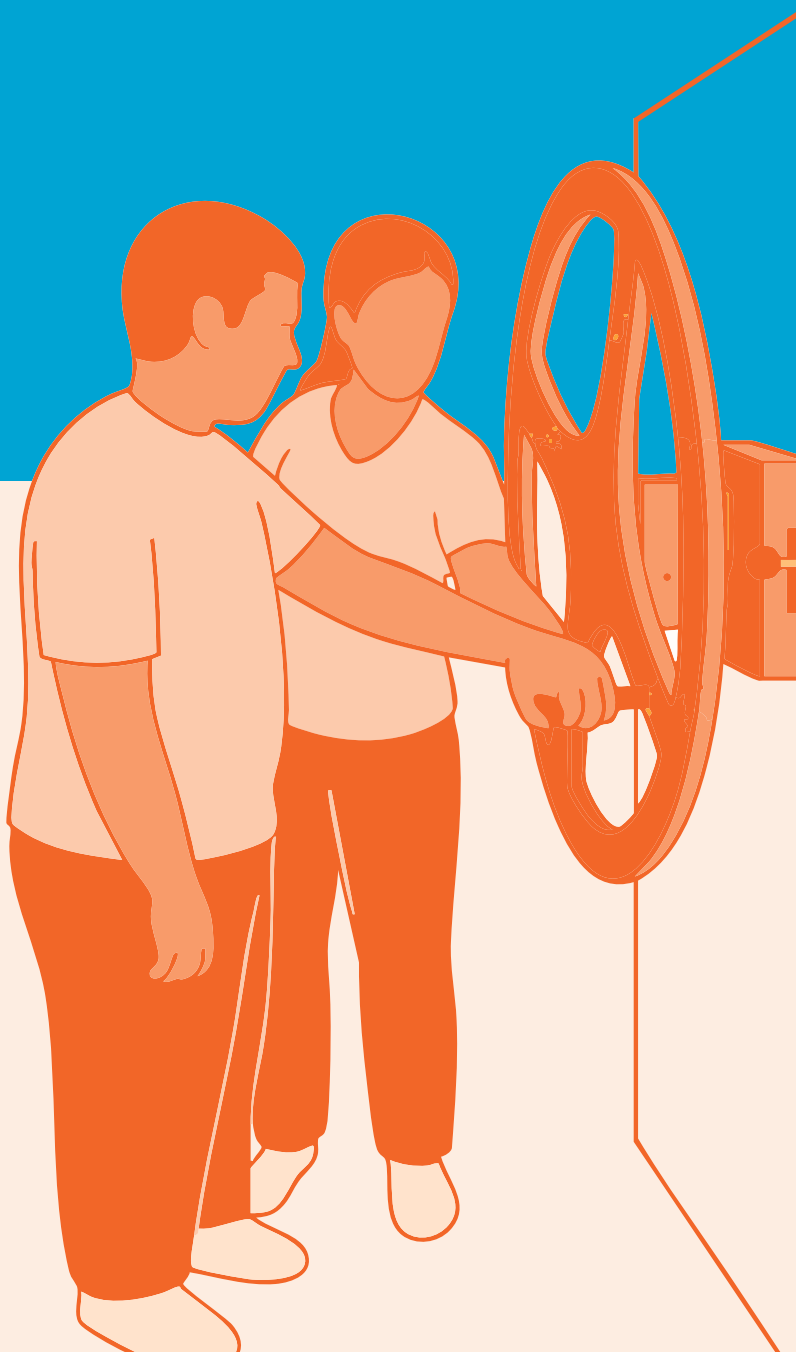
1.1 Objectives of this report

The Ministry of Health decided to implement GROWE in Armenia with the following objectives.

- To ascertain the state of the rehabilitation workforce, including its strengths, weaknesses and underlying factors.
- To identify recommendations for strengthening the rehabilitation workforce to ensure that it is equipped and able to meet the current and emerging rehabilitation needs of the population.
- To guide the development of actions that serve to implement the recommendations included in this report, aligned with overall reforms on human resources for health and integrated into the national health-care strategy.

This evaluation was conducted with the collaboration of the Ministry of Health, Ministry of Education, Science, Culture and Sports and the Ministry of Labour and Social Affairs and with the support of the WHO Regional Office for Europe and the WHO Country Office in Armenia.

2. Methodology



This report was conducted from October 2024 (commencement of evaluation) to February 2025 (establishment of recommendations and conclusions) and followed GROWE methodology *(8)*. The steps and details are described below.

2.1 Scope of the evaluation

The evaluation includes the following occupations, which are listed in alphabetical order to avoid hierarchy, based on the original report language of English.

The term physiotherapy is used throughout to include physiotherapy, physical therapy and kinesiotherapy:

- clinical psychologists *(9)*
- occupational therapists *(10)*
- physical medicine and rehabilitation doctors *(11)*
- physiotherapists *(12,13)*
- prosthetists and orthotists *(14,15)*
- social workers *(16,17)*
- speech and language therapists *(18)*.

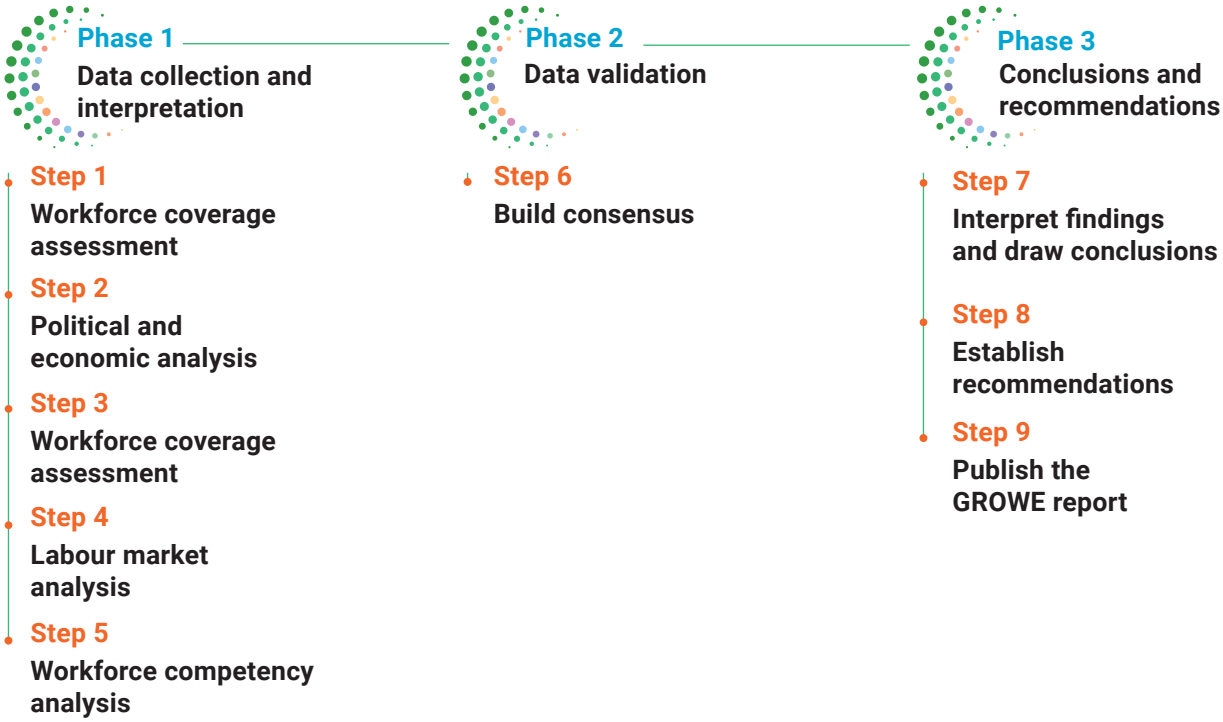
These occupations were selected because their primary objective is rehabilitation of the population. Therefore, occupations that engage in rehabilitation activities as a secondary function have been excluded from the assessment (for example; audiologists, optometrists, nurses, typhlo-pedagogues and other health-care workers).

The evaluation was implemented at national level, without any geographical, administrative or health level limitations.

2.2 Process

The evaluation process incorporated desk-based data collection, quantitative data requested from the key ministries and institutions, consensus-based data generation, stakeholder workshops and key informant interviews. By utilizing both qualitative and quantitative data, an evaluation can provide a more comprehensive understanding of the current standing and situation of the rehabilitation workforce, as well as the underlying factors contributing to this. Transitioning from data collection to the publication of the report involved three phases, which together consist of nine steps (Fig. 1).

Fig. 1. Overview of the nine-step process used in the evaluation



Source: WHO *(19)*.

2.3 Stakeholder engagement and participation

The evaluation was highly participatory, drawing on the input of stakeholders from the health, social, education and labour sectors. These stakeholders were identified by the Ministry of Health and the WHO Country Office in Armenia and comprised rehabilitation workers from the various occupational groups included in the evaluation and representatives from Government ministries, national professional associations and educational institutions, with representatives from each profession selected from professional societies, academic institutions, clinical settings and social care services.

Rehabilitation workers from the occupational groups included in the evaluation were assembled into the Rehabilitation Workforce Task Team (RWTT). The RWTT comprised between three and five members from each occupation, whose role was to provide information on the rehabilitation workforce; participate in analysis exercises; contribute to data identification, validation and interpretation; draw conclusions and draft recommendations.

This evaluation is the result of a collaborative effort between the RWTT and the Ministry of Health, the Ministry of Education, Science, Culture and Sports, the Ministry of Labour and Social Affairs and WHO.

Stakeholders were engaged through the mechanisms listed below.

- An initial in-country briefing to launch the GROWE methodology was held.
- Several workshops were used to inform stakeholders, collect data, raise issues of concern and hold discussions. A validation workshop with the RWTT was conducted to discuss preliminary findings, draw conclusions and draft recommended actions.
- Group analysis exercises were conducted by the RWTT.
- Key informant interviews were held to garner the input of relevant experts.
- Peer reviews of drafts of this report were sought from all stakeholders.

RWTT members, along with all contributors to the evaluation, are listed in Acknowledgements.

2.4 Data collection

Date and information were gathered in order to perform assessments of the coverage provided by the current rehabilitation workforce, the needs of the population for rehabilitation services, and analysis of the status of the labour market and the competency of the rehabilitation workforce The processes for these are detailed in the following sections.

2.4.1 Workforce coverage assessment

Effective coverage is defined in terms of the availability and accessibility of a workforce to the populations that need it and, further, that the workforce delivers quality and appropriate care according to those needs. This assessment allocated scores for workforce performance for the broad category definitions of availability, accessibility, acceptability and quality of each occupation (Annex 1) and for a range of factors contributing to this performance (Annex 2). Scores for both dimensions and factors range from 1 to 4, indicating the status of each occupation within the rehabilitation workforce:

1 **Weak:** needs establishment

2 **Emerging:** needs major strengthening

3 **Moderate:** needs minor strengthening

4 **Strong:** needs no immediate action.

The results of the workforce coverage assessment provided information on the relative strengths of each profession within the workforce and the areas that require further attention.

The **availability** of the rehabilitation workforce refers to the number of workers that are currently employed within rehabilitation services and therefore available to provide care. This is influenced by supply and demand for workers from the labour market and by the efficiency of workers' performance; that is, the productivity of the workforce and how much can be achieved with a given capacity *(20)*.

Supply, demand, absorption and efficiency all interact dynamically to shape the availability of the rehabilitation workforce. There are a range of factors that underpin these variables, influencing a country's ability to build, attract and retain workers (Annexes 3–5). These are often interconnected and codependent. It is, therefore, necessary to take a broad view of these factors and consider the relationships between factors and the positive or negative impact these have on availability.

Accessibility refers to the equitable distribution of health workers in terms of several dimensions:

- distance (spatial accessibility)
- opening hours (temporal accessibility)
- infrastructure attributes (physical accessibility)
- referral mechanisms (organizational accessibility)
- cost of services (financial accessibility).

Acceptability defines the characteristics and ability of a workforce:

- to treat all patients with dignity;
- to create trust; and
- to enable or promote demand for services in relation to a range of factors such as sex, language, religion and social and cultural values.

The **demographic compatibility** of a workforce with the population and how rehabilitation workers are perceived by the public and other health workers broadly shape workforce acceptability, and can determine the extent to which a population is aware of, seeks and utilizes the services provided.

Quality refers to the delivery of a standard of rehabilitation determined to be acceptable, desirable and capable of achieving optimal functioning outcomes. Among other factors, quality is shaped by the competency of a workforce and its performance. **Competence** considers the ability of a worker, based on their knowledge, skills and behaviours, to carry out their tasks and **performance** considers the ability to work safely, effectively and efficiently, which is determined by broader factors such as motivation, individual and team practices and work environment factors.

2.4.2 Population needs assessment

Demographic and epidemiological trends in Armenia highlight a significant demand for rehabilitation workers, particularly to address the needs of individuals with disabilities, who are at greater risk of exclusion, discrimination and human rights violations.

The following exercise determines how many workers are needed to provide effective rehabilitation, based on the number of individuals who require rehabilitation in a given population. It uses a sample of 24 health conditions that have been found to be associated with the majority of rehabilitation needs in populations, selected because they present a wide range of impairments that require a comparably diverse set of rehabilitation competencies.

The 24 selected health conditions are as follows:

- cancer
- acute myocardial infarction
- heart failure
- chronic obstructive pulmonary disease
- autism spectrum disorders
- neural tube defects
- developmental intellectual disability
- cerebral palsy
- schizophrenia
- hearing loss
- Guillain-Barré syndrome
- motor neuron disease
- multiple sclerosis
- Parkinson disease

- spinal cord injury
- Alzheimer disease and dementia
- traumatic brain injury
- cerebrovascular disease (stroke)
- rheumatoid arthritis
- amputation
- osteoarthritis
- fractures
- neck pain
- low back pain

For this evaluation, the RWTT calculated the time required to address the rehabilitation needs associated with those health conditions. The results are expressed as the number of full-time equivalent (FTE) workers required in each profession. The steps to calculate the FTE are as follows:

1. Establish the population size of Armenia using United Nations data *(21)*.
2. Determine the prevalence/incidence (as appropriate) of each health condition. Data for this step were arrived at following joint work between the Institute For Health Metrics and Evaluation and the WHO Rehabilitation Programme that is not available online.
3. Ascertain the proportion of people that would need rehabilitation for each health condition.
4. Calculate the time required to provide rehabilitation to a person within a year for each health condition.
5. Estimate the additional nonclinical time required (such as time for administration, teaching, learning and research) within a year.
6. Finally, use a formula to derive the FTE, on the assumption that FTE equals 8 hours a day, 5 days a week, for 46 weeks a year, which equates to 1840 worker-hours.

The formula to calculate FTE is:

$$\text{FTE} = \frac{\text{Total annual clinical time (in hours)}}{\text{1840 hours} - \text{total annual nonclinical time (in hours)}}$$

The findings of this needs analysis serve as an indicator of Armenia's current capacity to address rehabilitation needs at the population level and should inform future decisions regarding investments in rehabilitation positions across health and other sectors.

RWTT members were asked to consider the broader context of the Armenian health system and service delivery models when generating estimates. Even taking this into consideration, data should be interpreted very carefully due to the following methodological characteristics.

- The team that carried out the needs analysis was made up of workers from each occupational group. While efforts were made to ensure that the sample was diverse in terms of professional backgrounds, there is a risk that participants may not have been able to accurately estimate the time required to address the rehabilitation needs associated with all health conditions and settings, which would depend on their familiarity with the topic.
- The needs analysis is based only on the time needed to provide rehabilitation for a sample of proxy health conditions (conditions such as long-COVID following coronavirus disease (COVID-19)), for example, were not included). This means that results may suffer from an underestimation of the real needs.
- Estimates were generated even where no rehabilitation services for a given health condition currently exist in the country or a given occupational group does not provide such services in Armenia.

2.4.3 Labour market analysis

The labour market analysis focused on the **supply, demand** and **absorption** of rehabilitation workers in both the public and private sectors and how these factors work together dynamically to influence the effective coverage of the rehabilitation workforce.

Supply pertains to the number of rehabilitation workers available and willing to work, regardless of their current employment status (often referred to as a pool of workers). This report includes an analysis of factors influencing worker supply, including assessment of the education sector as the primary source of supply, as well as the other inflows and outflows of workers and the various so-called push and pull factors driving these.

Demand refers to the number of rehabilitation job positions available in both the public and private sectors, and is generally expressed as the equivalent number of FTE positions. These positions may or may not end up being filled, but the number reflects the perceived need for rehabilitation workers and how much such workers are valued and sought after.

Absorption refers to the level of employment of workers in rehabilitation positions, expressed as the number of workers employed out of the total number of available positions, or the proportion of positions that are occupied.

2.4.4 Workforce competency analysis

This analysis reviewed the rehabilitation workforce from the perspective of the level of workers' performance and the quality of care evident in the tasks they deliver. Data on workforce competency were arrived at by consensus among the members of the RWTT.

The profiling and assessment of proficiency takes the form of an evaluation of the performance level of each occupational group in a range of domains related to the delivery of rehabilitation, including practice, professionalism, learning and development, management and leadership and research.

- **Practice** refers to competencies and activities relating to interactions between the rehabilitation worker and the patient.
- **Professionalism** is concerned with the professional integrity, collaboration, safety and quality of care that enable the performance of a professional role.

- **Learning and development** relates to the professional development of rehabilitation workers themselves and how they support the professional development of others.
- **Management and leadership** is concerned with teamwork, strategic thinking, management, service development and evaluation, and resource management.
- The final domain, **research**, represents evaluation of the generation, dissemination and integration of rehabilitation research.

Each occupational group was evaluated for each of these domains and assigned proportionately to four levels of proficiency based on: (i) the level of autonomy in decision-making, (ii) the complexity of tasks undertaken, and (iii) the overall depth of knowledge and skills (Annex 6). The RWTT was asked to state what proportion of their occupational group aligned with each proficiency level across each of the five domains. In this way, data generated by the proficiency analysis highlighted strengths and weaknesses, providing valuable insights into areas that require further focus and action.

A task mapping exercise was completed to determine which occupations deliver key rehabilitation assessments and interventions (including provision of assistive products and pharmacological agents) for a range of health conditions. Task mapping can reveal overlaps or gaps in the performance of the rehabilitation workforce, helping to identify targeted actions that can enhance services. A gap in the delivery of a rehabilitation assessment or intervention is considered to exist when it is not being delivered by any occupational group, if only a small proportion of the occupational group feel confident in delivering the task, or if the task can only be delivered by an occupational group that has very limited availability in the country.

2.4.5 Projections

The GROWE includes an exercise in which projections are generated and a strategy impact analysis used to determine the influence of various degrees of change on workforce supply, demand and employment absorption. These projections cover 5-year intervals for an overall period of up to 20 years, with the option to simulate workforce production, immigration, migration and attrition.

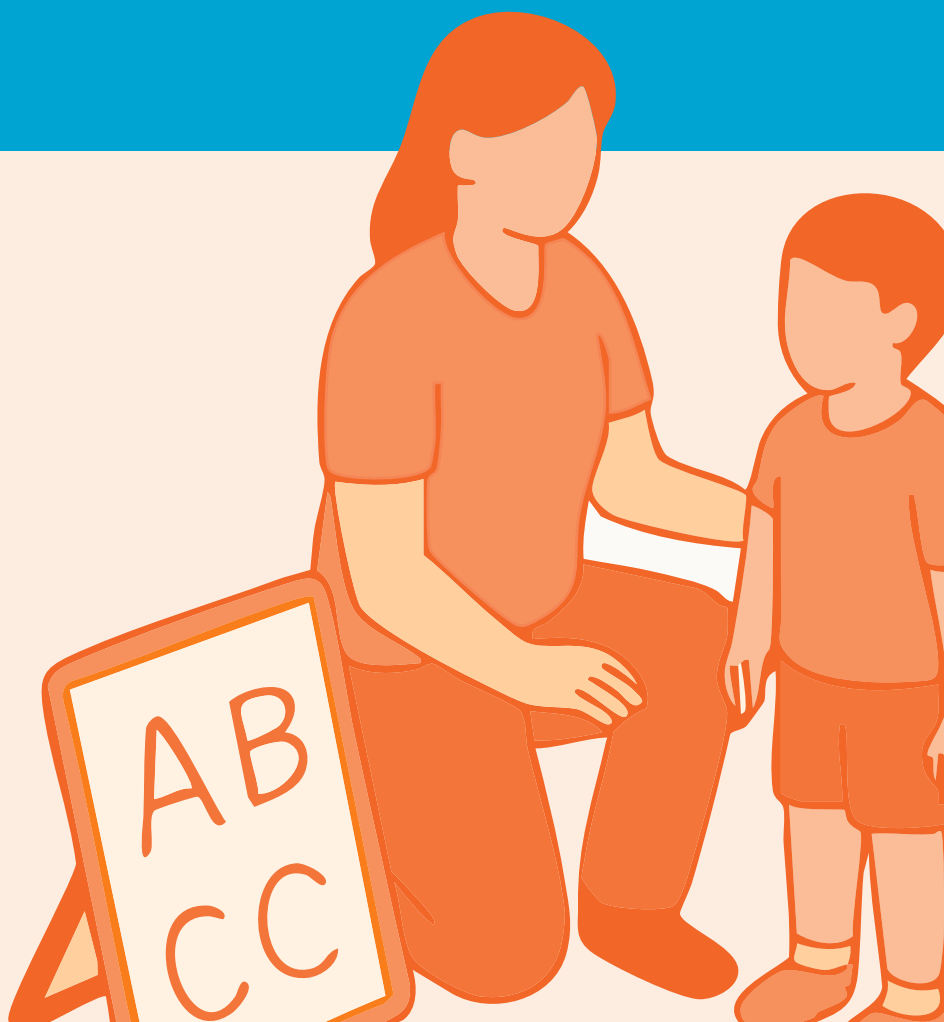
This exercise was not completed, and so workforce projections and an impact analysis for Armenia were not generated because of a lack of requisite data on workforce production, immigration, migration and other inflows and outflows necessary for these calculations.

2.5 Data validation

While reliable sources of data were always sought, disparities between sources were unavoidable, particularly when the source of data was direct reporting from RWTT members. These disparities were anticipated, given that only a very limited amount of information about the rehabilitation workforce is routinely collected and reported.

The data validation process involved presenting the key findings in the context of a workshop and through both a review of this report and identifying and discussing potential inaccuracies, with the view to establishing a consensus on the most accurate figures and results.

3. Armenia: country profile



3.1 Overview of rehabilitation in Armenia

Rehabilitation is defined as "a set of interventions designed to optimize functioning and reduce disability in individuals with health conditions in interaction with their environment" *(22)*. It is a core component of health care, along with health promotion, prevention, treatment and palliation. Rehabilitation is generally required right across the continuum of care, from acute care to the long term, and is delivered through all health-care levels (primary to tertiary) and community settings, including homes, schools and workplaces *(23)*. Rehabilitation serves to facilitate recovery, prevent complications, reduce readmissions and optimize outcomes to enable people to have the best possible quality of life, including through participation in education, employment and community life.

Similarly to other Member States from the WHO European Region, Armenia faces significant workforce challenges in the health-care and care sectors, including insufficient recruitment in primary health care (PHC), rehabilitation and mental health services; high turnover due to stress and burnout; and difficulties attracting workers to underserved areas. Skill mismatches, inefficient work organization and inadequate investment in workforce development all act to further hinder health-care service provision *(24)*.

In Armenia, the development of rehabilitation services has been shaped by the country's history of wars and natural disasters. International responses to these crises have largely focused on humanitarian aid, addressing both the immediate and the long-term needs of those affected. Foreign investments have helped to introduce modern rehabilitation practices; however, the country still relies heavily on treatment methods which lack clear evidence of their effectiveness *(6)*.

Rehabilitation in Armenia continues to be largely associated with disability, and access to services is often limited to individuals who are officially registered as having a disability. Despite this, overall awareness and understanding of contemporary rehabilitation approaches is gradually increasing. A few specialized centres in Yerevan exemplify high standards of care and serve as models of excellence *(6)*.

In recent years, Armenia has made notable progress in the field of rehabilitation, supported by Government-led reforms. Key initiatives include the restructuring of disability determination in May 2021 *(25)*, the modernization of the national digital health system (ArMed) *(26)*, the establishment of the Unified Social Service in 2021 *(27)* and increased investment in assistive technology policies and practices *(28)*. These measures collectively lay the foundation for further advancements in rehabilitation services across the country.

3.2 The rehabilitation workforce in Armenia

Rehabilitation workers play a central role in the health system. They strongly impact the quality and effectiveness of health care and drive demand for services *(29)*. The rehabilitation workforce is an essential, specialized subset within the broader health workforce. Both the health and the rehabilitation workforces share the common goal of enhancing patient health and quality of life, but may differ in approach, focus and expertise. They are inclusive in their collaboration, but exclusive in their specialized training and functional restoration roles.

Some rehabilitation workers are employed in positions outwith the health system proper, such as long-term care facilities, vocational activity centres, wellness and sporting clubs or educational settings. These workers still play an important role in overall health care; for example, in educational settings, rehabilitation workers assist children with health conditions, such as autism spectrum disorder, intellectual disabilities or cerebral palsy, to enhance their functioning and maximize their participation in social and learning activities.

Armenia's rehabilitation workforce faces several challenges. The country does not yet have a well-established multidisciplinary rehabilitation workforce. While various rehabilitation specialties exist, many professions are still not formally recognized within the health-care system. For example, occupational therapists, physiotherapists and speech and language therapists are categorized as paramedical workers and their roles are neither fully acknowledged nor consistently regulated across the health sector *(30)*. In the case of physiotherapists, ongoing reforms in PHC represent an opportunity to define and potentially expand the role at this level, as well as clarifying whether they will continue to provide legacy services such as electrotherapy and other passive modalities, or whether such services will be discontinued or reformed in accordance with modern understanding, in order to continue to provide appropriate services to the population.

An additional issue faced in terms of integration into the wider health-care community is that the medical terminology in common use is inconsistent and outdated and does not align with modern standards *(6)*.

3.3 Demographic and health trends in Armenia

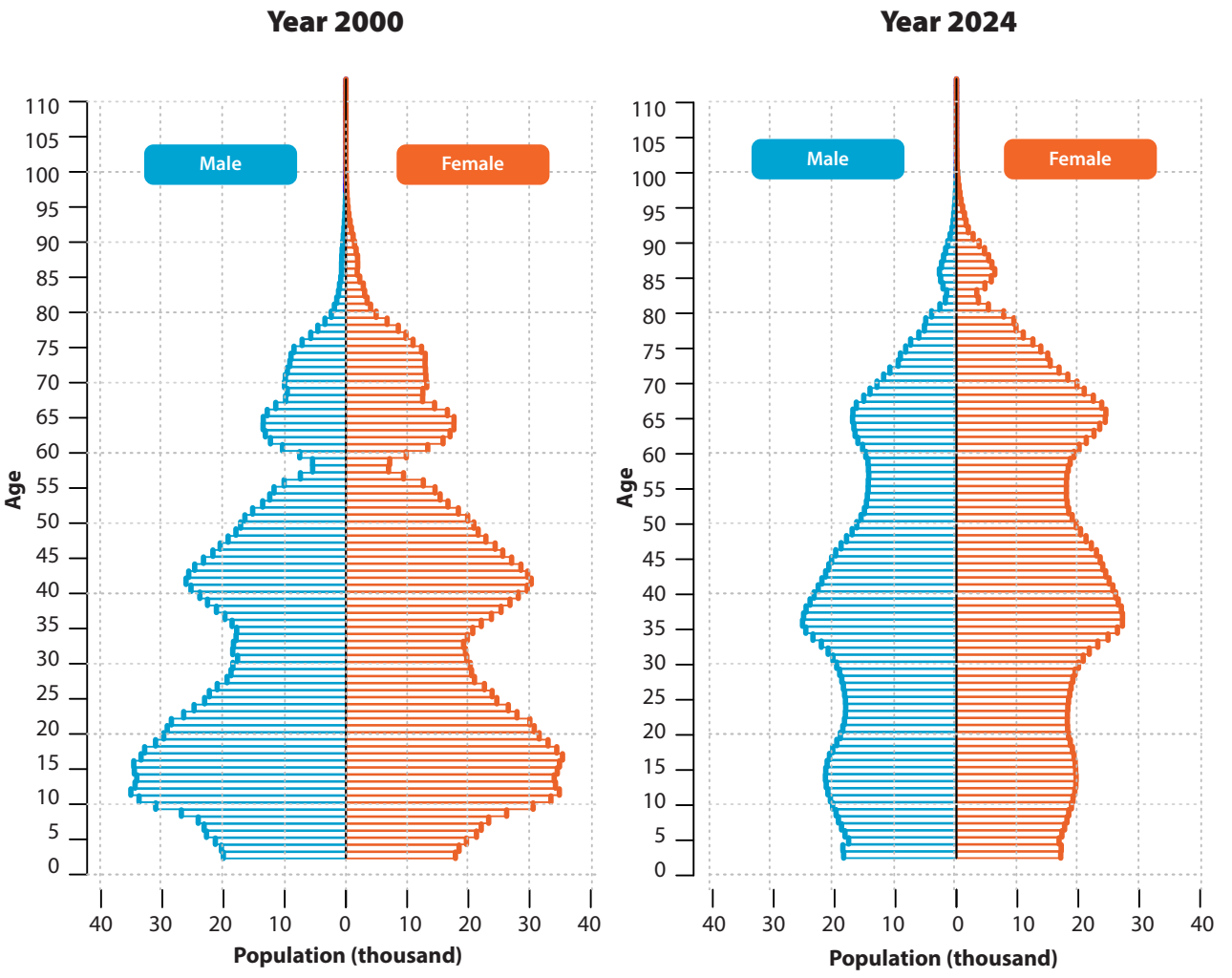
3.3.1 Population size and demographics

The population of Armenia was 2 991 201 on 1 January 2024, with a population density of 104.3/km^2. Approximately 36% of Armenia's population reside in rural areas, while over 64% live in urban settings, with 35% of these concentrated in the capital *(31,32)*.

The male-to-female ratio in Armenia is 82:100. The demographic profile is skewed towards the middle-aged, with over half of its citizens falling within the 25–64 years bracket. The evolution of Armenia's population structure between 2000 and 2024 exhibited a clear shift from a broad-based pyramid, typical of a young society, to a more cylindrical shape, reflecting an older population (Fig. 2).

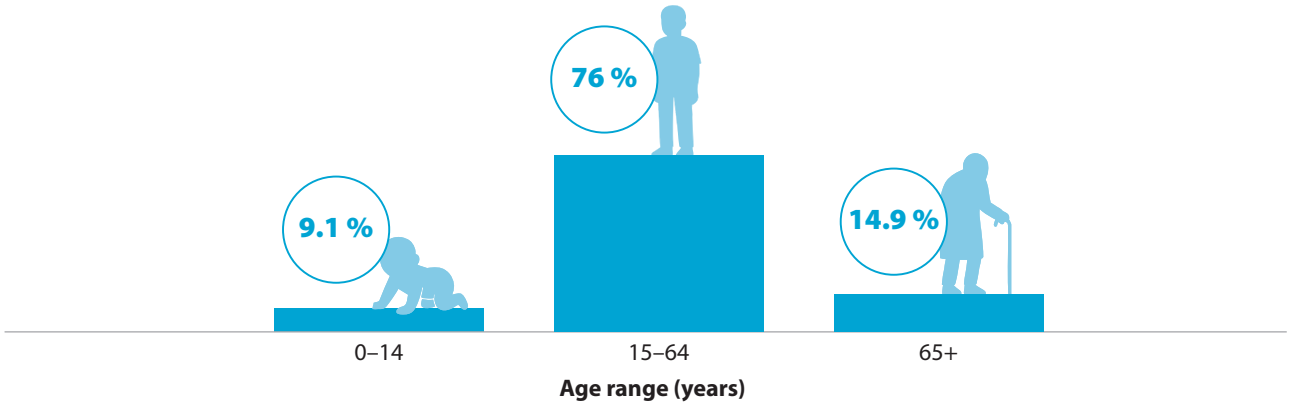
With nearly 15% of the population aged 65 years and over in 2024 (Fig. 3), Armenia falls within the United Nations definition of an aged country *(33)*. As population growth slows and the proportion of older adults continues to rise, there is an increasing need to prepare the existing health and social workforce to meet the care demands of ageing populations over time.

Fig. 2. Armenia: population pyramid



Source: United Nations Department of Economic and Social Affairs *(21)*.

Fig. 3. Armenian population age distribution, 2023

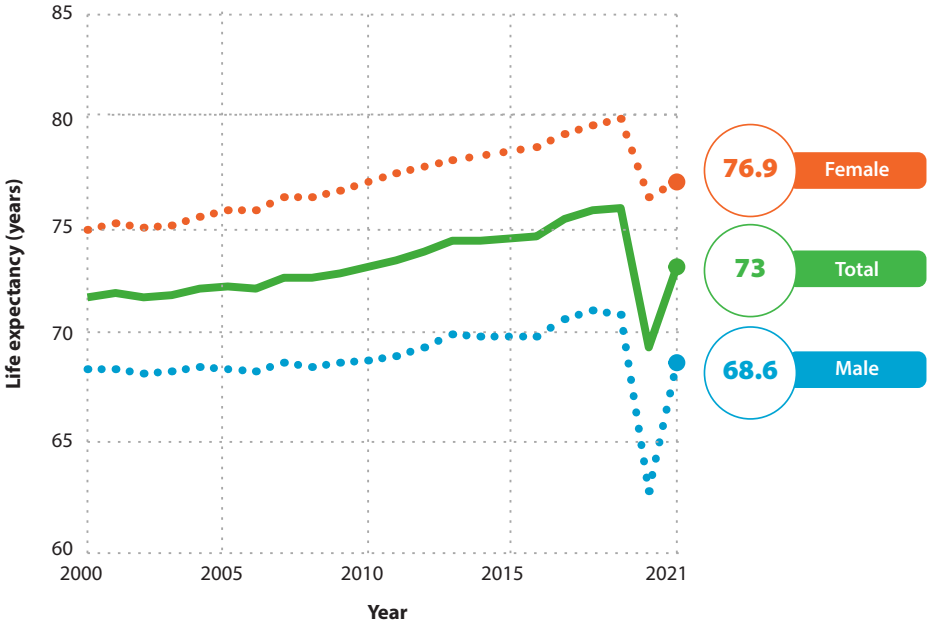


Source: WHO *(34)*.

3.3.2 Health trends

Life expectancy at birth has been slowly increasing in Armenia since 2000 (Fig. 4). In 2021 it was 73 years – 68.6 for men and 76.9 for women *(34)*.

Fig. 4. Life expectancy at birth in Armenia, 2000–2021



Source: WHO *(34)*.

The leading causes of death in Armenia in 2021 were ischaemic heart disease, COVID-19, stroke and lung cancer. Noncommunicable diseases account for approximately 93% of all deaths in the country, a figure notably higher than the global average of 71% *(35)*.

The high prevalence of noncommunicable diseases has substantial implications for the rehabilitation workforce, given that a significant proportion of individuals with noncommunicable diseases experience impairment in functional domains such as mobility, respiratory capacity, cognition and mental health as well as almost all other aspects of daily living. These functional limitations highlight the increasing need for integrated and comprehensive rehabilitation services within health systems.

3.4 Economic and policy context

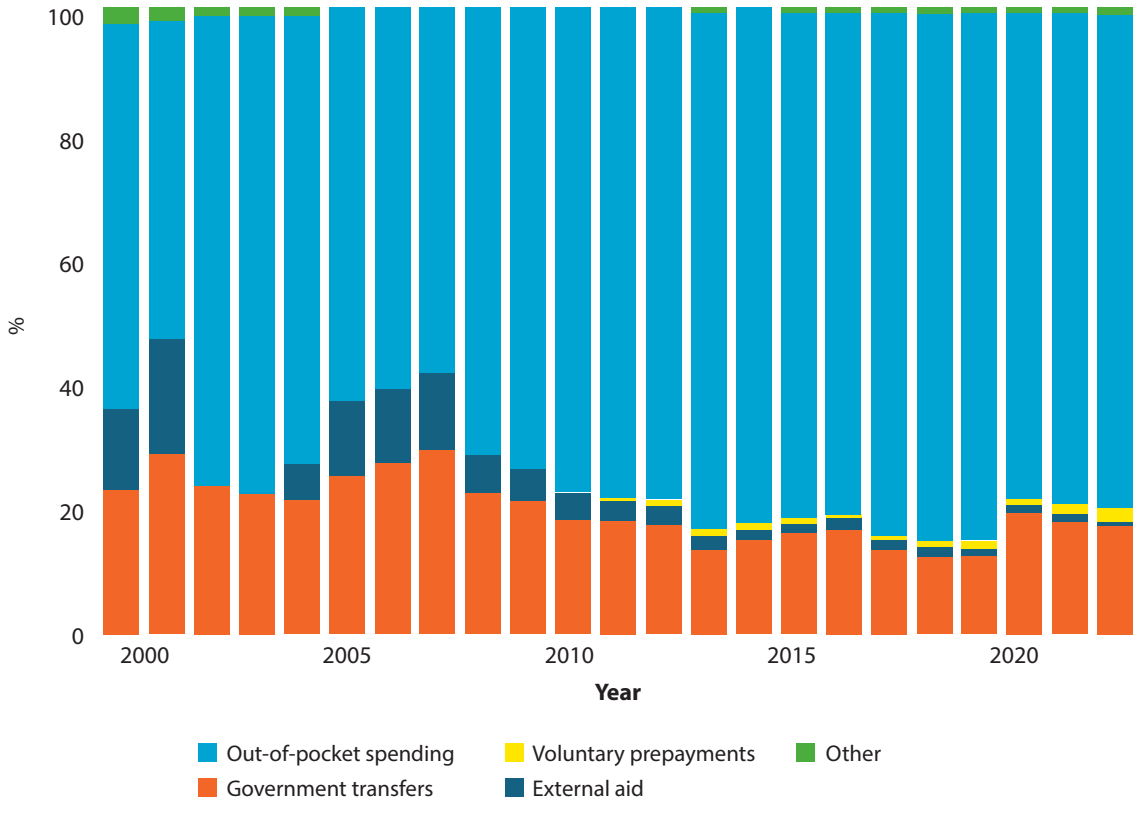
Armenia is classified as an upper-middle-income country, with a gross domestic product (GDP) of US$ 24.09 billion and GDP per capita of US$ 8053 (as of 2023). Armenia's GDP based on purchasing power parity was estimated at $21 746 in 2024 *(36)*.

In recent years, Armenia has faced significant sociopolitical and economic challenges, including the dual crises of the COVID-19 pandemic and the Second Nagorno-Karabakh War in 2020; more recently, a refugee crisis emerged in late 2023 *(37)*. While the country still faces considerable additional uncertainty due to ongoing geopolitical tensions, Armenia's economy has shown resilience despite these challenges, thanks in part to sound macroeconomic policies, such as active inflation targeting, fiscal discipline and effective regulation of the financial sector *(38)*.

Health expenditure has shown a steady upward trend in the 21st century, nearly doubling between 2005 and 2021 in proportion to GDP (from 5.86% to 12.34%). This trend mirrors a significant increase in the country's investment in health *(34)*. Despite these increases, public spending on health as a share of GDP remains among the lowest in the WHO European Region *(39)*.

Health expenditure in Armenia is mainly funded through a mixture of Government financing and out-of-pocket payments – and to a lesser extent, voluntary prepayments and external aid. As shown in Fig. 5, the level of out-of-pocket spending on health by the population – a proxy indicator for financial protection – is noticeably high; for example, 79.1% in 2022 *(39)*. This level remains the highest in the WHO European Region and the average of upper-middle-income countries globally.

Fig. 5. Sources of health expenditure in Armenia



Source: WHO *(39)*.

3.5 Overview of the Armenian health system

Armenia has a decentralized health system, with the Ministry of Health acting as the single source of payment for publicly funded services. The Ministry coordinates policy and regulation, while health-care services are delivered through a network of state-funded and private institutions. Public and private hospitals offer secondary and tertiary care, while PHC is essential for providing accessible health services.

The country is working towards universal health coverage by expanding its basic benefits package (BBP). Since 2019 increased funding for health services has steadily increased their availability. Efforts are underway to introduce universal health insurance by 2027 to improve financial protection and accessibility *(40)*.

The World Bank's 2024 PHC assessment report on Armenia highlighted some key challenges faced by the country at PHC level, including disparities in service quality, particularly between urban and rural areas, uneven resource distribution, limited integration with hospital care and inefficiencies in managing certain conditions. While PHC coverage has expanded, targeted reforms are necessary to improve service delivery, strengthen health-care financing and enhance coordination between PHC and higher levels of care *(41)*.

Rehabilitation is included in the BBP for people with social vulnerabilities and certain other groups, including children under the age of 18. The State Health Agency 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 *(6)*. Additionally, the rehabilitation services provided by physiotherapists at PHC level are often not based on the latest evidence, with passive modalities and electrotherapy still being commonly offered *(6)*.

The current model of care and PHC in Armenia is under revision. There is an intention to integrate rehabilitation-related professions, such as psychology, to PHC level *(35)*. Although these discussions are still in the early stages, they hold great potential for enhancing workforce distribution and future amendments.

Finally, Armenia is one of the few countries with a national coalition on mental health *(42)* regulated by the Ministry of Health. It is made up of most of the nongovernmental organizations and service providers in the mental health and psychosocial support spheres. This coalition is a key asset during emergencies, as it enables rapid coordination and delivery of psychosocial services to populations affected by crisis-related displacement and relocation. The institutionalized multisectoral network helps to ensure that mental health needs are addressed not only during emergency preparedness and response efforts but also through broader health system strengthening.

4. Findings and interpretations

This section offers a comprehensive overview of the rehabilitation occupations evaluated, including an assessment of workforce needs and an analysis of effective coverage based on availability, accessibility, acceptability and quality. It also examines the factors that could influence this coverage.

4.1 Overview of the rehabilitation workforce

The following subsections define the occupational groups included in this evaluation, outlining their education and training, recognition status and associated professional organizations. A summary of the data is provided in Table 1.

Table 1. Main characteristics of the rehabilitation occupations included in the evaluation

Occupation	Is it included in the list of main health professions?[a]	Is there education and training in Armenia?	Is the education regulated in Armenia?	Is a licence to practise or registration required?	Is there a national professional association?
Clinical psychologists	✗	✗	✗	✗	✓
Occupational therapists	✗	✓	✗	✗	✓
Physical medicine and rehabilitation doctors	✓	✓	✓	✗	✓
Physiotherapists	✗	✓	✗	✗	✓
Prosthetists and orthotists	✗	✓	✗	✗	✗
Social workers	✗	✓	✗	✗	✓
Speech and language therapists	✗	✓	✗	✗	✓

[a] Only physical medicine and rehabilitation doctors are included in the list of main health professions; the rest are considered paramedical workers.

4.1.1 Clinical psychologists

Clinical psychology was historically considered a medical specialty linked with psychiatry. Following the introduction of regulations on medical specialties in 2024, clinical psychology was no longer officially considered as a medical specialty. Moreover, there is no clinical residency for medical psychology *(43)*, and clinical psychologists in Armenia currently lack a standardized training pathway.

Psychologists are trained at the bachelor's and master's levels, with several universities offering psychology programmes. The largest institutions providing these courses are Yerevan State University (YSU) and the Armenian State Pedagogical University after Khachatur Abovyan (ASPU).

Master's programmes in clinical psychology typically last 1.5–2 years and have relatively flexible admission requirements, allowing almost anyone having a bachelor's degree to enter these courses. As a result, students holding bachelor's degrees from unrelated fields such as journalism or linguistics can still enrol in a master's programme and qualify as clinical psychologists.

Apart from specific study programmes studies leading to qualification as a titled psychologist or clinical psychologist, medical psychology as a general subject is taught through lectures, seminars and postgraduate courses *(44)*.

Psychologists in Armenia are represented across several professional associations, such as the Armenian Psychiatric Association, which includes several psychologists among its members. In 2024 the Association of Clinical Psychologists of Armenia was established to provide more targeted representation *(45)*. Additionally, under the leadership of the Ministry of Health, Armenia launched a mental health coalition in 2021, uniting over 40 organizations, including professional associations of psychologists, to strengthen collaboration in the mental health sector *(46)*.

4.1.2 Occupational therapists

Occupational therapists are referred to as **ergotherapists** in Armenia. They currently receive their education and training at master's level. Similarly to the psychology master's programme, admission criteria are flexible. As a result, individuals with bachelor's degrees in unrelated fields can enrol in the programme and qualify as occupational therapists. Until 2015 occupational therapists were trained at ASPU through bachelor's degree programmes.

Within the field there is a further group of workers without formal education in occupational therapy who refer to themselves as occupational therapists. Most of these are workers with a vocational education who need to be registered with their employers. There is no official body responsible for the formal registration of occupational therapists in Armenia, so these situations are largely uncontrolled.

The Armenian Ergotherapists' Association *(47)* was formed in 2017. Graduates from occupational therapy education in Armenia automatically receive membership and there were about 130 members in 2024. The Association is an associate member of the World Federation of Occupational Therapists and a member of the European Network of Occupational Therapy in Higher Education. The aim of the Association is to promote and develop the discipline and to promote the legitimacy of higher education over informal education within the profession.

4.1.3 Physical medicine and rehabilitation doctors

Physical medicine and rehabilitation doctors (referred to as **rehabilitationists** in Armenia) are medical specialists. They are the most established and recognized occupation in Armenia's rehabilitation workforce.

Their education and training is achieved through a clinical residency in medical rehabilitation for medical graduates. It has been available at the Yerevan State Medical University after Mkhitar Heratsi (YSMU) and lasts 1.5–2 years. Since 2011 YSMU has offered a clinical residency in paediatric rehabilitation medicine that lasts 1–2 years, depending on whether it is the first or second specialty.

The Armenian Association of Clinical Rehabilitologists *(48)* was founded in 2020. Its goal is to promote and develop the discipline of rehabilitation and physical medicine in the country.

4.1.4 Physiotherapists

Physiotherapists are called **kinesiotherapists** in Armenia. They obtain their education and training through bachelor's and master's degree courses at the Armenian State Institute of Physical Culture and Sport (ASIPCS).

As with the psychology and occupational therapy master's programmes, admission criteria are flexible; so again, as a result, individuals with bachelor's degrees in unrelated fields can enrol and qualify as physiotherapists.

Historically, physiotherapists were trained at doctorate level, graduating from YSMU. The therapeutic approaches taught often included methods that lacked strong evidence-informed support. This doctoral programme no longer exists.

There are multiple relatively new professional associations, although there are none exclusively designated for physiotherapists *(6)*.

4.1.5 Prosthetists and orthotists

Currently prosthetists and orthotists get their education and training through a 3-year programme at the Yerevan State Basic Medical College, a secondary professional institution within YSMU. The programme was established following the war in 2020, and approximately 10–15 students graduate each year.

Most of the prosthetists and orthotists in Armenia have acquired their knowledge and skills either through hands-on, on-the-job apprenticeships and short-term training programmes or via training provided by international organizations that supply prosthetic and orthotic equipment, parts and accessories.

The field remains largely unregulated, with no standardized certification or licensing requirements in Armenia.

Official health workforce data in Armenia include information on traumatologists and orthopaedists, which are distinct from prosthetists and orthotists. This can lead to the underrepresentation of prosthetists and orthotists in national data and may result in misinterpretation of this occupation within the national health system.

There is no professional association for this group.

4.1.6 Social workers

Social workers in Armenia receive their education and training through three main pathways:

- bachelor's programmes offered at several universities across the country;
- master's programmes available at various Armenian universities; and
- short-term courses in social work provided by the National Institute of Labour and Social Research under the Ministry of Labour and Social Affairs and typically lasting a few months.

The Armenian Association of Social Workers *(49)* was established in 2004. As the only professional social work organization in Armenia, it brings together more than 1000 members. Since 2005 it has been part of the International Federation of Social Workers. It aims to improve Armenia's social protection system through social policy reforms, protect social workers' rights and develop innovative social services.

4.1.7 Speech and language therapists

Speech and language therapists are called **logopeds** in Armenia and are trained at both the bachelor's (since 2004) and master's (since 2010) levels at ASPU.

During the Soviet era, speech and language therapists primarily focused on addressing speech difficulties in children. Subsequently, the pedagogy diploma granted by ASPU led many of these to work predominantly in educational settings. In the 2000s the occupation was introduced into polyclinics as part of paediatric health-care services, contributing to the expansion of paediatric rehabilitation. Currently, in certain adult rehabilitation facilities, speech and language therapists are integrated into multidisciplinary health teams to provide care for patients recovering from stroke.

The Armenian Speech Therapists' Association *(50)* was founded in 2018. The number of members reported exceeded 300 as of 2024. It has been a member of the European Speech and Language Therapy Association since July 2022.

4.1.8 Recent Government regulations concerning health professions

The official list of main health-care professions was most recently updated in 2025, following recent regulations introduced by the Ministry of Health and approved on 17 February 2025 *(43)*. The list includes main professions, narrow specializations and additional specializations for health-care professionals. This update is intended to clarify the definitions, organizational principles and implementation processes of these professions, which were previously undefined.

> *This update is the result of collaboration among chief consultants, professional associations and sector specialists, aiming to modernize and clarify health-care professional roles in Armenia (51).*
>
> – Anahit Avanesyan , Minister of Health, Armenia

The list of main professions is as follows:

- 40 medical professions
- 4 dental professions
- 1 pharmacy profession
- 1 public health profession.

Each main profession now also has associated narrow and additional specializations defined in the list *(43)*.

From the introduced regulations, some pertinent new inclusions and changes include:

- **secondary vocational education:** for the first time, regulations for health-care workers with secondary vocational education are included;
- **rehabilitation specialties:** paediatric and general (adult) rehabilitation physicians are recognized as independent specialties, reflecting Armenia's approach to differentiating paediatric and adult health-care services;
- **main professions:** now include physical medicine and rehabilitation and paediatric physical medicine and rehabilitation doctors;
- **narrow specializations:** now include sports medicine, pain management, intensive medicine and clinical pharmacology;

- **revisions and removals:** certain roles, such as reflexotherapists, manual therapists, kinesiotherapy physicians and physiotherapy physicians have been removed as main professions and reclassified within physical medicine and rehabilitation as narrow specialties or specific interventions;
- **clinical psychology:** has been removed from the list of physician professions; and
- **mid-level specializations:** nursing in paediatric rehabilitation is now recognized as a narrow specialization.

In 2021 the Ministry of Health approved an official list of paramedical services *(30)*. Apart from physical medicine and rehabilitation doctors, all other rehabilitation workers are recognized in the country as paramedical workers. The list of 11 approved paramedical services is as follows:

- psychological;
- kinesiological;
- ergotherapeutic;
- orthotic;
- prosthetic;
- social work;
- special pedagogical (logoped, deaf pedagogue, typhlo-pedagogue, art therapist, play therapist);
- information and counselling (education and clinics on diabetes, breastfeeding, pre- and postnatal classes, etc.);
- professional technical maintenance of medical equipment;
- therapeutic physical education; and
- corpse care, processing (tanning) and preservation of the corpse.

4.1.9 Common challenges for the rehabilitation workforce in Armenia

The intended result of the update of the lists of main health-care professions and paramedical services was to clarify and improve the organizational principles and implementation processes for these roles. However, in practice almost all the different rehabilitation occupations except for physical medicine and rehabilitation doctors have been grouped under the umbrella term paramedical services. This over-broad categorization could hamper workforce planning, job creation aligned with the rehabilitation needs of the population and the evaluation of outcomes for these rehabilitation occupations.

There are no active regulatory institutions in Armenia that work to ensure the quality of education and training programmes for the various rehabilitation disciplines. Due to this, all rehabilitation-related master's programmes can admit graduates from bachelor's programmes unrelated to the field. The only exception to this is the educational programme for physical medicine and rehabilitation doctors, which is considered a medical specialty. The result of this inconsistency is that master's degree graduates may not necessarily have the appropriate skills and training but nonetheless hold a qualification that will empower them to enter the rehabilitation labour market as recognized professionals.

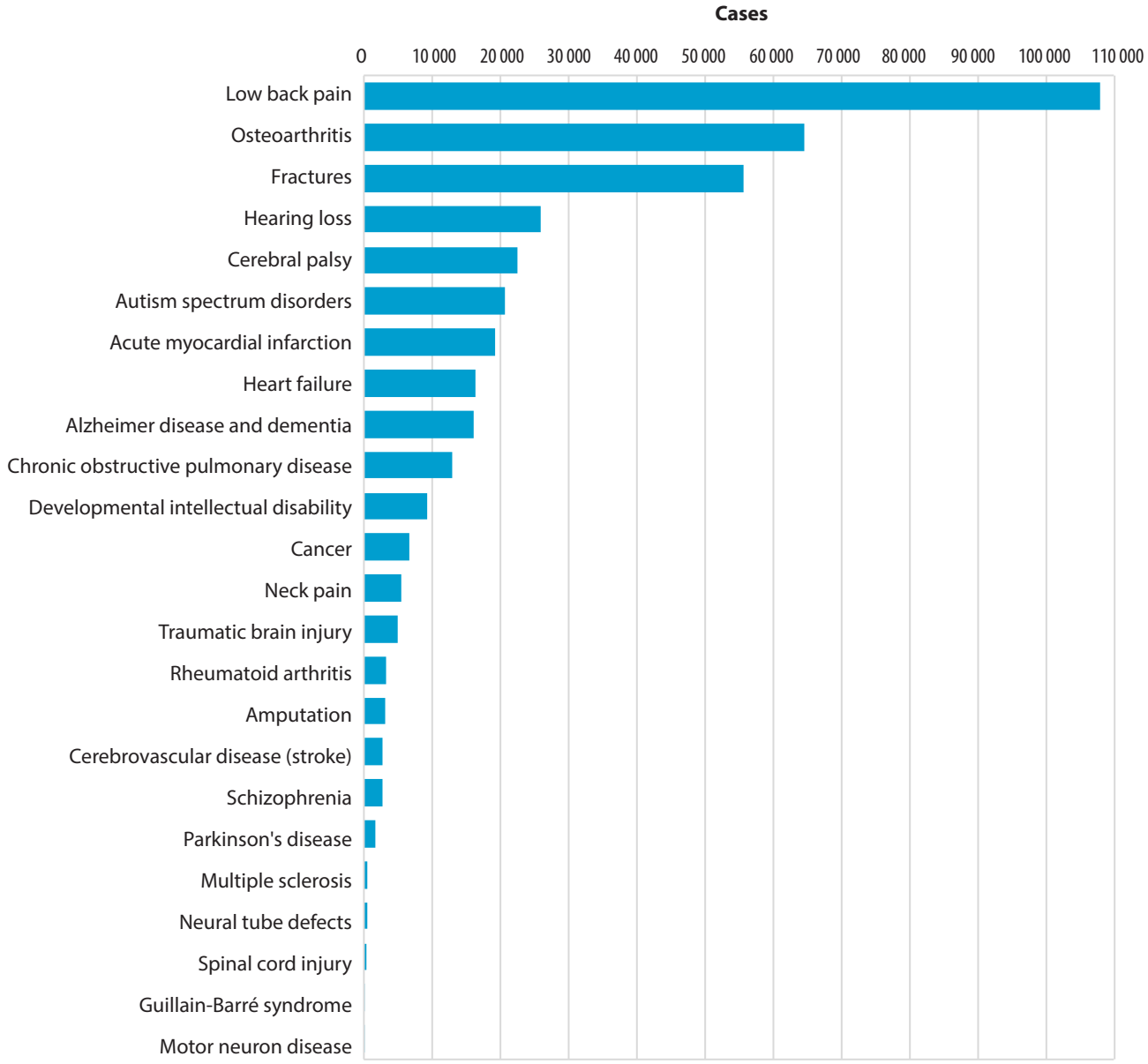
As an example, in 2015 the bachelor's programme in occupational therapy was suspended for several years, leaving only the master's programme available. During this period and due to the absence of graduates from bachelor-level programmes, employers were compelled to accept self-identified occupational therapists with no formal education (section 4.1.2) as a compromise. These individuals often lacked the foundational knowledge and skills essential for the occupation and for providing patient care. Consequently, any expertise they possess is typically developed vocationally under employer supervision, a process that requires significant time and can adversely impact the overall quality of services delivered.

Finally, there is no licensing body in Armenia responsible for regulating job standards and minimum qualifications of rehabilitation workers for entry into the health system labour market.

4.2 Needs analysis

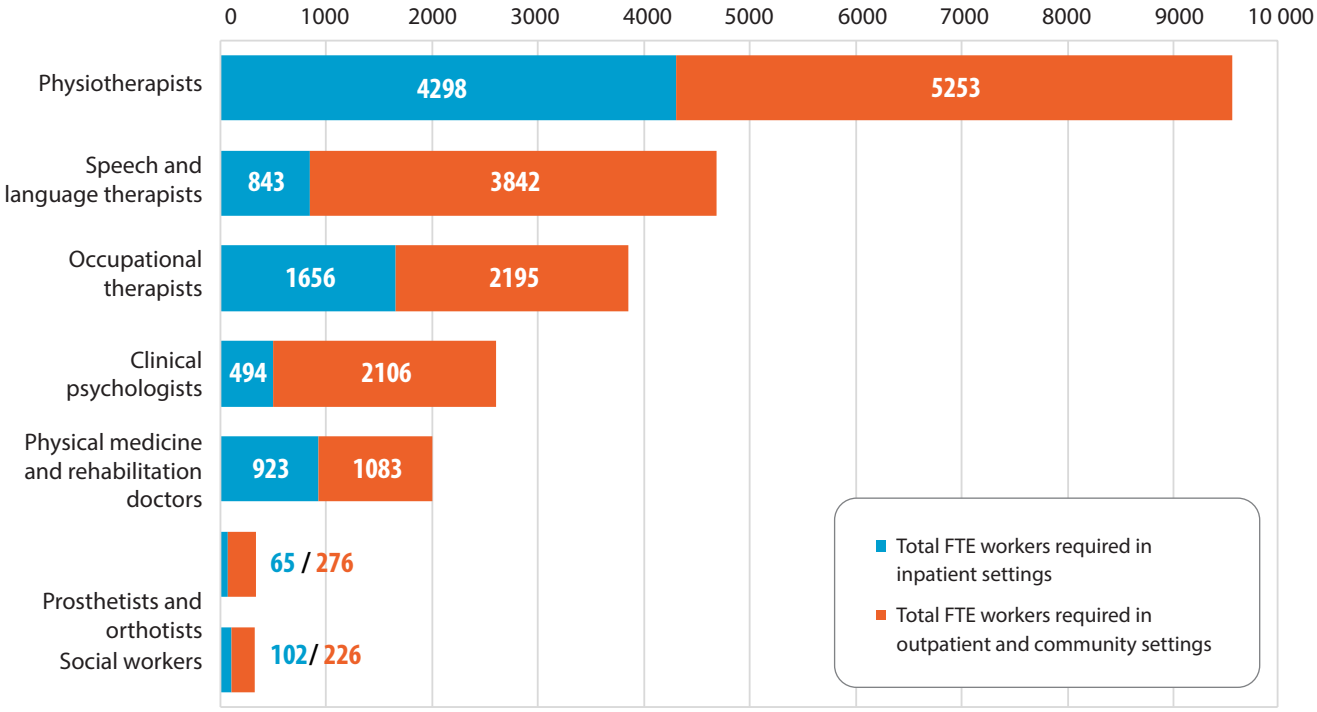
Fig. 6 illustrates the prevalence in Armenia of the 24 health conditions selected for the population needs assessment for 2024. The most prevalent conditions included low back pain, osteoarthritis, fractures, hearing loss, cerebral palsy, autism spectrum disorders, acute myocardial infarction, heart failure, Alzheimer disease and dementia and chronic obstructive pulmonary disease, all of which stand out significantly from the other conditions as can be seen below.

Fig. 6. Prevalence of the 24 selected health conditions in Armenia (year 2024).



Total FTE needs for each occupation are presented in Fig. 7 (nonclinical time is not included). The RWTT estimates indicate that the rehabilitation needs of the population are greater in outpatient and community settings than in inpatient settings. Physiotherapists, speech and language therapists and occupational therapists are viewed – albeit subjectively and from the RWTT perspective – as the most essential professions to meet the needs of the population.

Fig. 7. Number of workers (FTE) from each occupation required to meet the needs of the 24 selected health conditions in Armenia, disaggregated by setting (inpatient and outpatient and community settings)



Note: nonclinical time is not included.

Nonclinical time is defined as time spent on administration, teaching and learning and research. This was estimated by each worker as follows: 8 hours per month for social workers, 10 for occupational therapists, 15 for prosthetists and orthotists, 18 for physiotherapists, 24 for clinical psychologists, 30 hours for physical medicine and rehabilitation doctors and 140 for speech and language therapists. The nonclinical time needed per month for speech and language therapists is significantly higher than for other occupations. This is mainly due to their high involvement in teaching.

Including declared nonclinical time in FTE calculations increases the total FTE for occupational groups by an average of 12.5%; however, in the case of speech and language therapists, this increase would be 700%. This nuance should ideally be taken into consideration when calculating the needs and job offers for speech and language therapists.

The RWTT estimates indicated that addressing rehabilitation needs for all 24 of the health conditions assessed requires the involvement of a diverse range of rehabilitation occupations. Fig. 8 presents the estimated total clinical hours needed for each occupational group to address the seven health conditions that demanded the highest number of rehabilitation hours: low back pain, cerebral palsy, hearing impairment, osteoarthritis, fractures, autism spectrum disorder and Alzheimer disease. Of note, although clinical psychologists are not the most required occupation overall in terms of meeting the needs of the population, their skills are required in treatment of almost all the health conditions listed.

Fig. 8. Total of clinical hours needed for each occupational group to address the health conditions that demand the highest number of rehabilitation hours (annual data)

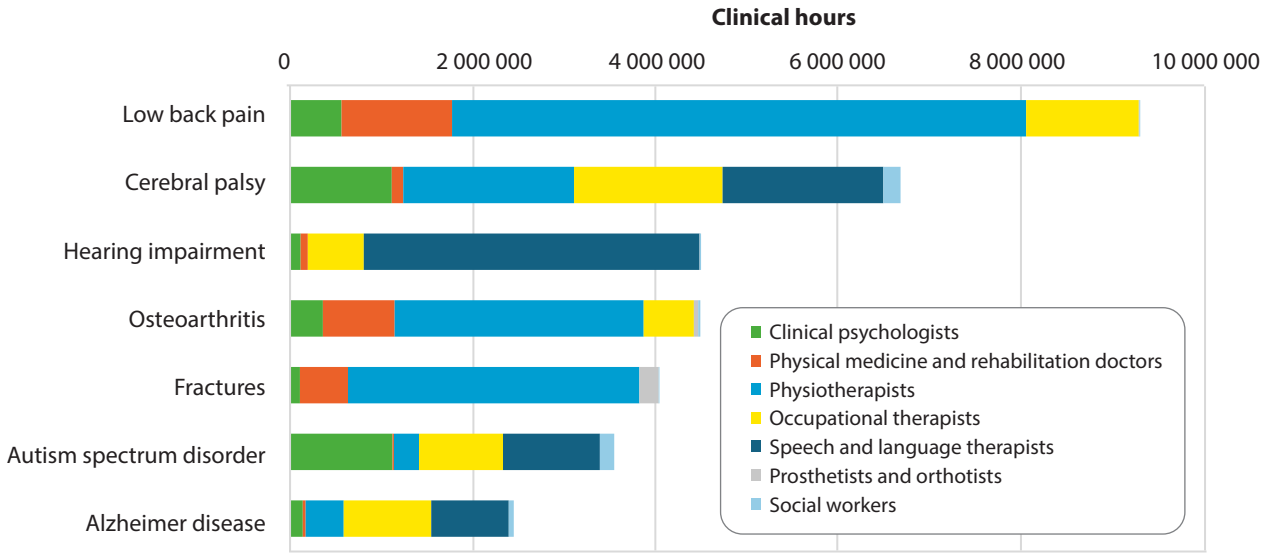
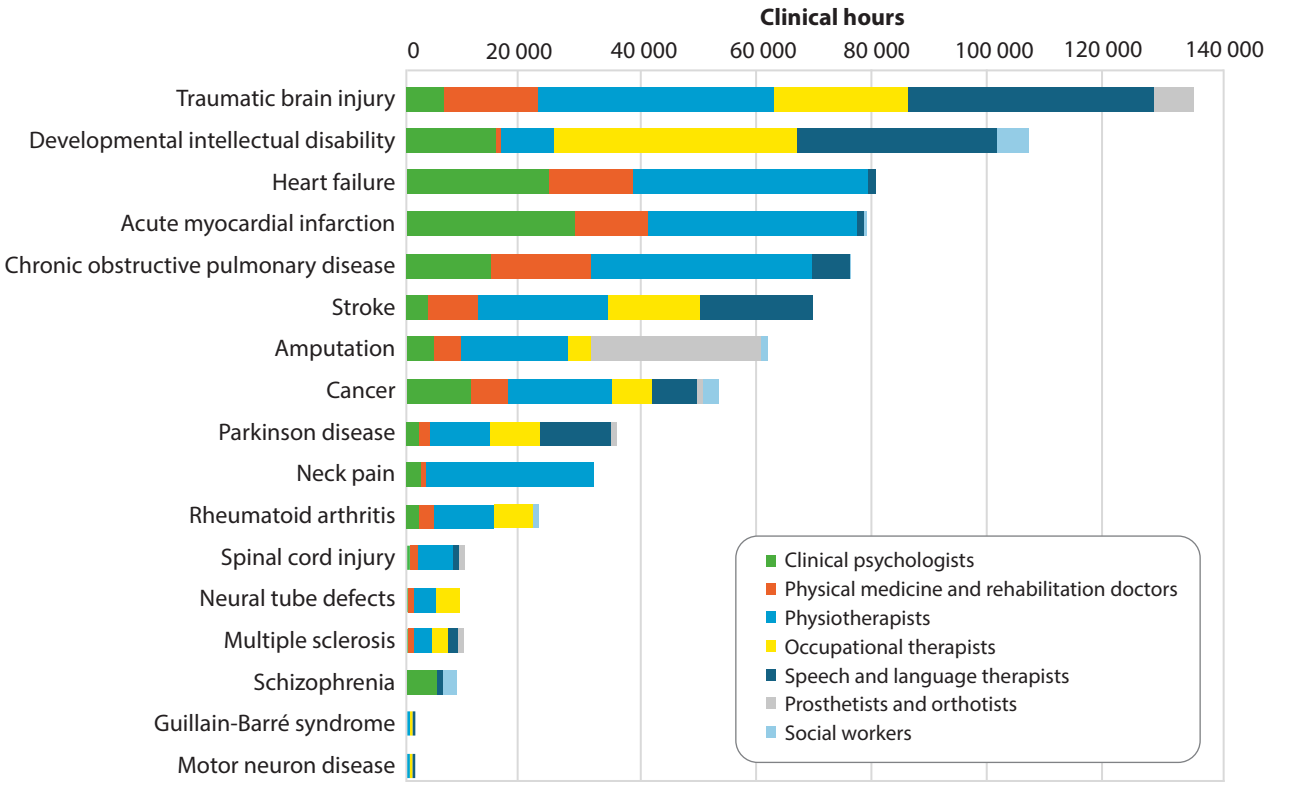


Fig. 9 presents the total clinical hours needed for each occupational group to address the remaining health conditions that demand fewer rehabilitation hours. As noted above, clinical psychologists are needed for almost all of these conditions. Prosthetists and orthotists are specifically needed for people with traumatic brain injury or amputations.

Annex 7 shows the estimated rehabilitation time required for each of the 24 selected health conditions for each occupation group included in this evaluation.

It should be emphasized that during the needs analysis, the RWTT estimated the optimal amount of time a patient with a specific health condition should receive rehabilitation services in both inpatient and outpatient/community settings. In Armenia, many of these services are either unavailable for adults or the relevant occupational group is not present in a given setting. As such, these estimations are an important reference point for the planification and development of future rehabilitation services.

Fig. 9. Total of clinical hours needed for each occupational group to address the health conditions that demand fewer rehabilitation hours (annual data)



4.3 Availability of the rehabilitation workforce

4.3.1 Supply

With the most recent updates to the official health-care workforce list (explained in section 4.1 of this report), certain occupations are now officially recognized as part of the physical medicine and rehabilitation discipline. However, accurate and reliable data on the broader rehabilitation workforce in Armenia remain limited, largely due to inconsistent terminology used to define rehabilitation roles.

Currently, reliable data exist only for physical medicine and rehabilitation doctors, as the pathway to this profession is well regulated, requiring both a medical degree and completion of a specialty or residency in a rehabilitation context. In contrast and as explained before, the educational pathways for other rehabilitation occupations are diverse and inconsistent, making it difficult to determine whether new entrants to the labour market possess appropriate qualifications. This issue is further complicated by the misuse of educational titles; for example, some individuals trained as masseurs may refer to themselves as physiotherapists. These challenges make it difficult to assess the true supply of rehabilitation workers in the country.

Moreover, Armenia's health and health care statistical yearbook *(52)* includes only physicians and mid-level personnel under the category of human resources, thereby excluding a wide range of rehabilitation occupations that fall outside these classifications – such as the majority of the occupations that are evaluated in this report: physiotherapists, occupational therapists, speech and language therapists, orthotists and prosthetists, clinical psychologists and social workers.

Consequently, the current supply of rehabilitation workers has been estimated based on the following data:

- data obtained from the expertise of the RWTT and professional associations;
- data on rehabilitation-related training programmes graduates; and
- data from the official medical personnel register *(53)* for physical medicine and rehabilitation doctors – the other occupational groups evaluated are excluded from this official registry.

Data on workforce availability is presented in Table 2. The largest occupational groups, according to estimates, are social workers, followed by speech and language therapists and occupational therapists. The smallest groups are physical medicine and rehabilitation doctors and prosthetists and orthotists. All occupations for which data are available show a predominance of women, except for prosthetists and orthotists, where there is a 100% male presence. Data for clinical psychologists and physiotherapists were not available.

Table 2. Estimated supply of rehabilitation workers in 2024, disaggregated by sex

Occupational group	Total supply	Female (%)	Male (%)
Clinical psychologists	NA	NA	NA
Occupational therapists	130	130 (100%)	0 (0%)
Physical medicine and rehabilitation doctors	40	31 (78%)	9 (22%)
Physiotherapists	NA	NA	NA
Prosthetists and orthotists	20	0 (0%)	20 (100%)
Social workers	900	720 (80%)	180 (20%)
Speech and language therapists	300	300 (100%)	0 (0%)

Note: the numbers provided are estimates generated by the RWTT except for physical medicine and rehabilitation doctors, who are included in the official medical personnel register

Inflow of rehabilitation workers

Inflow of rehabilitation workers in Armenia is largely driven by domestic production, i.e. graduations from Armenian universities. Table 3 presents the education and training programmes for the rehabilitation workforce, the duration of each programme and the educational institutions where the programmes are available, except for clinical psychology, which does not have an official programme in Armenia (as explained in a previous section). Instead, existing programmes for psychology have been included here. All the programmes are centralized in Yerevan, except for one for social workers, which is located in Gyumri.

Table 3. Education and training programmes, duration of programmes and institutions where the programmes are available in Armenia

Occupations	Education and training programmes	Duration (years)	Education institutions
Psychologists	3 bachelor's programmes	4	NAS, RAU, URARTU
	5 master's programmes	2 or 2.5[a]	ASPU, NAS, RAU, URARTU, YSU
Occupational therapists	0 bachelor's programmes	NA	NA
	1 master's programme	2	ASPU
Physical medicine and rehabilitation doctors	1 residency programme (adult rehabilitation)	1 or 2[a]	YSMU
	1 residency programme (paediatric rehabilitation)	1 or 2[a]	YSMU
Physiotherapists	2 bachelor's programmes	4 or 5[a]	ASIPCS
	2 master's programmes	1 or 1.5[a]	ASIPCS
Prosthetists and orthotists	1 secondary professional programme	3	YSMU college
Social workers	4 bachelor's programmes	4	ASPU, SSU, URARTU, YSU
	4 master's programmes	2	ASPU, SSU, URARTU, YSU
Speech and language therapists	1 bachelor's programme	4	ASPU
	1 master's programme	2	ASPU

Source: Ministry of Education, Science, Culture and Sports[2]
NA: not applicable; NAS: National Academy of Sciences; RAU: Russian-Armenian University; SSU: Shirak State University named after Mikayel Nalbandyan; URARTU: Urartu University of Practical Psychology and Sociology.
[a] This depends on whether the programme is full time, which has a shorter timeline, or distance-based/online education, which typically takes longer.

Table 4 presents a summary of places offered, applications, admissions and graduations for rehabilitation-related education and training programmes at both the bachelor and master) from the last academic year and from 5 years ago. There have been an increased number of applications and admissions for occupational therapy and physical medicine and rehabilitation over the past 5 years. Additionally, only the number of graduates in physiotherapy shows an upward trend.

Table 4. Places offered, applications, admissions and graduations for rehabilitation-related education programmes in Armenia, last academic year and from 5 years ago

Occupations	Number of places offered		Number of applicants		Number of admissions		Number of graduates	
	2019	2024	2019	2024	2019	2024	2019	2024
Psychologists	234	283↑	207	260↑	161	176↑	128	172↑
Occupational therapists	15	15≈	9	15↑	9	14↑	9	9≈
Physical medicine and rehabilitation doctors	NA	NA	10	13↑	10	13↑	—	—
Physiotherapists	135	136↑	118	118≈	126	74↓	96	106↑
Prosthetists and orthotists	—	—	—	—	—	—	—	—
Social workers	271	217↓	203	165↓	182	126↓	209	180↓
Speech and language therapists	80	80≈	54	44↓	53	41↓	74	50↓

↑: increasing trend, ↓: decreasing trend, ≈: relatively stable, no significant change
NA: not applicable.
Source: Ministry of Education, Science, Culture and Sports[3]

[2] Personal communication, 27 January 2025 according to WHO request.

[3] Personal communication, 27 January 2025 according to WHO request.

Annex 8 presents a detailed dataset on educational institutions along with information on both offered and filled places, applicants and graduates for 2019 and 2024, based on data obtained from the Ministry of Education, Science, Culture and Sports.[4]

There are no data available on the inflow of foreign workers entering the rehabilitation labour market and no regulatory and licensing body to ensure the readiness of immigrated workers to enter the health system. As a result of this situation, it is often the case that immigrant workers with secondary vocational education find it easy to enter the labour market but later fail to meet standards for their employment, which affects their career development and the quality of care of the Armenian health system.

Outflow of rehabilitation workers

There are no reliable data on the outflow of rehabilitation workers due to migration or other forms of attrition. Nevertheless, according to economic data sources, human capital outward migration, or so-called "brain drain", is particularly high in Armenia, above the world average, so it can be assumed that the rehabilitation workforce is also affected by this migratory phenomenon *(54)*.

4.3.2 Demand and absorption

Job positions in Armenia are distributed across the public and private sectors; however, concrete data on where rehabilitation workers are employed are very limited. With the new regulations and definitions for main health-care specialties and narrow and additional specializations, the narrow specialization in physiotherapeutic medicine is now included in the educational curriculum for the main specialty in physical medicine and rehabilitation *(43)*.

The RWTT rated the demand of each occupational group, Table 5 shows the results and a more detailed breakdown is presented in Annex 9.

Physiotherapists and prosthetists and orthotists both reported that they felt in high demand. Their feedback was that the number of job positions aligns well with both population needs and the supply of workers, as there is limited unemployment as well as few job vacancies. Speech and language therapists also scored demand for their services highly.

Clinical psychologists and occupational therapists felt that demand within their field was insufficient and high unemployment poses a considerable concern. Social workers gave the lowest score for demand.

In terms of job availability, the demand for physical medicine and rehabilitation doctors in health care is not enough to meet the needs of the population. Additionally, the number of specialists (supply) is insufficient to cover this demand; therefore, every new graduate entering the market can easily find a job in either public or private institutions. Many job opportunities also exist in rural areas, where specialists can find work if they cannot find suitable employment in Yerevan. Despite this, there is still a shortage of physicians willing to specialize in rehabilitation. The result of this situation is that vacancies remain an issue and the qualifications required are lower as a result.

---

[4] Personal communication, 27 January 2025 according to WHO request.

Table 5. RWTT scores for supply, demand absorption for each occupation

Professions	Supply	Demand	Absorption
Clinical psychologists	3	2	1
Occupational therapists	2	2	3
Physical medicine and rehabilitation doctors	2	2	3
Physiotherapists	3	4	2
Prosthetists and orthotists	4	4	2
Social workers	1	1	1
Speech and language therapists	2	3	1

Note: 4 : needs no immediate action; 3 : needs minor strengthening; 2 : needs major strengthening; 1 : needs establishing.

The data on absorption are also descriptive, based on RWTT declarations (Table 5). Neither group reported high uptake in the health system. Physical medicine and rehabilitation doctors and occupational therapists considered that absorption in health care is satisfactory and the highest among rehabilitation workers. It is weaker for physiotherapists and prosthetists and orthotists. Clinical psychologists, social workers and speech and language therapists considered that less than half of their occupational groups are absorbed in health care (they mostly work in other sectors). This seems to be a vicious circle, as the absorption of rehabilitation workers in health care is generally low and yet the unclarified status of many professions in health care, along with high requirements and low wage rates, contributes to a lack of willingness to work in the health-care sector.

4.3.3 Efficiency

The results of the rehabilitation workforce coverage assessment (section 2.4.1) show that the perceived efficiency of clinical psychologists, occupational therapists, physiotherapists, social workers and speech and language therapists is low, indicating that it needs strengthening. However, mechanisms to improve productivity and efficiency are already emerging.

Physical medicine and rehabilitation doctors, and prosthetists and orthotists, were the only two groups that declared a higher than normal level of efficiency, meaning they mostly achieve their aims within desired or expected time frames – although workload can often be excessive. Exact scores for each factor can be found in Annex 9.

Factors that were felt to hinder the efficiency of clinical psychologists the most were:

- limited infrastructure, including space, facilities and equipment
- workplace policies, culture and practices.

These were similar for the main part for occupational therapists, physical medicine and rehabilitation doctors, social workers and speech and language therapists. Adequate infrastructure, equipment and consumables and workplace policies were generally considered as the factors best placed to serve the efficiency of physiotherapists and prosthetists and orthotists.

The use of technology and innovation, such as applications, tele-health and digital information systems, were rarely utilized by most rehabilitation workers, while utilization was slightly higher for occupational therapists and prosthetists and orthotists.

Prosthetists and orthotists believe that the way tasks are allocated among workers is already close to optimal and carefully planned for the main part. In contrast, other rehabilitation workers reported seeing substantial scope for improvement. Their scores suggest that there is limited planning for role allocation and task sharing, and that workers are rarely adequately trained or supported to implement any new roles or tasks.

4.3.4 Factors underpinning availability

The institutional capacity to produce workers is determined by institutional policies and practical issues such as the availability of the appropriate university faculty. For most rehabilitation-related professions there is satisfactory institutional capacity and preparation of faculties and entities to conduct education/training in this area, but applicants' interest is still not sufficient to fill these places, and in most programmes there are more places than applicants. Additionally, in the case of physiotherapy and speech and language therapy, over the last 5 years the number of applicants for bachelor's degree programmes has decreased and the number of applicants for master's degree programmes has increased (despite an identical or very similar number of places being available).

The primary challenge is that most of these courses (apart from specialties in medical rehabilitation and clinical psychology) are offered by nonmedical universities. According to the RWTT, this may have a negative impact on the perception of the role of these occupations in the health-care system. The pedagogical or sports profiles of universities do not provide clinical practice experience and internships, which results in a lack of opportunities to gain practical experience in health care over the course of study.

The perception of an occupation can influence the number of people that pursue it as a career. There is a limited understanding of the rehabilitation workforce in Armenia among other health workers and service users, and its reputation as a respected and trusted workforce is still emerging.

The assessment revealed that this is a particular barrier to the availability of physiotherapists and occupational therapists, as their role and scope of practice is not widely understood. This is due to both inconsistent terminology, different educational backgrounds and lack of recognition in health care.

The occupation of physical medicine and rehabilitation doctor is increasingly well-recognized, and this has in part been influenced by the introduction of a week-long training course for medical students that aims to raise awareness of rehabilitation. As evidenced by the largest number of study opportunities and the largest number of students, the most recognized related occupation group seems to be social workers – yet this group has its strongest position in the social sector.

Financial incentives, i.e. the earning potential of each occupation, can play a significant role in attracting or deterring people to a rehabilitation occupation. Most occupational groups reported average salaries in the range 200 000–300 000 Armenian dram (US$ 500–750) yet there is no clear data on the exact salaries as this may vary according to the workplace, duties performed, number of places of employment. There are no statutory remunerations for occupational groups in rehabilitation.

Armenia's average monthly nominal wage, according to the Classification of Economic Activity (NACE rev.2): health care and social service data *(55)*, was 257 240 000 dram (US$ 650) in September 2024. This would suggest that wages in rehabilitation are below average or average, which could have a negative impact on the willingness of pursuing a career in rehabilitation. This is also one of the reasons why rehabilitation workers take up positions in other, better-paid sectors.

Employment prospects and opportunities for career progression weigh heavily into people's choices to pursue a career in rehabilitation. The RWTT reported that the use of career opportunities, such as pathways to promotion and leadership roles, to attract and retain their workforce is limited in most settings. There are no clearly defined career paths for all rehabilitation-related professions.

4.4 Accessibility of the rehabilitation workforce

4.4.1 Distribution of rehabilitation workers

The RWTT reported that the majority of rehabilitation workers are concentrated in Yerevan, reflecting a broader issue of centralization across various sectors. For example, 75% of physical medicine and rehabilitation doctors are concentrated in Yerevan and this trend also applies to the broader health-care workforce, with more than half of all physicians (67%) and nurses (53%) also working in the capital. Individuals in rural areas face even greater challenges due to limited financial capacity and lower awareness of available services. Additionally, there are no incentives to work in rural areas, particularly in adult rehabilitation, which is not funded from the state budget. In contrast, as it is covered by the BBP paediatric rehabilitation is relatively better situated, allowing for some services and centres to be available outside of the capital.

RWTT members subjectively reported that they are not generally placed (or are rarely accessible) in rural and remote areas. Prosthetists and orthotists have limited outreach in rural areas; certainly insufficient to meet population needs. Clinical psychologists are occasionally available in emergencies through ad hoc relocations, and although social workers are more present in remote areas due to nationwide social services, their impact and reach remains limited in health-care settings, as they are not fully integrated into the system.

4.4.2 Distribution through health system levels

Rehabilitation workers in the health-care sector are primarily concentrated in tertiary hospitals and specialized rehabilitation centres. While community-based private practices exist, they operate without clear regulatory oversight.

In some polyclinics and rehabilitation centres, physicians continue to practise under the title of physiotherapist, despite adhering to outdated and non-evidence-informed approaches, which differ vastly from modern, accepted and evidence-informed physiotherapy methods. These practitioners are also commonplace in many sanatoriums and resorts, with the services they provide covered under the BBP. Within the new official list of primary health professions, this arrangement is no longer recognized.

Practitioners using non-evidence-informed rehabilitation techniques are also present at PHC level. As of 2024 Armenia is undergoing a comprehensive process of remodelling and modernizing its PHC system, and within this context, it is essential to ensure the integration of rehabilitation occupations with practices grounded in scientific evidence. Rehabilitation services provided at PHC level offer a more accessible, comprehensive and coordinated approach, capable of addressing common rehabilitation needs for the majority of individuals.

4.4.3 Distribution across sectors other than health care

Among rehabilitation occupations, both physical medicine and rehabilitation doctors and prosthetists and orthotists reported dedicating most of their working time exclusively to health care and rehabilitation.

Social workers primarily operate within the social protection sector, mainly working for nongovernmental organizations that provide services delegated by the State, charities or international nongovernmental organizations to vulnerable populations. Physiotherapists, in addition to their full- or part-time employment, often engage in private practice as well as providing care services at patients' homes.

Clinical psychologists, occupational therapists and speech and language therapists typically work across multiple settings due to proper regulation issues within the health-care system. This is observed primarily in education and social protection and in some cases, even in fields unrelated to their original field of study.

4.4.4 Factors underpinning accessibility

In rural and regional areas, where there may be cultural differences from major urban areas, health services may be less advanced and access to support and supervision may be more limited. This can impact how readily rehabilitation workers are to take positions in these areas and how equipped workers feel to practise.

According to the RWTT, existing education and training opportunities are generally insufficient to adequately prepare or incentivize rehabilitation workers to practise in rural areas. However, clinical psychologists, as well as prosthetists and orthotists, expressed greater confidence in their training and experience in terms of suitability for rural and remote practice.

Encouraging people from underserved areas to train in urban areas and return home following training is a well-established strategy for expanding overall access to workers in rural and remote areas. Speech and language therapists shared an interesting observation that, although there are many speech and language therapy students from rural and remote regions with up to 90% coming from outside Yerevan, after graduation the tendency is to remain in Yerevan and most do not want to return to their place of origin to work.

RWTT members also observed that people entering the job market after graduation prefer to stay in Yerevan, even if there are positions available in more remote regions and when wages are higher. The main motivation is simply the desire to work in the capital, because it is seen as the most attractive place to live by young graduates.

Additionally, incentives for working in underserved areas are (reportedly) underutilized for the rehabilitation workforce. There are no incentives to work in rural or underserved areas, particularly in adult rehabilitation, which is not covered by the state budget.

Placement and deployment mechanisms are not established to ensure a more equitable distribution of rehabilitation workers in underserved areas of Armenia. In some other countries, such mechanisms typically include mandatory service requirements or incentive programmes for workers to practise in rural or remote regions after graduation, helping to mitigate workforce disparities.

Technology and innovation, such as the use of tele-health and mobile applications, have an increasing potential to expand the reach of rehabilitation workers to underserved areas. Although technology and innovation have advanced in recent years, they remain underutilized in Armenia as tools for increasing access to rehabilitation workers in areas with limited availability. RWTT members reported that there is no structured use of any technology to reach those having limited access to rehabilitation services.

Outreach services, whereby individuals or teams of workers visit underserved areas to deliver rehabilitation, are (reportedly) offered only by prosthetists and orthotists. Although most prosthetic and orthotic centres are located in Yerevan, prosthetists and orthotists conduct outreach programmes if needed and their expenses are generally covered because people requiring rehabilitation following amputations have their needs covered by the BBP.

Clinical psychologists generally provide outreach services in case of an emergency, when they are relocated to work specifically with survivors. Nevertheless, this is an ad hoc mechanism and usually mobilized on a voluntary basis, particularly during emergencies. Clinical psychologists also shared the observation that while relocation mechanisms in emergencies do occur and are effective, they mainly involve workers from Yerevan and do not mobilize local workers.

4.5 Acceptability of the rehabilitation workforce

4.5.1 Compatibility

Physiotherapists, prosthetists and orthotists and social workers generally perceived their workforce composition overall as well-suited to the population, including to minority groups and individuals with less common needs. However, other occupation groups acknowledged a need for improvement in this area to ensure that workforce competencies can better meet the needs of a broader range of service users. None of the groups reported that language, cultural or religious differences posed an issue to the provision of services in the country.

The rehabilitation workforce in Armenia is predominantly female, with certain professions, such as occupational therapy and speech and language therapy, being entirely so. The trend of gender distribution for occupational therapists is consistent with global data which observe that 80.3% of this occupational group are women *(56)*. Similarly, the field of speech and language therapy is predominantly female on a global scale. A 2018 survey of 31 international speech-language associations revealed that, on average, only 5.8% of their members were men *(57)*.

In contrast, physiotherapists and prosthetists and orthotists in Armenia are predominantly male. This trend contrasts with global data, where physiotherapy is typically a female-dominated occupation, with 61% of the global physiotherapy workforce female *(58)*. One explanation for this discrepancy could be that within the country, physiotherapists graduate from ASIPCS, which has a higher proportion of male students due to its strong focus on sports-related disciplines. Meanwhile, most prosthetists and orthotists in Armenia work as technicians specializing in the fabrication of prostheses and orthoses, and the gender disparity in this field is largely influenced by cultural norms within the education system.

4.5.2 Perceptions

There is limited awareness and understanding of the rehabilitation workforce among both health-care workers and service users, and the reputation of rehabilitation as a respected and trusted field of study is still developing. Public awareness of the roles within the service and the contributions of rehabilitation to overall health care remains low, influencing how individuals seek and value these services, and ultimately leaving certain needs unmet.

Within the broader health-care workforce, rehabilitation is also often undervalued, with insufficient recognition of its critical role in patient care and outcomes. This lack of understanding negatively impacts referral practices and limits the effective integration of rehabilitation occupations into multidisciplinary health care teams. Additionally, the inadequate availability of rehabilitation workers across all levels of health care exacerbates their lack of recognition among both health-care workers and the general population.

4.5.3 Factors underpinning acceptability

Other health-care workers' level of acceptance influences how they refer to, communicate with, interact with and value all members of the rehabilitation workforce. The RWTT noted that there was very limited discussion and recognition of the role and contribution to health care that rehabilitation workers offer in the pre- and/or post-service education and training programmes of the wider health workforce.

There are initiatives in progress and actions being taken to increase awareness among other health-care workers and encourage them to undertake education in the field of rehabilitation, which is a positive trend. A good example is the introduction of a one-week course on rehabilitative medicine in the fifth year of medicine, where

all students become acquainted with the principles of rehabilitation and gain an understanding of what the occupation entails, its benefits and how rewarding it can be.

The order of the Minister of Health on the official lists of approved paramedical services *(30)* includes all rehabilitation occupations except physical medicine and rehabilitation. This lack of inclusion within the official categories could hamper workforce planning, job creation aligned with the rehabilitation needs of the population and the evaluation of outcomes for these rehabilitation occupations.

Interprofessional collaboration, beyond being essential for ensuring continuity of care or efficient service delivery, is also an important opportunity for the interdisciplinary health workforce to recognize the role and benefits of rehabilitation workers towards improving patient outcomes.

The RWTT reported that collaboration among rehabilitation workers is steadily improving, particularly within individual facilities, where roles are well understood and mutual respect is evident.

Collaboration with non-rehabilitation health-care workers remains limited, affecting the timeliness and continuity of care. Gaps in the referral system were also identified, with other health-care workers often failing to refer patients to rehabilitation specialists.

The knowledge that the public (and service beneficiaries in particular) have about the roles and value of rehabilitation workers shapes how they seek care.

Professional networks and associations play a major role in building public knowledge of rehabilitation workers through awareness campaigns and other forms of promotion. The evaluation showed that professional associations and networks within the rehabilitation sector vary in their level of development. Some associations have been well-established for several years, actively supporting their members and contributing to professional growth.

Associations representing occupational therapists, social workers and speech and language therapists have clearly defined missions, regularly attract new members and are affiliated with international professional organizations. These associations play a vital role in promoting their respective professions and advocating for their recognition in health policy discussions – an important achievement that should be maintained and further strengthened.

For other occupational groups, the absence of well-structured and effective associations remains a challenge. For example, physiotherapists face difficulties in establishing a distinct identity due to inconsistent terminology. Some practitioners still identify as masseurs, leading to confusion between the roles of physiotherapists and massage therapists. As a result, these disciplines often operate under a single association, which further blurs the distinction between these professions and limits their collective representation.

The perception of speech and language therapists is shaped by Soviet-era views, where they were primarily regarded as specialists addressing speech difficulties in children, particularly in correcting pronunciation issues, a practice historically referred to as defectology. Speech and language therapists in Armenia are trained at ASPU, which grants pedagogical diplomas, leading to their predominant employment in educational settings. In the 2000s, these workers were introduced into polyclinics as part of paediatric health-care services. With the subsequent expansion of paediatric rehabilitation, they gained greater visibility in rehabilitation facilities. However, their recognition within the health-care sector remains limited. Currently, only a small number of stroke services integrate speech and language therapists as essential members of multidisciplinary health care teams.

Similarly, the identity of physiotherapists is affected by inconsistent terminology and misconceptions. Some physiotherapists refer to themselves as masseurs and some masseurs claim to be physiotherapists, leading to confusion between the professions. This ambiguity allows individuals with only a few months of massage training to misrepresent themselves as physiotherapists, and the ensuing lack of clear occupational distinction further complicates workforce assessments and the accurate evaluation of physiotherapy services in the country.

Additionally, rehabilitation services in Armenia do not yet fully align with contemporary international standards and evidence-informed practices *(6)*. Rehabilitation remains largely associated with treatments such as mud therapy, balneotherapy, hydrotherapy and massage, many of which lack strong medical and evidential endorsement. Additionally, individuals without higher education – often qualifying after only short, unregulated training courses – can work alongside formally educated workers, further undermining the credibility of the rehabilitation field.

This issue is compounded by a broader stereotype in Armenia, where health workers who obtain their education and training outside of medical educational institutions struggle to gain recognition as bona fide members of the wider health-care workforce. Trust in pedagogical or sports-related education and training institutions remains low within the health-care system, further limiting acceptance and integration of graduates from such establishments into the broader workforce.

4.6 Quality of the rehabilitation workforce

4.6.1 Competence

Competence is the term to describe the level of performance of a workforce as a whole. From the assessments undertaken by the RWTT, occupational therapists, prosthetists and orthotists and social workers reported that most workers have the knowledge, skills and behaviours to deliver rehabilitation to an acceptable standard. Clinical psychologists, physical medicine and rehabilitation doctors, physiotherapists and speech and language therapists felt that within their occupational groups, the knowledge, skills and behaviours to deliver rehabilitation to an acceptable standard were emerging, but that many individuals still had major gaps in competence that compromise the overall quality of care. It was also noted by RWTT that there are considerable differences between the competence of rehabilitation workers with a university qualification and those who have undergone less formal training that must be considered.

The results of the proficiency profiling are summarized below. The assigned proficiency levels (1 through 4) reflect increasing autonomy, decision-making, task complexity and expertise, with level 1 as the minimum and level 4 the highest. Each domain (section 2.4.4) was evaluated and proficiency level scores were allocated for each occupational group.

Practice

The proficiency of rehabilitation workers in Armenia in terms of practice varies significantly (Table 6). Physical medicine and rehabilitation doctors, followed by clinical psychologists and occupational therapists reported having the highest levels of autonomy in decision-making, prescribing interventions and having a very high level of relevant knowledge and skills that need to be applied when working with people with highly complex needs and their families. The overview was that only small percentage required occasional direction and guidance when delivering rehabilitation care. In contrast, physiotherapists, social workers and speech and language therapists indicated feeling that most of them have a greater need for support in terms of overall work

direction, guidance and decision-making, and that most followed prescriptive pathways and adapted existing protocols to provide rehabilitation interventions.

Table 6. Proficiency levels for the practice domain, by profession

Professions	Level 1	Level 2	Level 3	Level 4
Clinical psychologists	Few	Few	Most	Few
Physical medicine and rehabilitation doctors	Few	Few	Most	Few
Physiotherapists	None	Most	Few	Few
Occupational therapists	Few	Few	Few	Most
Prosthetists and orthotists	None	Few	None	None
Social workers	All	None	None	None
Speech and language therapists	Few	Few	Few	Few

Professionalism

The professionalism of rehabilitation workers was also reported to vary significantly (Table 7). Most rehabilitation workers require regular guidance to manage their workload, perform assigned tasks with frequent direction, maintain a relatively consistent workflow, contribute to administrative and reporting duties and apply their knowledge and skills within a well-defined scope. Physical medicine and rehabilitation doctors and prosthetists and orthotists reported greater autonomy within their fields, in examples such as managing their workload with only occasional direction, handling a fluctuating workflow, assuming responsibility for administrative and reporting requirements and applying advanced knowledge and skills to a broader range of responsibilities. However, very few rehabilitation occupations operated with complete independence, managing unpredictable and highly variable workloads, overseeing extensive administrative and reporting duties and applying specialized expertise to complex responsibilities.

Table 7. Proficiency levels the for professionalism domain, by profession

Professions	Level 1	Level 2	Level 3	Level 4
Clinical psychologists	Most	Most	Few	Few
Physical medicine and rehabilitation doctors	Few	Few	Most	Few
Physiotherapists	Few	Most	Few	None
Occupational therapists	Few	Most	Few	Few
Prosthetists and orthotists	None	None	Most	Few
Social workers	Most	Few	Few	None
Speech and language therapists	Most	Most	Few	Few

Learning and development

The evaluation revealed that providing peer support was not common among rehabilitation workers, with learning mainly occurring through observation, structured education and training (Table 8). Teaching activities among peers, students and colleagues were reported to be rare, and while rehabilitation workers manage their professional development, this was often done only with support. The highest level of advancement in providing supervision, managing own development and assisting others was reported by prosthetists and orthotists.

Table 8. Proficiency levels for learning and development domain, by profession

Professions	Level 1	Level 2	Level 3	Level 4
Clinical psychologists	Few	Most	Few	Few
Physical medicine and rehabilitation doctors	Few	Few	Few	Few
Physiotherapists	Few	Few	Few	Few
Occupational therapists	Most	Few	Few	Few
Prosthetists and orthotists	None	None	Most	Few
Social workers	Most	Few	Few	None
Speech and language therapists	Few	Few	Few	Few

Management and leadership

The evaluation concluded that few workers take on roles overseeing team operations, service development or resource procurement and allocation (Table 9). Even fewer possess advanced knowledge and skills in leadership across peers, services or systems. Instead, most contribute to team operations and resource management at a basic or working level, applying only introductory leadership skills within their assigned responsibilities.

Table 9. Proficiency levels for management and leadership domain, by profession

Professions	Level 1	Level 2	Level 3	Level 4
Clinical psychologists	Few	Most	Few	Few
Physical medicine and rehabilitation doctors	Few	Few	Few	Few
Physiotherapists	None	None	None	None
Occupational therapists	Most	Few	Few	Few
Prosthetists and orthotists	None	Most	None	None
Social workers	Few	Most	Few	None
Speech and language therapists	Most	Few	Few	Few

Research

The analysis of the research domain showed that competency in research was generally underdeveloped (Table 10). Few rehabilitation workers apply evidence to practice, or interpret and use statistical and other analytical methods. They more commonly use personal and peer experience to appraise evidence for best practices and do not participate in research activities. Only prosthetists and orthotists reported slightly higher research skills, with most interpreting and incorporating various research methodologies to appraise evidence, additionally supporting and contributing to its dissemination.

Table 10. Proficiency levels for research domain, by profession

Professions	Level 1	Level 2	Level 3	Level 4
Clinical psychologists	Few	Few	Few	Few
Physical medicine and rehabilitation doctors	Few	Few	Few	None
Physiotherapists	None	None	None	None
Occupational therapists	Most	Few	Few	Few
Prosthetists and orthotists	None	None	Most	None
Social workers	None	Most	Few	Few
Speech and language therapists	Few	Few	Few	Few

4.6.2 Competency – tasks mapping

The results showed that, for most rehabilitation occupational groups except clinical psychologists and speech and language therapists, performance in safety, effectiveness and efficiency was largely satisfactory, although there is room for improvement.

Overall, workforce performance was reported to be broadly acceptable based on quality of care and service utilization. However, clinical psychologists and speech and language therapists felt their performance is improving but still falls short, with quality of care and service utilization remaining concerns.

Some gaps in the delivery of rehabilitation assessments and interventions were identified by the task mapping, such as potential gaps of concern in the screening of vision and hearing impairment. In this case; however, it should be noted that the workers who usually deliver these assessment tasks (e.g. audiologists, optometrists) were not included in the evaluation.

Assessment of vestibular functions and cardiovascular functions require attention as they are performed only by physical medicine and rehabilitation doctors.

Gaps were also identified in the ability to deliver the following rehabilitation interventions: retrograde massage, fitness training and thermotherapy.

Physical medicine and rehabilitation doctors can recommend assistive products and informally guide service users on their purchase; however, training in assistive technology, mainly for seating and mobility, is provided only by physiotherapists and occupational therapists, to the extent of their ability. Prosthetists and orthotists are the only practitioners who produce prostheses and orthoses, and they also provide training in their use.

Where overlaps in the delivery of rehabilitation assessments and interventions in Armenia occur, identifying them can be challenging, as rehabilitation workers come from very diverse backgrounds and lack a uniform scope of practice. Many competencies in assessment and intervention – particularly in mobility, daily activities and participation – are shared among physical medicine and rehabilitation doctors, physiotherapists, occupational therapists, prosthetists and orthotists and social workers.

4.6.3 Factors underpinning quality

In Armenia, most institutions have national accreditation and are either taking further steps to be accredited by an international professional accreditation body or already have an international accreditation. YSU is a full member of several international associations, including the International Association of Universities and the European University Association, affirming its adherence to international educational standards. ASIPCS, ASPU and YSMU are accredited by the National Centre for Professional Education Quality Assurance (ANQA).[5] Shirak State University is currently under reaccreditation by ANQA, and Urartu University of Practical Psychology and Sociology was not listed in the available ANQA accreditation register as of 2024.

The requirements for entry into programmes for education on rehabilitation services can be an indicator of the competitiveness and academic demands of the programme, and a gauge for the academic calibre of the student cohort. Physical medicine and rehabilitation doctors, physiotherapists and speech and language therapists reported that course entrance standards for their workforce were highly competitive, while for others are relatively low.

---

[5] ANQA is an independent organization founded by the Armenian Government in 2008. It implements quality assurance processes through institutional and program accreditation in preliminary, vocational and higher educational institutions. The goal is to support tertiary-level institutions to create a quality culture based on developments in the legislation of Armenia.

The maturity of the curriculum and the rigor in which students are assessed against it influence the learning outcomes of students and how prepared they are to face the demands of full-time work in the field. The RWTT reported that for most programmes, the curriculum was under development or revision. Competence is assessed, although often in simulated or non-context-specific environments. The lack of a uniform curriculum for a specific programme and differences in curricula between universities were considered two of the major factors influencing the learning outcomes.

With regards to opportunities for subspecialization, the RWTT declared that opportunities for subspecializations are limited and available only in some fields of practice.

Opportunities for knowledge sharing and skill development are limited, although there are some communities of practice, conferences and other forums emerging. This is more often conducted through informal additional training organized by individual experts, and so the quality of the training is not verified. There is also no formal regulation of the training market. Physiotherapists felt that additional skill development is necessary, as they have recognized that it directly translates into their skills and consequently to increased demand for their services and earnings.

The cultivation of research skills is limited. The evaluation suggested that while courses do introduce research theory and occasionally develop research skills, workers rarely evaluate evidence to improve best practices. Deficiencies in this area have been identified as one of the main factors affecting the proficiency of rehabilitation workers.

The availability and use of clinical guidelines and protocols are very limited. There is a general lack of up-to-date, evidence-informed and context-specific guidelines and protocols to support the performance of the rehabilitation workforce, which results in reduced use of these guidelines and protocols in relevant areas of practice. [6]

Support, supervision and mentorship of the workforce was found to be limited. More specifically, access to supervision and mentorship from senior colleagues is expanding but remains limited, particularly in rural and remote areas. The most developed supervisory mechanisms were reported to be among physical medicine and rehabilitation doctors. The traditional view of doctors as senior health-care workers, along with their formal recognition among the wider audience, may grant them greater authority when overseeing other professions. Social workers reported consistent access to supervision and mentorship at all career stages to support their development.

The availability of adequate equipment and consumables is limited. For all occupational groups except prosthetists and orthotists, it was reported that limited equipment, consumables and facilities hindered their efficiency. Prosthetists and orthotists declared having much better access to adequate infrastructure to practise effectively across most settings.

Standards for entry into clinical practice define the minimum qualifications, knowledge and skills required to use an educational title and provide care. The evaluation found no such standards of practice for rehabilitation occupations had yet been established.

[6] *Note*: in response to recent emergencies, the Ministry of Health, with technical support from WHO, has developed clinical guidelines on rehabilitation for amputation and burns and a standard operating procedure for burn rehabilitation.

5. Summary of findings

As of 2024, Armenia still lacked a well-developed multidisciplinary rehabilitation workforce. As this analysis shows, various rehabilitation specializations exist, but many professions and sub-professions remain unrecognized within the health-care sector. Occupational therapists, physiotherapists and speech and language therapists are currently officially considered as paramedical workers within the health-care workforce *(30)*, but even despite this categorization, these roles are still not fully recognized, or consistently regulated.

Additionally, many rehabilitation occupations are not formally overseen by the state, and despite job titles these roles often lack defined qualifications, making quality assurance difficult. Additionally, inadequate or entirely absent job descriptions further contribute to role ambiguity and hinder occupational recognition.

While several professional associations exist, most are still in early development. The National Rehabilitation Workforce Evaluation in Armenia drew on a range of methods to analyse and understand the situation, as well as the various factors shaping it. It revealed both strengths to be leveraged and areas requiring investment and action. While not an exhaustive reflection of all findings, the following statements capture the significant conclusions of the evaluation, as determined by the RWTT and other rehabilitation stakeholders.

The state of the rehabilitation workforce has a direct impact on the rehabilitation care available to people in Armenia. Analysing data on rehabilitation needs alongside data on the availability of rehabilitation workers across occupational groups provides preliminary insight into the extent of rehabilitation care that can be delivered and what needs are going unmet. The evaluation used a limited set of health conditions as a proxy to indicate the capacity of the workforce to deliver rehabilitation care. For each condition, rehabilitation care targeting the following areas of functioning were analysed: mental functions, communication, swallowing, pain, respiration, skin, cardiovascular, mobility, activities of daily living and education and vocation.

5.1 Strengths of the rehabilitation workforce in Armenia

The Ministry of Health, Ministry of Education, Science, Culture and Sports, Ministry of Labour and Social Affairs and the rehabilitation practice community are strongly committed to developing a skilled and empowered multidisciplinary rehabilitation workforce and enhancing its role in health care, as outlined in the draft strategy and action plan on strengthening rehabilitation and assistive technology (2025–2030).

The Ministry of Health has introduced new regulations for health-care professions, streamlining definitions and specializations, including for physical medicine and rehabilitation doctors.

There is a clearly developing identity among all rehabilitation workers and an increasing awareness of their necessary role in rehabilitation and health care.

There is a growing pool of rehabilitation workers eager to learn and advance their occupational qualifications.

Rehabilitation medicine is now a defined and established specialty, and physical medicine and rehabilitation doctors have the opportunity to serve as leaders and advocate for collaboration with other rehabilitation workers, and to raise awareness among other health-care workers.

Unemployment among rehabilitation workers is relatively low, despite shortages in the health-care sectors where they are needed.

Well-developed professional associations, linked to international organizations, are positively influencing the rehabilitation workforce's growth and setting strong examples for others.

Young rehabilitation workers are actively moving away from outdated methods and practices, and towards modern, evidence-informed interventions. This is an extremely positive indicator of the overall direction of development within the discipline.

Effective outreach mechanisms are helping to increase the availability of rehabilitation workers in remote areas, with prosthetists and orthotists being the most accessible, and clinical psychologists providing voluntary support during emergencies.

5.2 Challenges to address

5.2.1 Availability of rehabilitation workers

The supply, demand and absorption of rehabilitation workers in Armenia's health-care sector remains a concern. Graduate turnout remains insufficient, with significant gaps in the system. Many workers are unable to find employment positions in health care, and many lack necessary skills, as most have learnt in nonmedical institutions. Many specialists work in counselling, sports centres, wellness, schools and kindergartens where their training and skills would align better with education and social services; in particular clinical psychologists, speech and language therapists and social workers. Conversely, physiotherapists are often found to be working in the sports- and wellness-related sectors.

The limited availability of the rehabilitation workforce remains a critical challenge to accessing rehabilitation services in Armenia for the wider population, particularly for those in remote areas. This is most commonly due to inadequate distribution geographically, rather than a lack of skilled workers.

Data on the health-care workforce have been collected and are readily available; however, determining the exact supply of rehabilitation workers is challenging due to inconsistent terminology and limited formal recognition in the health-care system.

Varied educational backgrounds, caused by the existence of multiple training pathways for the same rehabilitation occupation ranging from informal training to bachelor's and master's degrees result in significant variation in knowledge and competencies within occupational groups. This, in turn, affects their recognition and credibility within the health system.

Physical medicine and rehabilitation doctors have the highest level of recognition within the health-care system, although various related specialties continue to exist.

Occupational therapists, physiotherapists, prosthetists and orthotists and speech and language therapists are not formally recognized as part of the health-care workforce, placing them outside both senior (physicians) and middle-level (nurses) workforce categories.

Clinical psychologists are recognized as paramedical workers, are not state-funded for adult services and are excluded from the BBP, while social workers have their strongest position within the social sector.

There is no regulatory or licensing body to oversee the rehabilitation workforce across sectors or to track workforce inflow and outflow.

Dual practice is very common among all rehabilitation workers in Armenia, both in terms of working across multiple positions or facilities, and being employed in different sectors such as health care, social services and education. Rehabilitation work is rarely the sole source of income, primarily due to low salaries, a limited pool of qualified personnel and a small market. As a result, a single rehabilitation centre may operate multiple branches and in terms of leadership and oversight it may often be more practical for one doctor to cover several locations.

Only physical medicine and rehabilitation doctors are able to prescribe pharmacological agents, and this is still limited to only a few of the common prescriptions that can be used for common issues and disorders: mental, sleep, psychomotor, mobility, respiratory, cardiovascular functions and pain.

5.2.2 Accessibility of rehabilitation workers

Limited and uneven distribution of the rehabilitation workforce hinders access to rehabilitation services in Armenia, with most educational institutions and workers concentrated in Yerevan, reflecting a broader issue of centralization across various sectors.

The centralization of rehabilitation workers in Yerevan, combined with the exclusion of adult rehabilitation services from the BBP and high costs of care places a significant financial burden on the population.

There are no incentives or deployment mechanisms to achieve more equitable distribution to underserved areas.

Rehabilitation workers mainly work in tertiary hospitals and specialized rehabilitation centres, while community-based private practices operate without clear regulatory oversight.

5.2.3 Acceptability of rehabilitation workers

The role and contribution of the rehabilitation workforce is not well integrated into the education of non-rehabilitation workers, except for medical students. Most rehabilitation workers are trained at nonmedical universities.

Inconsistent terminology affects identity and public perception, impacting demand for services.

Collaboration among rehabilitation workers is steadily improving within individual facilities, with clear roles and mutual respect. However, stronger collaboration with non-rehabilitation health-care workers and between facilities is needed to enhance referral pathways.

The rehabilitation workforce in Armenia is predominantly female, with the fields of occupational therapy and speech and language therapy being entirely female, and the exceptions that physiotherapists and prosthetists and orthotists are mostly male. The workforce is perceived as well-suited to the population's needs.

Inconsistent terminology across rehabilitation disciplines further contributes to misunderstandings and weakens the identity of rehabilitation occupations. Additionally, the absence of reliable quantitative data on specific rehabilitation groups hinders advocacy efforts and the establishment of a strong occupational standing.

5.2.4 Quality of rehabilitation workers

Variations in competencies among workers within the same discipline pose challenges for defining standardized skills and expertise across the workforce. Skills are primarily developed through workplace experience due to a lack of formal training pathways, internships and supervision. Limited access to rehabilitation for certain health conditions also restricts opportunities for the development of specialized competencies.

There is a shortage of up-to-date, evidence-informed and context-specific guidelines to support rehabilitation occupations.

Variations in the educational background of professionals – ranging from short-term training to full academic degrees and including transitions from unrelated fields – combined with a lack of standardized guidelines, contribute to inconsistent practice quality in the health-care system.

Physical medicine and rehabilitation doctors have the highest autonomy in decision-making and intervention planning, followed by clinical psychologists and occupational therapists. Physiotherapists, social workers and speech and language therapists work with more guidance and oversight.

Limited research and management skills across the rehabilitation workforce affect overall proficiency.

Therapies such as mud therapy, balneotherapy, hydrotherapy and massage therapy remain classified as rehabilitation services and are included in the BBP for specific groups, including war veterans and people with disabilities, although they do not align with international evidence base on rehabilitation work.

Continuing professional development is mandatory for only a few professions in Armenia, and uses a credit system for evaluation. Physicians must achieve 220 credits within 5 years, and nurses 140 in 5 years; continuing professional development is not required for other rehabilitation occupations *(59)*.

Overlapping roles across professions and inconsistent competencies within the same occupational groups create inefficiencies and hinder efforts to establish a standardized baseline for skills and expertise. Gaps in training concerning the provision of assistive products limit the ability of health-care based rehabilitation workers to effectively prescribe them, creating disparities with social welfare teams involved in disability determination.

Uncoordinated expansion of scopes of practice can lead to inefficiencies, despite some beneficial overlap aimed at addressing workforce shortages. While role overlap may help to address workforce shortages, a lack of standardized guidelines, supervision and consistent training increases the risk of uneven intervention quality. The lack of opportunities for subspecialization limits the capacity of the workforce to meet complex population needs and hampers recruitment and retention by reducing career development and earning potential. The absence of structured opportunities for knowledge sharing and skill development hampers collective workforce quality improvement. Limited development of research skills hinders workforce maturity and the advancement of evidence-informed practice in rehabilitation. The lack of clinical guidelines and protocols limits the development of evidence-informed practice and undermines quality of care, particularly where protocol-based delivery is essential. Limited support, supervision and mentorship hinder knowledge transfer, patient safety and workforce motivation, particularly for newly graduated rehabilitation workers. Limited access to adequate equipment and consumables restricts safe, effective rehabilitation and prevents workers from practicing to their full scope and achieving desired patient outcomes. The rehabilitation workforce plays a crucial role within the health system by optimizing functional outcomes, reducing disability, enhancing the quality and effectiveness of health care and driving demand for services.

To meet population needs, it is essential to ensure an adequate number of workers with the right skill mix. This requires substantial investment in education, in motivation of the workforce and in retention of staffed positions. The rehabilitation workforce consists of a diverse range of occupational groups and specializations, is a crucial element of universal health coverage and is essential to achieving Sustainable Development Goal 3 (health for all at all ages) *(23)*.

To improve future workforce planning, comprehensive data collection on rehabilitation workers is essential. Tracking workforce trends, including production, migration and distribution, will enable projections and targeted interventions and support evidence-informed planning and ensure rehabilitation services meet future population needs. Additionally, the absence of national regulatory or licensing bodies, along with variations in educational programmes, presents a significant challenge for the rehabilitation workforce in Armenia and represents a priority that must be addressed in a timely manner.

6. Recommended actions

Rehabilitation is a critical component of health systems, contributing significantly to improving population functioning and quality of life. To maximize its impact, the rehabilitation workforce must be recognized and strategically aligned within the broader health workforce framework. Integrating rehabilitation workforce recommendations into the overall health workforce strategy ensures that rehabilitation workers receive adequate support, funding and policy attention comparable to other health professions.

This integration should be accompanied by strengthened advocacy efforts, including enhanced pre- and post-service education for health-care workers, capacity-building of professional associations, public awareness campaigns and increased representation of rehabilitation professionals in decision-making forums. These measures will raise the profile and influence of the rehabilitation workforce, fostering greater collaboration and resource allocation.

By embedding rehabilitation workforce actions within the national strategy and reinforcing advocacy, Armenia can promote synergy across health disciplines, ensure efficient use of resources and build a unified vision for health workforce development – ultimately strengthening health system resilience and responsiveness to evolving population needs.

The following recommended actions have been generated based on the conclusions of these evaluations, identifying broad areas for investment and action. They serve to simultaneously address the dimensions of availability, accessibility, acceptability and quality of the rehabilitation workforce. In this way, each of them may address multiple issues identified in the conclusions of this report. Therefore, rather than being organized by dimension as the conclusions are, these recommended actions are organized by strategic approach.

6.1 Strengthening the recognition and capacity of the rehabilitation workforce

- Integrate the detailed rehabilitation workforce action plan into the broader health workforce strategy in Armenia.
- Establish clear terminology for all rehabilitation occupations.
- Include rehabilitation professions in the official register and systematically track data on workforce supply, inflow, outflow, distribution and employment trends to improve workforce planning and development.
- Advocate for the formal recognition of rehabilitation workers as part of the health-care workforce, ensuring appropriate regulations define their roles and job descriptions.
- Develop and implement standardized curricula and education requirements for all rehabilitation professions, including minimum entry standards and standardized exams for master's programmes.
- Strengthen management and leadership competencies within the rehabilitation workforce to support effective service delivery and occupational growth.
- Increase awareness and understanding of the rehabilitation workforce among health-care workers and service users.
- Strengthen collaboration between rehabilitation and other health-care workers to improve patient outcomes and promote integrated care.
- Strengthen and clarify occupational identities through dedicated associations to advance professions and enhance their influence within the health-care system.

- Formalize the RWTT joint team and create an alliance with relevant rehabilitation stakeholders to oversee the ongoing development of the rehabilitation workforce and advocate as a single strong voice.

6.2 Attraction and retention of the rehabilitation workforce

- Build trust and reduce stigma towards rehabilitation occupations in nonmedical educational institutions training health-care workers by ensuring active involvement of professional associations, promoting the rehabilitation workforce and engaging with graduates.
- Track graduates' transition into the Armenian labour market to monitor and support their career development.
- Integrate rehabilitation workers into the health-care sector, particularly at PHC level, through formal recognition, structured career pathways and expanded opportunities for internships, interdisciplinary clinical placements and mentorship programmes to enhance skill development.
- Consider financial incentives, such as bonuses or increased remuneration, to support rehabilitation workers in taking on new responsibilities and meeting challenges, similar to the incentives introduced for health-care workers in Armenia *(24)*.
- Establish mechanisms to promote careers in rehabilitation by enhancing medical training, creating attractive job opportunities and increasing awareness of rehabilitation needs.
- Develop strategies beyond simple wage incentives, such as professional development opportunities and making more diverse leadership roles available to attract and retain rehabilitation workers in rural areas.

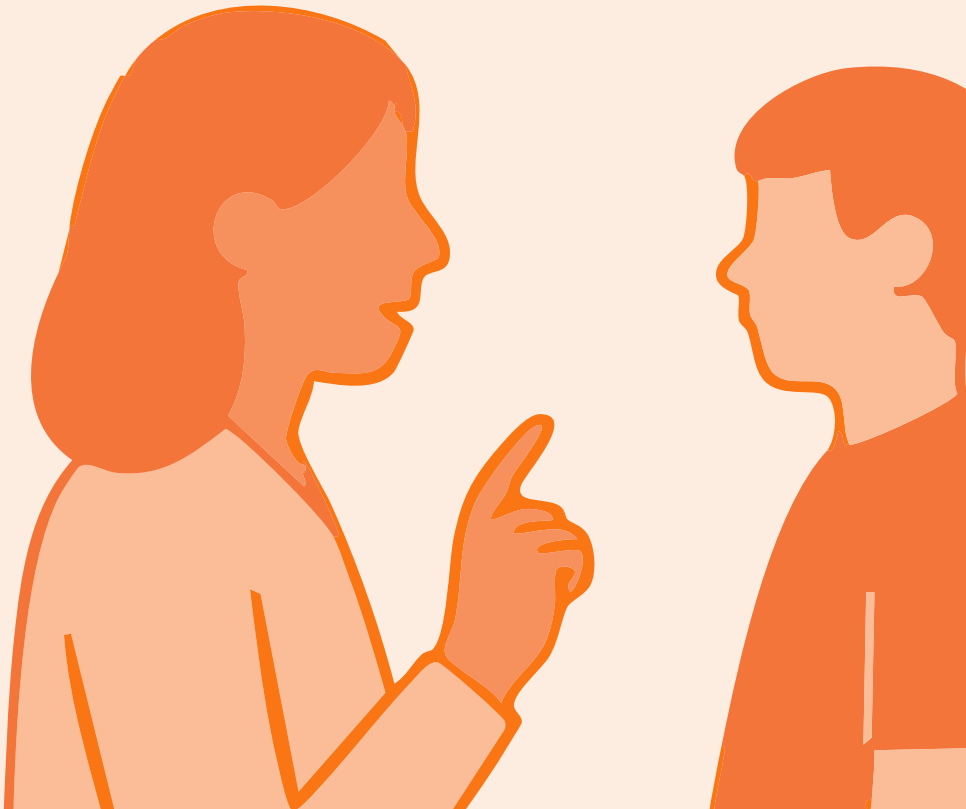
6.3 Organization of the rehabilitation workforce

- Introduce a licensing system requiring certification for employment in the health-care system and private practice ownership in order to regulate practice, ensure accountability and uphold workforce standards.
- Establish minimum entry standards and implement standardized training programmes aligned with international best practices to ensure a qualified and competent rehabilitation workforce.
- Create and enforce standardized practice guidelines that clearly define occupational roles, competencies and service delivery expectations to promote consistent, high-quality care.
- Explore placement and outreach strategies to improve the distribution of rehabilitation workers in rural areas, including evidence-informed policy interventions to attract and retain workforce in underserved regions *(60)*.
- Utilize technology and tele-health to expand access to rehabilitation services in rural and remote areas.

6.4 Enabling the rehabilitation workforce

- Strengthen and institutionalize professional associations by involving them in public health care hearings, developing clinical guidelines and leading advocacy, communication and information campaigns. Encourage networking, international participation and leveraging the experience of established associations.
- Update the list of rehabilitation services to include evidence-informed practices and to raise public awareness about modern rehabilitation professions and their benefits.
- Invest in continuing professional development through targeted programmes, management training and continuing education to close proficiency gaps and enhance service quality.
- Strengthen the cultivation of research skills across the rehabilitation workforce to advance evidence-informed practice.
- Build trust and awareness within the broader health-care workforce about the importance and benefits of rehabilitation, while enhancing interdisciplinary collaboration and referral systems across all health-care levels.

References[1]



[1] All references were accessed on 14 July 2025.

1. Armenia to provide accessible healthcare across the country with World Bank Support [news release]. World Bank; 28 June 2024 (https://www.worldbank.org/en/news/press-release/2024/06/28/armenia-to-provide-accessible-healthcare-across-the-country-with-world-bank-support).

2. Objective 23: managing the human potential and quality in the healthcare sector. In: Five-year action program 2021–2026: year 2. Yerevan: Government of the Republic of Armenia; 2021 (https://www.gov.am/files/docs/5896.pdf).

3. Objective 21: improving the quality of medical care and services. In: Five-year action program 2021–2026: Annex No 1 to Decision of the Government of the Republic of Armenia No 2045–L of 19 December 2024. Yerevan: Government of the Republic of Armenia; 2021 (https://www.gov.am/files/docs/5894.pdf).

4. Seventy-sixth World Health Assembly: Agenda item 13.4, 30 May 2023: Strengthening rehabilitation in health systems. Geneva: World Health Organization; 2023 (WHA76.6; https://iris.who.int/handle/10665/376760).

5. Առողջապահության փոխնախարարը և ԱՀԿ ներկայացուցիչն անդրադարձել են վերականգնողական բժշկության ոլորտում ՀՀ-ի ներուժի զարգացմանը [Deputy Minister of Health and WHO Representative discussed the development of Armenia›s capacity in the field of rehabilitative care] [news release]. Factor.AM; 27 October 2023 (https://factor.am/705337.html) (in Armenian).

6. A situation assessment of rehabilitation in Armenia. Copenhagen: WHO Regional Office for Europe; 2024 (https://iris.who.int/handle/10665/376953). Licence: CC BY-NC-SA 3.0 IGO.

7. Rehabilitation 2030 initiative [website]. World Health Organization; 2025 (https://www.who.int/initiatives/rehabilitation-2030).

8. Guide for rehabilitation workforce evaluation. Geneva: World Health Organization; 2023 (https://iris.who.int/handle/10665/369346). Licence: CC BY-NC-SA 3.0 IGO.

9. Clinical psychologist job profile [website]. British Psychological Society; 2025 (https://www.bps.org.uk/clinical-psychologist-job-profile).

10. About occupational therapy [website]. World Federation of Occupational Therapists; 2025 (https://wfot.org/about/about-occupational-therapy).

11. The society [website]. International Society of Physical and Rehabilitation Medicine; 2025 (https://isprm.org/discover/the-society/).

12. What is physiotherapy? [website]. World Physiotherapy; 2025 (https://world.physio/resources/what-is-physiotherapy).

13. Physiotherapist (EU country variations). In: Generic profession names [online database]. Brussels: European Commission Regulated Professions Database; 2025 (https://ec.europa.eu/growth/tools-databases/regprof/professions/generic/profession/1250).

14. Standards for prosthetics and orthotics. Geneva: World Health Organization, United States Agency for International Development; 2017 (https://iris.who.int/handle/10665/259209). Licence: CC BY-NC-SA 3.0 IGO.

15. Prosthetist and orthotist/orthopaedic technician/surgical truss-maker (EU country variations). In: Generic profession names [online database]. Brussels: European Commission Regulated Professions Database; 2025 (https://ec.europa.eu/growth/tools-databases/regprof/professions/generic/profession/1120).

16. Global definition of the social work profession [website]. European Speech and Language Therapy Association [website]. European Speech and Language Therapy Association; 2025 (https://eslaeurope.eu/practice-terminology/).

17. Social worker (EU country variations). In: Generic profession names [online database]. Brussels: European Commission Regulated Professions Database; 2025 (https://ec.europa.eu/growth/tools-databases/regprof/professions/generic/profession/4030).

18. Terminology. In: European Speech and Language Therapy Association [website]. European Speech and Language Therapy Association; 2025 (https://eslaeurope.eu/practice-terminology/).

19. Guide for rehabilitation workforce evaluation [website]. World Health Organization; 2025 (https://www.who.int/teams/noncommunicable-diseases/sensory-functions-disability-and-rehabilitation/guide-for-rehabilitation-workforce-evaluation).

20. Health systems strengthening glossary. Geneva: World Health Organization; 2011 (https://cdn.who.int/media/docs/default-source/documents/health-systems-strengthening-glossary.pdf).

21. Armenia. In: World Population Prospects 2024 [online database]. New York: United Nations Department of Economic and Social Affairs; 2024 (https://population.un.org/wpp/graphs?loc=51&type=Demographic%20Profiles&category=Population%20Pyramids&year=2024).

22. Rehabilitation [fact sheet]. World Health Organization; 22 April 2024 (https://www.who.int/news-room/fact-sheets/detail/rehabilitation).

23. Rehabilitation in health systems. Geneva: World Health Organization; 2017 (https://iris.who.int/handle/10665/254506). Licence: CC BY-NC-SA 3.0 IGO.

24. Health and care workforce in Europe: time to act [news release]. World Health Organization; 14 September 2022 (https://www.who.int/europe/publications/i/item/9789289058339).

25. Situational analysis of the rights of persons with disabilities in Armenia: country report 2021. New York: United Nations Partnership on the Rights of Persons with Disabilities; 2023 (https://unprpd.org/new/wp-content/uploads/2023/12/CR_Armenia_2021-db7.pdf).

26. Armenia: ArMed national digital health system [meeting report]. Copenhagen: WHO Regional Office for Europe; 2021 (https://www.who.int/europe/publications/m/item/armenia-armed-national-digital-health-system-(2021)). Licence: CC BY-NC-SA 3.0 IGO.

27. Mkrtchyan G. Supporting social workers to strengthen assistance for families in vulnerable situations [news release]. UNICEF Armenia; 29 July 2025 (https://www.unicef.org/armenia/en/stories/supporting-social-workers-strengthen-assistance-families-vulnerable-situations).

28. Building an ecosystem to support assistive technology access in Armenia: case study 3. New York: United Nations Children›s Fund; 2025 (https://www.unicef.org/eca/media/22061/file/Case%20study%203.pdf). Licence: CC BY-4.0.

29. Sivan M, Negrini S. An expanded workforce is needed to strengthen rehabilitation in health systems. BMJ. 2024;384:q60 (https://doi.org/10.1136/bmj.q60).

30. 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) (in Armenian).

31. Age and sex distribution of Armenia›s permanent population, 2023–2025 [online database]. Yerevan: Statistical Committee of the Republic of Armenia; 2025 (https://armstat.am/en/?nid=969).

32. Ընդհանուր տեղեկություններ [General information]. In: Our city [website]. Yerevan.am; 2025 (https://www.yerevan.am/hy/our-city) (in Armenian).

33. Approach paper: World Bank support to aging countries. Washington, DC: World Bank; 2019 (https://ieg.worldbankgroup.org/sites/default/files/Data/reports/ap_agingcountries.pdf). Licence: CC BY-4.0.

34. Country health data overview: Armenia [online database]. Geneva: World Health Organization; 2025 https://data.who.int/countries/051).

35. Armenia takes steps to improve its primary health care system [news release]. WHO Regional Office for Europe; 16 Mar 2023 (https://www.who.int/europe/news-room/16-03-2023-armenia-takes-steps-to-improve-its-primary-health-care-system).

36. Country data: Armenia [online database]. Washington, DC: World Bank; 2025 (https://data.worldbank.org/country/Armenia).

37. Melkonyan A, Oyugi B, Conovali E, Storozhenko O, Gijs G, Paronyan L et al. A review of the response and the emergency medical teams (EMTs) deployment in Armenia following an explosion at a fuel depot near Stepanakert (Nagorno-Karabakh) in Armenia. Confl Health. 2025;19*(1)*:10 (https://doi.org/10.1186/s13031-025-00649-1).

38. Overview: the World Bank in Armenia [website]. Armenia 2024. In: European Health Observatory [online database]. Geneva: World Health Organization; 2025 (https://eurohealthobservatory.who.int/publications/i/health-systems-in-action-armenia-2024).

39. Health expenditure profile: Armenia. In: WHO Global Health Expenditure Database [online database]. Geneva: World Health Organization; 2025 (https://apps.who.int/nha/database/country_profile/index/en).

40. Decent work. Geneva: International Labour Organization; 2021 (https://www.ilo.org/global/topics/decent-work/lang--en/index.htm). Licence: CC BY-4.0.

41. Armenia primary healthcare assessment report: strengthening primary healthcare. Washington, DC: World Bank; 2024 (http://hdl.handle.net/10986/42479). Licence: CC BY-4.0.

42. In Armenia, WHO/Europe joins hands with local NGOs and people living with mental health conditions to mark World Mental Health Day [news release]. WHO Regional Office for Europe; 17 Oct. 2022 (https://www.who.int/europe/news-room/17-10-2022-in-armenia--who-europe-joins-hands-with-local-ngos-and-people-living-with-mental-health-conditions-to-mark-world-mental-health-day).

43. Առողջապահության բնագավառի մասնագիտական գործունեության հիմնական մասնագիտությունների, նեղ և լրացուցիչ մասնագիտացումների կազմակերպման սկզբունքները և դրանց ցանկերը հաստատելու մասին ՀՀ առողջապահության նախարարի հրամանը 17 փետրվարի. 2025. N 23-Ն [Order of the Minister of Health of the Republic of Armenia on approving the principles of organizing the main specialties, narrow and additional specializations of professional activities in healthcare field and their lists, February 17, 2025. N 23-N]. Yerevan: Ministry of Health of the Republic of Armenia; 2025 (https://moh.am/images/legal-1812.pdf) (in Armenian).

44. Department of Medical Psychology [website]. Yerevan State Medical University; 2025 (https://ysmu.am/en/faculty/department-of-medical-genetics/).

45. Հայաստանի կլինիկական հոգեբանների ասոցիացիա [Association of Clinical Psychologists of Armenia] [Facebook profile]. Facebook; 2025 (https://www.facebook.com/AssociationofClinicalPsychologistsofArmenia) (in Armenian).

46. Նոր հարթակ հոգեկան առողջության ոլորտի խնդիրներն ուշադրության կենտրոնում պահելու համար. կնքվեց հուշագիր [New platform to focus attention on mental health issues: Memorandum signed] [news release]. 1in.am; 1 April 2025 (https://www.1in.am/3091874.html) (in Armenian and English).

47. Սահմաններից զերծ էրգոթերապիա [Ergotherapy without borders] [blog] Armenian Ergotherapists Association; 2025 (https://armergotherapy.blogspot.com/p/blog-page_19.html) (in Armenian).

48. Կլինիկական ռեաբիլիտոլոգների հայկական ասոցիացիա [Association of Rehabilitation Specialists of Armenia] [Facebook profile]. Facebook; 2025 (https://www.facebook.com/associationrehab/) (in Armenian).

49. Armenian Association of Social Workers [website]. Armenian Association of Social Workers; 2025 (https://aasw.org/en).

50. Armenian Speech Therapists› Association [website]. Armenian Speech Therapists› Association; 2025 (https://armslp.wixsite.com/armspechtherapists).

51. Quote from Anahit Avanesyan, Minister of Health [post]. Facebook; 2025 (https://www.facebook.com/share/p/1H6MoS2HRV/) (in Armenian).

52. Andreasyan D, Muradyan G, Simonyan S, Mirzoyan L, Simonyan A et el. Health and health care statistical yearbook 2024. Yerevan: National Institute of Health Named after Academician S. Avdalbekyan; 2024 (https://www.nih.am/assets/pdf/atvk/ff14e3c27082c00737f3f4f9fc3b5493.pdf).

53. Բուժաշխատողների ռեգիստր [Register of medical professionals] [website]. Armenian National Institute of Health; 2025 (https://nih.am/home/register) (in Armenian).

54. Prosperity data. In: World Bank Data 360 [online database]. Washington, DC: World Bank; 2025 (https://prosperitydata360.worldbank.org/en/indicator/FFP+FSI+E3).

55. Armenia average monthly nominal wage [online database]. London: CEIC, 2025 (https://www.ceicdata.com/en/armenia/average-monthly-real-and-nominal-wages/average-monthly-nominal-wage-nace-2-health-care-and-social-service).

56. Ledgerd R, World Federation of Occupational Therapists. WFOT report: WFOT human resources project 2018 and 2020. World Fed Occup Ther Bull. 2020;76(2):69–74 (https://doi.org/10.1080/14473828.2020.1821475).

57. Campos I, Skiados M, Perry Flynn P. The unicorn: the rarity of males in speech-language pathology. Perspect ASHA Spec. 2025;3(17):29–37 (https://doi.org/10.1044/persp3.SIG17.29).

58. Global report on world physiotherapy: annual membership census 2024. London: World Physiotherapy; 2024 (https://world.physio/sites/default/files/2025-01/AMC2024-Global-report.pdf).

59. ՀՀ առողջապահության նախարարի հրամանը շարունակական մասնագիտական զարգացումն ապահովող միջոցառումների կազմակերպմանը, իրականացմանը և մասնակցությանը ներկայացվող պահանջները, շարունակական մասնագիտական զարգացման յուրաքանչյուր տեսակի գծով շնորհվող ՇՄԶ կրեդիտների քանակը և դրանց շնորհման կարգը հաստատելու մասի N 20- Ն, 26.04. 2019 [Order of the Minister of Health of the RA on approving the requirements for the organization, implementation and participation in events ensuring continuing professional development, the number of CPD credits awarded under each type of continuing professional development, the procedure for their award, N20-N, 26 April 2019]. Yerevan: Ministry of Health of the Republic of Armenia; 2019 (https://www.arlis.am/DocumentView.aspx?docid=183441) (in Armenian).

60. WHO guideline on health workforce development, attraction, recruitment and retention in rural and remote areas. Geneva: World Health Organization; 2021 (https://iris.who.int/handle/10665/341139). Licence: CC BY-NC-SA 3.0 IGO.

Annexes

Annex 1. Workforce coverage assessment: scores for each dimension

The workforce coverage assessment allocated scores for workforce performance for the broad category definitions of availability, accessibility, acceptability and quality of each occupation (Tables A1.1–A1.4) and for a range of factors contributing to this performance (Annex 2).

Table A1.1. Availability

Criteria	4 Needs no immediate action	3 Needs minor strengthening	2 Needs major strengthening	1 Needs establishment
Supply	Supply is sufficient to meet population needs across all levels of the health system, the public and private sectors and for all service delivery platforms; to compensate for situations of annual, study, sick or parental leave; and to compensate for attrition, retirement, career or role changes.	Supply is sufficient to meet population needs across most levels of the health system, the public and private sectors and for most service delivery platforms. However, it is not fully capable of compensating for situations of annual, study, sick or parental leave, attrition, retirement, career or role change.	Supply is largely insufficient to meet population needs and there are large gaps across some levels of the health system and service delivery platforms. However, it is increasing and the workforce has a growing presence within key health services.	Supply is grossly insufficient to meet population needs and there are few or no workers in the health system. The supply of the workforce is not expanding to a notable degree.
Demand	The number of positions for this workforce aligns with population needs and is sufficient to staff relevant services. There is limited unemployment and minimal job vacancies.	The number of positions for this workforce is beginning to align with population needs and is sufficient to staff most relevant services. Unemployment of workers and/or job vacancies continue to be a concern.	While there are some positions for this workforce, the number is insufficient to meet population or staff relevant services. There is high unemployment of workers and/or considerable job vacancies posing a considerable concern.	There are no or negligible positions for this workforce.
Absorption	The vast majority (> 90%) of workers are employed in the health system.	A moderate proportion (> 80%) of workers are employed in the health system.	A limited proportion of workers (> 70%) are employed in the health system.	A very limited proportion (> 50%) of workers are employed in the health system.
Efficiency	Workers achieve their aims within desired or expected time frames, in supportive, efficient and enabling environments.	Workers mostly achieve their aims within desired or expected time frames, although environmental barriers (such as from excessive administration or bureaucracy or inefficient systems) still compromise productivity and efficiency to some extent.	Workers often do not achieve their aims within desired or expected time frames, although mechanisms to improve productivity and efficiency are emerging.	Workers rarely achieve their aims within desired or expected time frames.

Table A1.2. Accessibility

Criteria	4 Needs no immediate action	3 Needs minor strengthening	2 Needs major strengthening	1 Needs establishment
Distribution	This workforce is readily accessible in rural and remote areas, either directly or through outreach mechanisms. There is representation of the workforce at all levels of the health system.	This workforce is accessible in most rural and remote areas, either directly or through outreach mechanisms. There is representation of the workforce in all levels of the health system, although it is not yet adequate to meet population needs, particularly in rural and remote areas.	It is difficult to access this workforce in many rural and remote areas. Available workforce typically concentrated at one level of the health system (typically tertiary/ national hospitals), with access at other levels limited.	This workforce is not or is rarely accessible in rural and remote areas. Any available workforce is generally only accessible at one level of the health system, typically tertiary/ national hospitals and access at other levels is very limited to nonexistent.
Temporal availability	The amount of time the workforce is available for rehabilitation practice is high relative to worker density.	Workers are able to allocate considerable working time to delivering care, although administrative and service inefficiencies still pose a concern. There is some absenteeism.	The workforce is able to allocate a growing amount of time to rehabilitation practice, but it is still low relative to worker density.	The time workers can allocate to delivering care is considerably reduced due to administrative and service inefficiencies. There is significant absenteeism.

Table A1.3. Acceptability

Criteria	4 Needs no immediate action	3 Needs minor strengthening	2 Needs major strengthening	1 Needs establishment
Compatibility	The demographic profile and competencies of this workforce are acceptable to the vast majority of the population, including minority groups and those with special needs.	The demographic profile and competencies of this workforce are acceptable to most of the population, although these is minor incompatibility with some minority groups and people with special needs.	The demographic profile and competencies of the workforce are unacceptable to many service users, but efforts to improve alignment with the broader population are emerging.	The demographic profile and competencies of the workforce are unacceptable to most service users.
Perception	This workforce is widely perceived as highly competent and effective and their role and contribution to health is well understood and appreciated by health workers and service users.	This workforce is mostly perceived as competent and effective, although their role and contribution to health is not always well understood by some health workers and service users.	There is a limited understanding of this workforce among other health professionals and service users and their reputation as a respected and trusted workforce is still emerging.	This workforce is not well respected or understood. Most people do not recognize or appreciate their role or contribution to health.

Table A1.4. Quality

Criteria	4 Needs no immediate action	3 Needs minor strengthening	2 Needs major strengthening	1 Needs establishment
Competence	The vast majority of this workforce have the knowledge, skills and behaviours to deliver rehabilitation to an excellent standard, meeting the diverse needs of the population.	Most of this workforce have the knowledge, skills and behaviours to deliver rehabilitation to an acceptable standard, although some competency gaps exist.	This workforce is gradually expanding the knowledge, skills and behaviours to deliver rehabilitation tasks to an acceptable standard, but many still have major gaps in competence that compromise quality of care.	Most of this workforce do not have the knowledge, skills or behaviours to deliver rehabilitation to an acceptable standard.
Performance	This workforce performs safely, effectively and efficiently and is a model to other countries. The performance of workers attracts high rates of service utilization and contributes to optimal outcomes.	The performance of this workforce is largely satisfactory in regard to safety, effectiveness and efficiency, although there is scope for further improvement. Quality of care and service utilization reflect a broad acceptance of workforce performance.	The performance of this workforce is showing signs of progress in regard to safety, effectiveness and efficiency but it remains subpar. Quality of care and service utilization remain concerns.	The performance of this workforce is largely unacceptable, with concerns regarding safety, effectiveness and efficiency significantly compromising quality of care and reducing service utilization.

Annex 2. Workforce coverage assessment: contributing factors and scores (templates)

The workforce coverage assessment allocated scores for workforce performance for the broad category definitions of availability, accessibility, acceptability and quality of each occupation (Annex 1) and for a range of factors contributing to this performance (Tables A2.1, A2.2).

Table A2.1. Main and specific factors for the workforce assessment

Main factors	Specific factors
Guidelines and protocols	Existence of guidelines and protocols
	Utilization of guidelines and protocols
Interprofessional collaboration	Collaboration for timeliness and care continuity
Institutional capacity	Faculty
	Facilities
	Accreditation
Pre- and post-service education and training	Entrance standards
	Curriculum
	Subspecialization
	Research skills
	Pre- and post-service education for meeting diverse needs
	Pre- and post-service education for cultural competence
	Awareness building of non-rehabilitation workforce
	Knowledge and skills for rural and remote practice
Support, supervision and mentorship	Access to supervision and mentorship
	Peer support
Career progression	Career opportunities
Incentives	Benefits for rural and remote practice
Working conditions	Infrastructure
	Equipment and consumables
	Policies, culture and practices
Placement and deployment	Placement and deployment mechanisms
Service delivery models	Utilization of outreach services
Positions and employment	Positions in the public and private sectors
Role allocation and task shifting	Implementation of role allocation and task sharing
Workforce composition	Demographics
	Language
Associations and networks	Opportunities for knowledge sharing and skill development
	Promotion
Technology and innovation	Utilization of technology and innovation
Regulation, accreditation and licensing	Standards for practice
	Immigration of workers

Table A2.2. Scores for contributing factors to effective coverage

Criteria		4 Needs no immediate action	3 Needs minor strengthening	2 Needs major strengthening	1 Needs establishment
Guidelines and protocols	Existence of guidelines and protocols	There are up-to-date, evidence-informed and context-specific guidelines and protocols to support all relevant areas of practice.	There are up-to-date, evidence-informed and context-specific guidelines and protocols to support most relevant areas of practice.	There is limited availability of up-to-date, evidence-informed and context-specific guidelines and protocols to support relevant areas of practice.	There are no up-to-date, evidence-informed and context-specific guidelines and protocols to support the performance of this workforce.
	Utilization of guidelines and protocols	Guidelines and protocols are widely utilized in all relevant areas of practice.	Guidelines and protocols are utilized in most relevant areas of practice.	Few guidelines and protocols are utilized in relevant areas of practice.	There are no guidelines and protocols utilized in relevant areas of practice.
Interprofessional collaboration	Collaboration for timeliness and care continuity	These is widespread and effective collaboration between this workforce and rehabilitation and non-rehabilitation workers, which ensures timeliness and continuity of care and a holistic approach to care.	Collaboration between this workforce and rehabilitation and non-rehabilitation workers is common and mostly effective in helping ensure timeliness and continuity of care and a holistic approach to care.	These is limited collaboration between this workforce and rehabilitation and non-rehabilitation workers, hindering timeliness and continuity of care and preventing a holistic approach to care.	There is no collaboration between this workforce and rehabilitation and non-rehabilitation workers, greatly hindering timeliness and continuity of care and preventing a holistic approach to care.
Institutional capacity	Faculty	There are Institution(s) for education and training with faculty who are well equipped for their positions (have postgraduate degrees and ample experience).	There are Institution(s) for education and training pf this workforce, although they face some challenges with maintaining an adequately qualified faculty.	There are Institution(s) for education of this workforce, although they face significant challenges with maintaining an adequate qualified faculty and rely heavily on international/ external support.	There are no institutions for education of this workforce. Students are required to gain their qualifications and seek opportunities to build their competence abroad.
	Facilities	Institution(s) are equipped with modern facilities to deliver context-specific education (laboratories clinics, workshops, online learning platforms, etc.).	Facilities are generally fit for purpose but there are some limitations that restrict student numbers and some equipment is substandard. Online learning platforms are limited.	Facilities and online learning platforms are limited and compromise the quality of teaching and learning.	There are no facilities to support the education of this workforce.
	Accreditation	Institution(s) are accredited by an international professional accreditation body.	Institution(s) are taking steps to be accredited by an international professional accreditation body.	Institutions endeavour to follow the guidelines of international professional accreditation bodies but have not commenced an accreditation process.	There are no attempts to accredit the Institution(s) or follow the guidelines of international professional accreditation bodies.

Table A2.1 contd.

Criteria		4 Needs no immediate action	3 Needs minor strengthening	2 Needs major strengthening	1 Needs establishment
Pre- and post-service education and training	Entrance standards	Course entrance standards for this workforce are highly competitive; there are significantly more applications for education programmes than admissions.	There are mid-tier course entrance standards for this workforce; there are more applications for education programmes than admissions.	Entrance standards for the education programmes of this workforce are low relative to other equivalent health courses.	Education programmes of this workforce are open to anybody with a high school certificate.
	Curriculum	There are well developed competency-based curricula for the education of this workforce that ensure competence is vigorously assessed in real-world environments.	There are sound competency-based curricula for the education of this workforce that ensure competence is systematically assessed in real-world environments.	Curriculum for the education of this workforce is being developed or revised. Competence is assessed but often in simulated or non-context-specific environments.	Curriculum for the education of this workforce has not yet been developed.
	Subspecialization	Opportunities for subspecialization are available to all workers.	Opportunities for subspecialization in some areas of practice are available to most workers.	Opportunities for subspecialization are limited.	There are no education opportunities for subspecialization.
	Research skills	Courses develop research skills that enable the workforce to make valuable contributions to the rehabilitation evidence base.	Courses develop research skills that enable the workforce to evaluate evidence for practice.	Courses introduce research theory, but student do not develop research skills.	Courses do not teach research theory or skills.

Table A2.1 contd.

Criteria	4 Needs no immediate action	3 Needs minor strengthening	2 Needs major strengthening	1 Needs establishment
Pre- and post-service education for meeting diverse needs	The knowledge, skills and behaviours workers need to meet the diverse needs of service users, such as those who have communication or severe mobility impairments, are well developed in pre- and/or post-service education.	The knowledge, skills and behaviours workers need to meet the most needs of service users, such as those who have communication or severe mobility impairments, are developed in some pre- and/or post-service education.	Development of the knowledge, skills and behaviours needed to meet the needs of service users with diverse needs, such as those who have communication or severe mobility impairments, is limited in pre- and/or post-service education.	The knowledge, skills and behaviours to meet the diverse needs of service users, such as those with communication or severe mobility impairments, are not developed in pre- and/or post-service education.
Pre- and post-service education for cultural competence	The knowledge, skills and behaviours to work and communicate effectively with people of the various cultures in the population are well developed in pre- and/or post-service education.	The knowledge, skills and behaviours to work and communicate effectively with people of various cultures in the population are developed in some pre- and/or post-service education.	Development of the knowledge, skills and behaviours to work and communicate effectively with people of various cultures in the population is limited in pre- and/or post-service education.	The knowledge, skills and behaviours to work and communicate effectively with people of various cultures in the population are not developed in pre- and/or post-service education.
Awareness building of non-rehabilitation workforce	The role and contribution of this workforce are widely integrated in pre- and/or post-service education of non-rehabilitation workers.	The role and contribution of this workforce are integrated in pre- and/or post-service education of some non-rehabilitation workers.	There is limited integration of the role and contribution of this workforce in pre- and/or post-service education of non-rehabilitation workers.	The role and contribution of this workforce is not integrated in pre- and/or post-service education of non-rehabilitation workers.
Knowledge and skills for rural and remote practice	The knowledge, skills and behaviours need to prepare and encourage this workforce to practise in rural and remote area are developed in pre- and/or post-service courses.	The knowledge, skills and behaviours need to prepare and encourage this workforce to practise in rural and remote area are developed in some pre- and/or post-service courses, but there is scope for further integration as some workers feel ill-equipped.	Development of the knowledge, skills and behaviours to feel prepared for or encouraged to work in rural and remote practice is limited in pre- and/or post-service education.	The knowledge, skills and behaviours to feel prepared for or encouraged to work in rural and remote practice are not developed in pre- and/or post-service education.

Table A2.1 contd.

Criteria		4 Needs no immediate action	3 Needs minor strengthening	2 Needs major strengthening	1 Needs establishment
Support, supervision and mentorship	Access to supervision and mentorship	Workers at all stages of their career can readily access the supervision and mentorship of more senior colleagues to support their ongoing development.	Most workers can access the supervision and mentorship of more senior colleagues to support their ongoing development, although this a challenge for those in senior positions or who work in remote and rural areas.	Access to supervision and mentorship from more senior colleagues is expanding, but it remains limited in many settings, particularly in rural and remote settings.	There is limited to no access to supervision and mentorship from more senior colleagues in both rural and urban settings.
	Peer support	Workers at all stages of their career have ample peer support to facilitate informal learning and development.	Most workers have adequate peer support to facilitate informal learning and development.	A significant proportion of works lack access to peer support, particularly in rural and remote areas.	Peer support is rarely or never available to workers.
Career progression	Career opportunities	Career opportunities, such as pathways to promotion and leadership roles are effectively used to attract and retain this workforce.	Career opportunities, such as pathways to promotion and leadership roles, are used to attract and retain this workforce in some settings.	The use of career opportunities, such as pathways to promotion and leadership roles, to attract and retain this workforce is limited in most settings.	Career opportunities, such as pathways to promotion and leadership roles, are not used to attract and retain this workforce.
Incentives	Benefits for rural and remote practice	Competitive benefits, such as increased salary, housing and travel support and leave allowances are effectively used to attract and retain this workforce.	Benefits, such as increased salary, housing and travel support and leave allowances are used to attract and retain this workforce in some settings.	There is limited use of benefits, such as increased salary, housing and travel support and leave allowances to attract and retain this workforce.	Benefits, such as increased salary, housing and travel support and leave allowances are not used to attract or retain this workforce.
Working conditions	Infrastructure	There is advanced infrastructure, including ample space and facilities, to enable this workforce to practise effectively in both urban and rural settings and across the levels of the health system in the public and private sectors.	There is adequate infrastructure, including space and facilities, to enable this workforce to practise effectively in most settings and across most levels of the health system in the public and private sector.	There is limited infrastructure, including space and facilities, to support the efficiency or performance of this workforce.	There is no or completely inadequate infrastructure, including space or facilities, to support the efficiency or performance of this workforce.

Table A2.1 contd.

Criteria		4 Needs no immediate action	3 Needs minor strengthening	2 Needs major strengthening	1 Needs establishment
	Equipment and consumables	There is ample equipment and consumables to enable this workforce to practise effectively in both urban and rural settings and across the levels of the health system in the public and private sector.	There is adequate equipment and consumables to enable this workforce to practise effectively in most urban and rural settings and across most levels of the health system in the public and private sector.	Equipment and consumables to support this workforce to practise effectively are limited.	There are no equipment or consumables to support this workforce to practise effectively.
	Policies, culture and practices	Workplace policies, culture and practices maximize the efficiency and performance of this workforce.	Workplace policies, culture and practices support the efficiency and performance of this workforce.	Workplace policies, culture and practices undermine the efficiency and performance of this workforce.	Workplace policies, culture and practices greatly compromise the efficiency and performance of this workforce.
Placement and deployment	Placement and deployment mechanisms	Well established placement and deployment mechanisms are used to achieve more equitable distribution of this workforce to all otherwise underserved areas.	Placement and deployment mechanisms are used to achieve more equitable distribution of the workforce to most otherwise underserved areas.	There are limited placement and deployment mechanisms used to improve the equitable distribution of the workforce to underserved areas.	There are no placement and deployment mechanisms used to achieve more equitable distribution of this workforce to underserved areas.
Service delivery models	Utilization of outreach services	Outreach services are being effectively used to expand the reach of this workforce to all otherwise underserved areas.	Outreach services are being used to expand the reach of this workforce to most underserved areas, but the frequency and scope are not yet adequate to meet all needs.	Outreach services are used to expand the reach of this workforce to a growing number of otherwise underserved areas, but there are still a significant number unreached.	There are limited to no outreach services used to increase access to this workforce in underserved areas.
Positions and employment	Positions in the public and private sectors	The number of positions for this workforce in the public and private sectors is sufficient to meet population needs across the levels of the health system. These are little to no vacancies.	The number of positions for this workforce in the public and private sectors is sufficient to meet most population needs across the levels of the health system. There may be some vacancies, particularly for positions in rural and remote areas.	There are a limited number of positions for this workforce in the public and private sectors with significant gaps in some levels of the health system resulting in unmet needs.	There are few to no positions for this workforce in either the public or private sector, resulting in massive unmet needs.

Table A2.1 contd.

Criteria		4 Needs no immediate action	3 Needs minor strengthening	2 Needs major strengthening	1 Needs establishment
Role allocation and task shifting	Implementation of role allocation and task sharing	Role allocation and task sharing are carefully planned and workers are adequately trained and supported to carry out any new roles or tasks.	Role allocation and task sharing are mostly carefully planned and workers are provided with some training and support to carry out any new roles or tasks.	There is limited planning for role allocation and task sharing and workers are rarely adequately trained or supported to implement any new roles or tasks.	There is no planning for role allocation and task sharing and workers are not adequately trained or supported to implement any new roles or tasks.
Workforce composition	Demographics	The gender balance and representation of religions, races and ethnicities within this workforce are widely acceptable to the population.	The gender balance and representation of religions, races and ethnicities within this workforce are acceptable to most of the population.	The gender balance and representation of religions, races and ethnicities within this workforce are not acceptable to many in the population.	The gender balance and representation of religions, races and ethnicities within this workforce are not acceptable to the vast majority of the population.
	Language	Workers speak the language(s) of the population and interpreters are rarely required and used whenever needed.	Workers speak the language(s) of most of the population and interpreters are occasionally needed and used in most instances when needed.	A large proportion of the population speak language(s) other than those spoken by this workforce and interpreters are rarely used.	A large proportion of the population speak language(s) other than those spoken by this workforce and interpreters are not used.
Associations and networks	Opportunities for knowledge sharing and skill development	Networks and associations provide a range of opportunities for knowledge sharing and skill development across a wide range of specialization areas, such as through communities of practice, conferences and other forums that enable national and international collaboration.	Networks and associations provide a range of opportunities for knowledge sharing and skill development across some specialization areas, such as through communities of practice, conferences and other forums that enable national and some international collaboration.	Networks and associations provide limited opportunities for knowledge sharing and skill development, although there some communities of practice, conferences and other forums emerging.	Associations and networks do not provide opportunities for knowledge sharing and skill development.
	Promotion	Associations and networks are strongly promoting a positive perception of this workforce. For example, they represent it well in broader health and policy forums, serve to build a reputation of excellence and capture and communicate its role and contribution.	Associations and networks are somewhat promoting a positive perception of this workforce. For example, they represent it adequately in broader health and policy forums, serve to build a reputation of excellence and mostly capture and communicate its role and contribution.	Associations and networks poorly promote this workforce. They rarely represent it in broader health and policy forums and poorly capture and communicate its role and contribution.	Associations and networks are not promoting a positive perception of this workforce and do not represent it adequately in broader health and policy forums, nor capture or communicate its role and contribution.

Table A2.1 contd.

Criteria		4 Needs no immediate action	3 Needs minor strengthening	2 Needs major strengthening	1 Needs establishment
Technology and innovation	Utilization of technology and innovation	Technology and innovation, such as applications, tele-health and digital information systems, are widely utilized by this workforce.	Technology and innovation, such as applications, tele-health and digital information systems, are utilized by most this workforce, but are limited by lack of access to or unreliable Internet.	Available technology and innovation, such as applications, tele-health and digital information systems, are rarely utilized by this workforce.	Available technology and innovation, such as applications, tele-health and digital information systems, are not utilized by this workforce.
Regulation, accreditation and licensing	Standards for practice	There is a well-resourced and highly performing national regulatory and licencing body for this workforce that effectively establishes and enforces standards for practice.	There is a national regulatory and licencing body for this workforce that establishes standards for practice, but enforcement is inconsistent.	There is a national regulatory and licencing body for this workforce that establishes standards for practice, but these are not enforced.	There is no national regulatory or licencing body to set or enforce standards of practice for this workforce.
	Immigration of workers	There is a well-resourced and highly performing regulatory and licencing body that effectively manages the immigration of workers, ensuring their readiness to enter the health system.	There is a regulatory and licencing body that manages the immigration of workers but mechanisms of ensuring their readiness to enter the health system are not consistently utilized.	There is a regulatory and licencing body for managing the immigration of workers, but it is not effective in ensuring their readiness to enter the health system.	There is no regulatory and licencing body to ensure the readiness of immigrated workers to enter the health system.

Annex 3. Workforce supply questions template

Who or what determines the number of places offered in rehabilitation education programmes?

- ☐ Are there government policies or regulations influencing the number of places offered?
- ☐ Does institutional capacity limit the places offered and if so, what aspects, e.g. faculty, resources, infrastructure?
- ☐ What trends are being observed with private educational institutions, e.g. are they emerging or expanding?

How competitive is entrance into rehabilitation education programmes?

- ☐ What are the entrance criteria for education programmes for different rehabilitation occupations? How is this changing over time, i.e. are they becoming selective or remaining the same?
- ☐ How do the entrance criteria for domestic rehabilitation education programmes compare with foreign programmes?
- ☐ Are entrance criteria notably different between private and public institutions?

How does education for different rehabilitation occupations compare with other health occupations?

- ☐ How do the entrance criteria for rehabilitation programmes compare with other health occupations, such as nurses or pharmacists?
- ☐ How does the cost of completing a rehabilitation programme compare with other health occupations?

What is the composition of rehabilitation education programmes and is this changing?

- ☐ What is the proportion of different genders within rehabilitation education programme cohorts? How has this changed over time?
- ☐ What is the proportion of students of different genders, cultures and ethnicities within rehabilitation programmes cohorts? How has this changed over time?

Are there mechanisms to upskill rehabilitation workers?

- ☐ Are there bridging courses or "stepladder" pathways for rehabilitation workers to upskill or progress their career? For example, to progress from a community health worker to a rehabilitation assistant?

Are rehabilitation workers prepared for practice?

- ☐ How much practical experience do students receive in preservice education? Do they have supportive supervision?
- ☐ Do supervisors receive training on working with students?
- ☐ What settings do students get exposure to before they graduate?

How are domestic rehabilitation educational institutions perceived internationally?

- ☐ Are graduates of domestic rehabilitation institutions generally allowed to practise overseas?
- ☐ Do domestic rehabilitation education programmes attract foreign students? How is this changing over time?
- ☐ Do domestic rehabilitation education programmes attract foreign faculty?

Where are rehabilitation workers that acquired their rehabilitation education and training abroad studying?

- ☐ To, which countries are students moving to obtain their education?
- ☐ Do regulatory bodies monitor and control what qualifications are accepted to practise domestically?

Which countries do foreign rehabilitation workers primarily migrate from?

- ☐ Are countries workers frequently migrate from increasing their employment of rehabilitation workers? If so, is this occurring at a rate that will reduce migrant workers immigrating in the short to medium term?

What are the factors driving attrition?

- ☐ What are the main reasons rehabilitation workers leaving the country or profession, e.g. dissatisfaction with wages, working conditions, job prospects, career progression or standard of living, family responsibilities?

Annex 4. Labour market demand absorption questions template

What factors are primarily limiting demand (the investment in positions) for rehabilitation workers?

- ☐ To what extent is workforce supply restricting demand?
- ☐ Are rehabilitation positions perceived as a good investment in the health system, i.e. are they valued relative to those allocated to other health occupations?

What impact (positive, negative or neither) does dual practice have on rehabilitation workforce availability, accessibility and quality and why?

- ☐ Is dual practice perceived as an issue or advantage overall by rehabilitation workers?
- ☐ Does dual practice lead to excessive absenteeism and compromise quality of care or does it serve to strengthen retention or a combination of both?

What factors drive rehabilitation workers to undertake dual practice?

- ☐ To what extent do monetary (wages) and professional factors (desire for greater clinical autonomy, experiences, alternative facilities and equipment and the pursuit of professional aspirations, etc.) shape dual practice among the rehabilitation workforce?

To what extent does regulation influence dual practice behaviours among rehabilitation workers?

- ☐ Are there regulations concerning dual practice that apply to rehabilitation workers and what do they stipulate?
- ☐ Are regulations actively enforced? Are they effective in managing dual practice behaviours?

What factors "pull" rehabilitation workers towards employment opportunities in underserved areas/sectors?

- ☐ Which factors appear to have the greatest effect on attracting rehabilitation workers to underserved areas?
- ☐ Which factors are currently used and are they considered to be effective/sufficient?
- ☐ Which factors are potentially underutilized to attract and retain rehabilitation workers in underserved areas/sectors?

What factors "push" rehabilitation workers away from employment opportunities in underserved areas/sectors?

- ☐ Which factors are thought to be the greatest deterrents for rehabilitation workers taking up employment in underserved areas/sectors?

How does the absorption of rehabilitation workers compare with other health occupations?

- ☐ Do other health occupations, such as nurses, doctors and pharmacists, experience similar patterns of vacancies and maldistribution as for rehabilitation workers?
- ☐ What strategies have they applied to address maldistribution and vacancies and how do these differ from what is used for rehabilitation workers?

Annex 5. Labour market efficiency failure questions template

Is task sharing utilized and to what extent?

- ☐ Do mid-level rehabilitation occupations or primary health workers for example, deliver rehabilitation tasks? If so, which tasks and under what circumstances?
- ☐ Do rehabilitation occupations of similar level qualification task share? If so, which tasks and under what circumstances?
- ☐ Is task sharing coordinated at a national or subnational/district level or both? If at a national level, how does this translate to practise?
- ☐ Is task sharing regulated and endorsed?
- ☐ To what extent are alternative occupations trained and supported to perform the tasks delegated to them?
- ☐ Is task sharing perceived to be working well? Why/why not?

Is technology, such as tele-health, mobile phones or digital health information systems, utilized to facilitate the delivery of rehabilitation?

- ☐ What technology is working effectively in facilitating the delivery of rehabilitation? What factors have helped to make it effective?
- ☐ What technology has potential but is not yet used? What are the barriers to its uptake and what opportunities might exist for its introduction?
- ☐ Is there any part of the population that has less access to this technology or risks being excluded? Include a gender analysis.

Do rehabilitation workers receive the level of education and training they need to provide quality care?

Do educational institutions have the capacity, in terms of faculty, infrastructure, equipment and learning experiences, to provide quality education and training?

- ☐ Are educational institutions for rehabilitation accredited? If so, to what extent do the accreditation standards reflect the health system context and population needs?
- ☐ Do rehabilitation education institutions use targeted admission strategies to attract students from rural and remote areas or other typically underrepresented student groups?
- ☐ Do rehabilitation educational institutions provide competency-based education (do they use a competency framework and/or define competency-based learning outcomes that reflect population needs)?
- ☐ Are faculty members formally trained as educators?

Are rehabilitation workers motivated to perform their work?

- ☐ Do rehabilitation workers feel that they have the opportunity and incentive to participate in in-service education and training?
- ☐ Do rehabilitation workers have access to supportive supervision and mentorship?
- ☐ Do rehabilitation workers have access to the infrastructure and equipment they need to perform their full scope of practice effectively?

Annex 6. Proficiency level profile template

Practice			
Level 1	**Level 2**	**Level 3**	**Level 4**
• Works with frequent direction and guidance • Follows protocols or prescriptions to provide rehabilitation interventions • Supports the implementation of rehabilitation plans • Has an introductory level of relevant knowledge and skills that are applied when working with people with basic needs and their families.	• Works with regular direction and guidance • Follows prescriptions and adapts protocols to provide rehabilitation interventions • Makes minor decisions regarding rehabilitation plans • Has a working level of relevant knowledge and skills that are applied when working with people with basic needs and their families.	• Works with occasional direction and guidance • Prescribes rehabilitation interventions • Makes decisions regarding rehabilitation plans • Has an advanced level of relevant knowledge and skills that are applied when working with people with complex needs and their families.	• Works autonomously • Prescribes rehabilitation interventions • Makes decisions regarding rehabilitation plans • Has a specialist level of relevant knowledge and skills that are applied when working with people with highly complex needs and their families.
Professionalism			
Level 1	**Level 2**	**Level 3**	**Level 4**
• Delivers an assigned workload with frequent direction • Manages a consistent flow of work • Contributes to administrative and reporting requirements • Has an introductory level of relevant knowledge and skills that are applied to confined responsibilities	• Manages own workload with regular direction • Manages a mostly consistent flow of work • Contributes to administrative and reporting requirements • Has a working level of relevant knowledge and skills that are applied to a mostly confined workload	• Manages own workload with occasional direction • Manages a fluctuating flow of work • Takes responsibility for administrative and reporting requirements • Contributes to new and innovative systems • Has an advanced level of relevant knowledge and skills that are applied to a workload with a range of responsibilities	• Independently manages own workload • Manages an unpredictable and fluctuating flow of work • Takes responsibility for a range of administrative and reporting requirements • Initiates and leads new and innovative systems • Has a specialist level of knowledge and skills that are applied to a workload with a range of complex responsibilities
Learning and development			
Level 1	**Level 2**	**Level 3**	**Level 4**
• Provides peer support within own team • Learns through observation and prescribed and structured education and training • Manages own professional development plan, with support • Has an introductory level of relevant knowledge and skills that are applied to personal and peer learning and development	• Provides supervision to others, with support • Contributes to education and training programmes/ courses • Seeks out learning opportunities • Manages own professional development plan, with support • Has a working level of relevant knowledge and skills that are applied to the learning and development of themselves and others	• Provides supervision to others • Undertakes teaching activities among peers, students and colleagues, with support • Manages own learning and development and assists others with theirs • Has an advanced level of relevant knowledge and skills that are applied to the learning and development of themselves and others	• Oversees supervision within the team or service • Initiates and leads education and training programmes/ courses • Manages own learning and development and oversees that of others • Has a specialist level of relevant knowledge and skills that are applied to the learning and development of themselves and others

Management and leadership			
Level 1	**Level 2**	**Level 3**	**Level 4**
• Contributes to the operation and development of the team • Contributes to resource procurement and allocation • Has an introductory level of relevant knowledge and skills that are applied to informal leadership among their peers	• Contributes to the operation and development of the team • Contributes to resource procurement and allocation • Has a working level of relevant knowledge and skills that are applied to allocated leadership responsibilities among their peers	• Provides direction in the operation and development of the team and service • Manages resources procurement and allocation with distant support • Has an advanced level of relevant knowledge and skills that are applied in a range of leadership responsibilities among peers and colleagues	• Oversees the operation and development of the team and service • Oversees and manages complex resource procurement and allocation • Has a specialist level of relevant knowledge and skills that are applied in a range of leadership responsibilities across the service and or system
Research			
Level 1	**Level 2**	**Level 3**	**Level 4**
• Applies evidence to practise by using guidelines and protocols in decision-making • Uses personal and peer experience to appraise evidence for best practice • Has an introductory level of relevant knowledge and skills that are applied in their closely guided participation in research activities	• Applies evidence to practise by using guidelines, protocols and other sources of evidence in decision-making • Uses personal and peer experience to appraise evidence for best practice • Has a working level of relevant knowledge and skills that are applied in their guided participation in research activities	• Applies evidence to practise by drawing on evidence and experience in complex decision-making • Interprets and incorporates a range of research methodologies to appraise evidence, with support • Contributes to evidence dissemination • Has an advanced level of relevant knowledge and skills that are applied in their participation in research activities	• Applies evidence to practise by drawing on a range of evidence and experience in complex decision-making • Interprets and uses statistical and other analytical methods to appraise evidence • Disseminates evidence through a variety of platforms and networks • Has a specialist level of knowledge and skills that are applied through the initiation and oversight of research activities

Annex 7. Rehabilitation workforce time across selected health conditions

The workforce time assessment estimated the required rehabilitation time across the 24 selected health conditions for each occupation group included in the evaluation (Figs. A7.1–A7.7). The figures in these graphs do not account for nonclinical time.

Fig. A7.1 Clinical psychologists

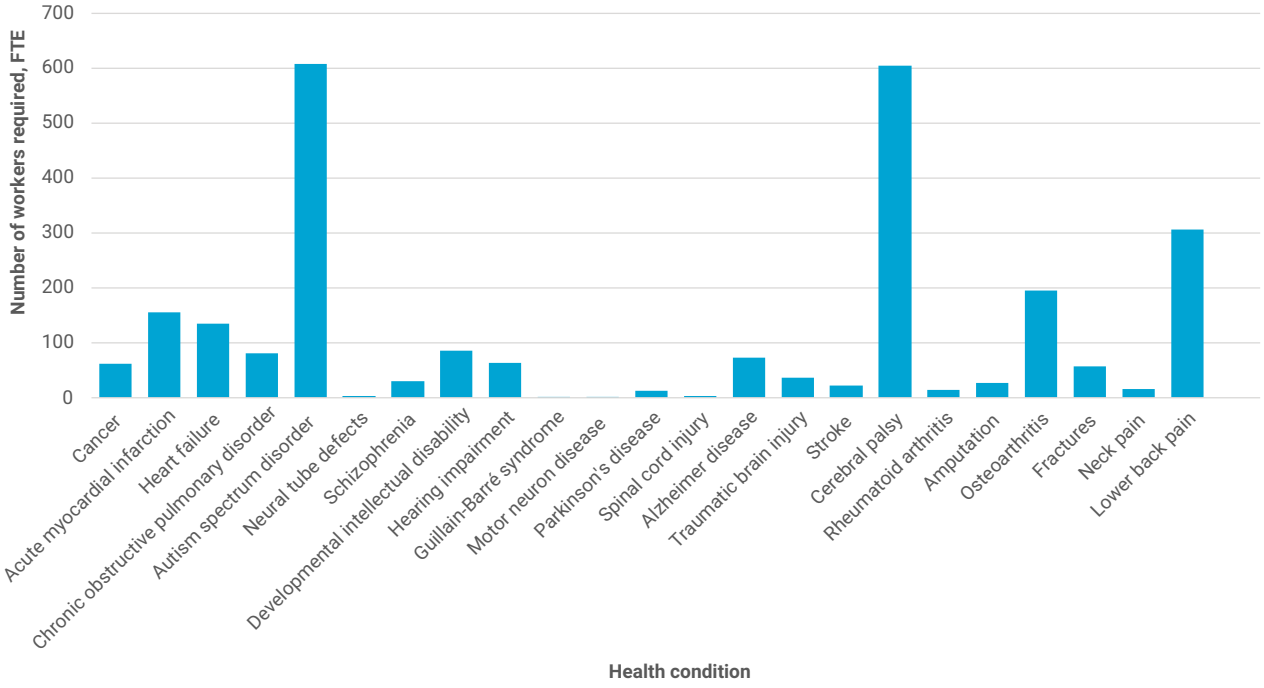


Fig. A7.2. Occupational therapists

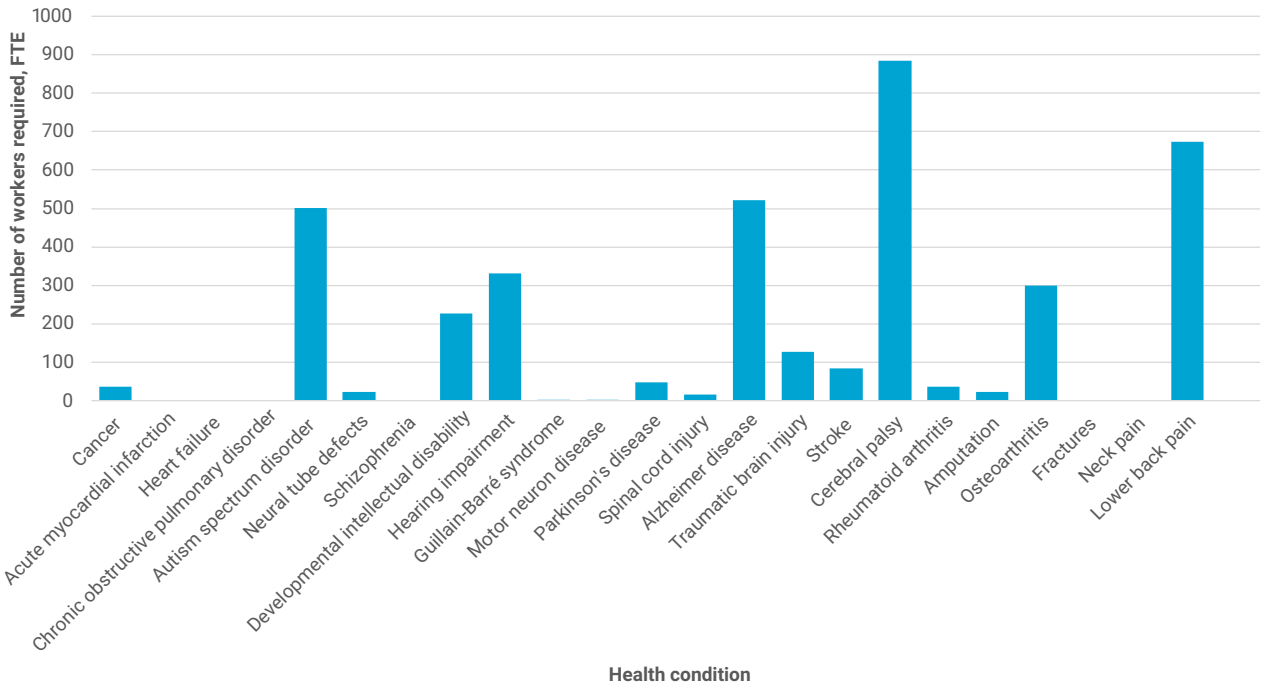


Fig. A7.3. Physical medicine and rehabilitation doctors

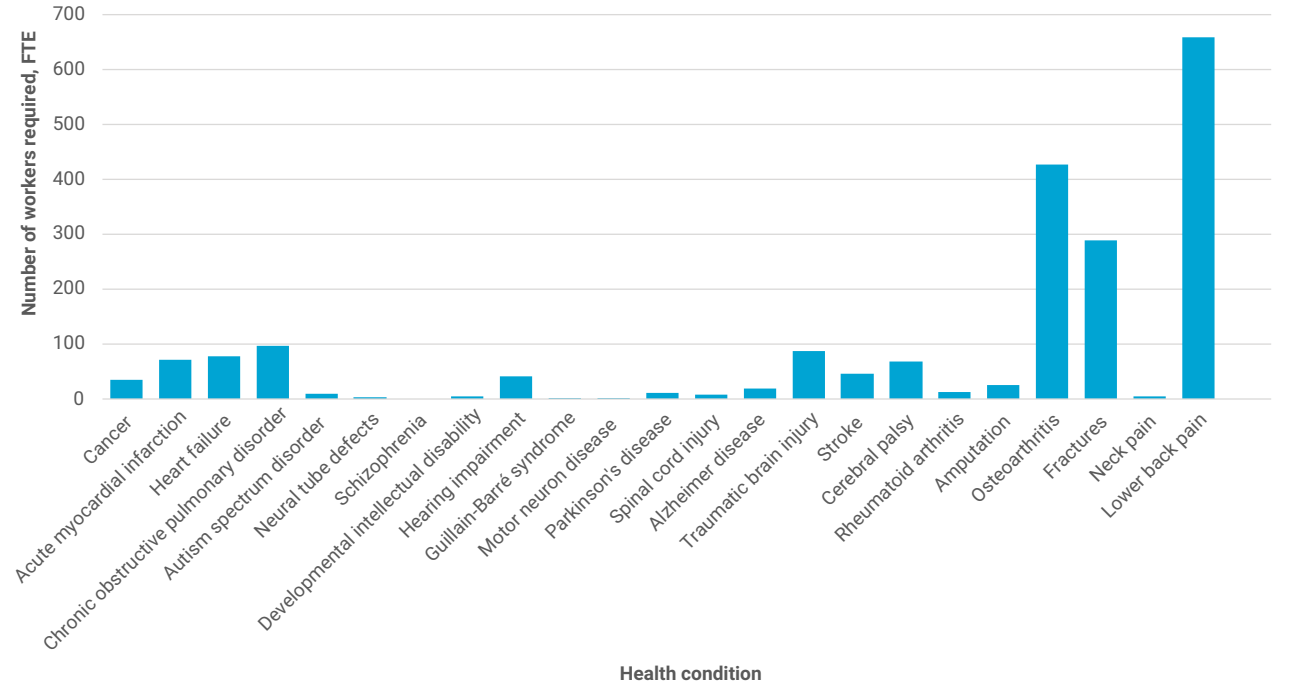


Fig. A7.4. Physiotherapists

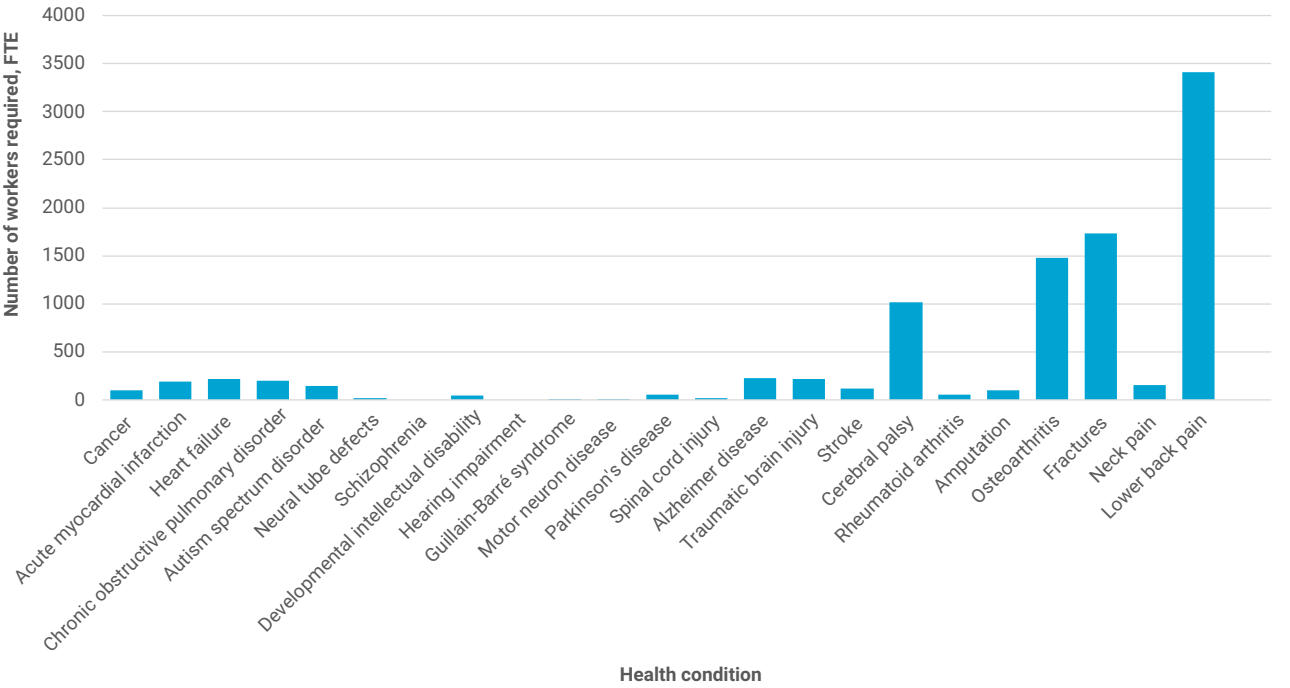


Fig. A7.5. Prosthetists and orthotists

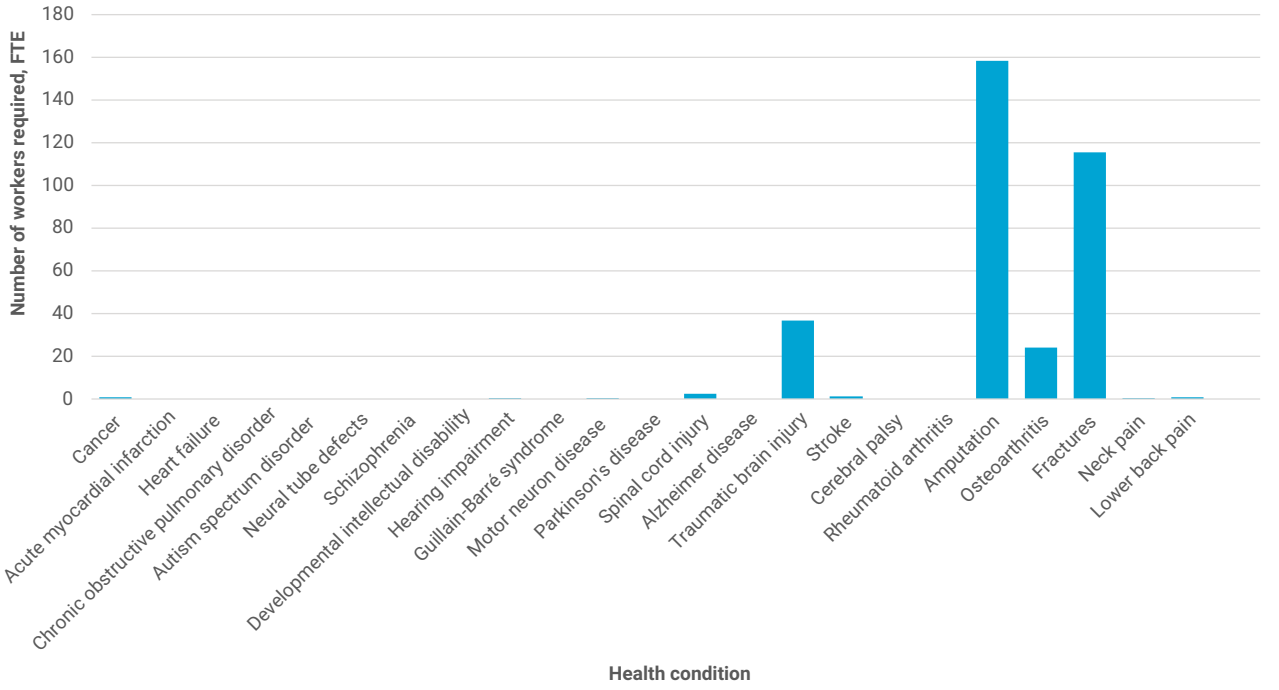


Fig. A7.6. Social workers

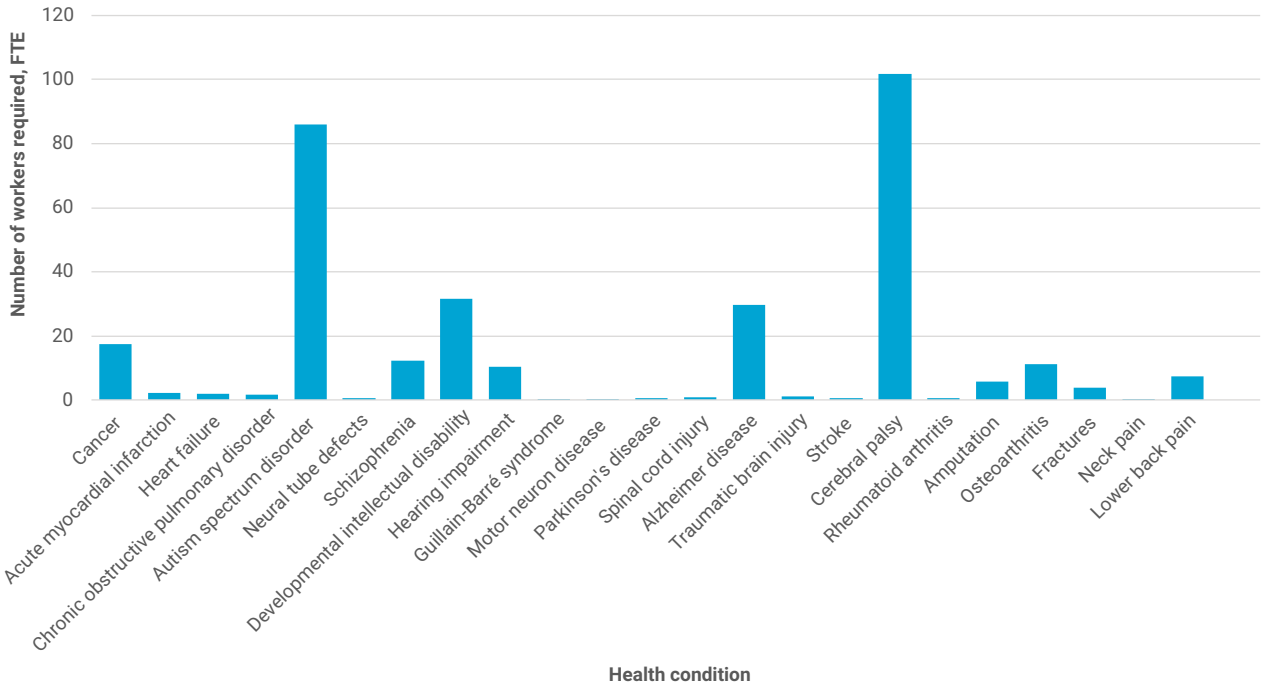
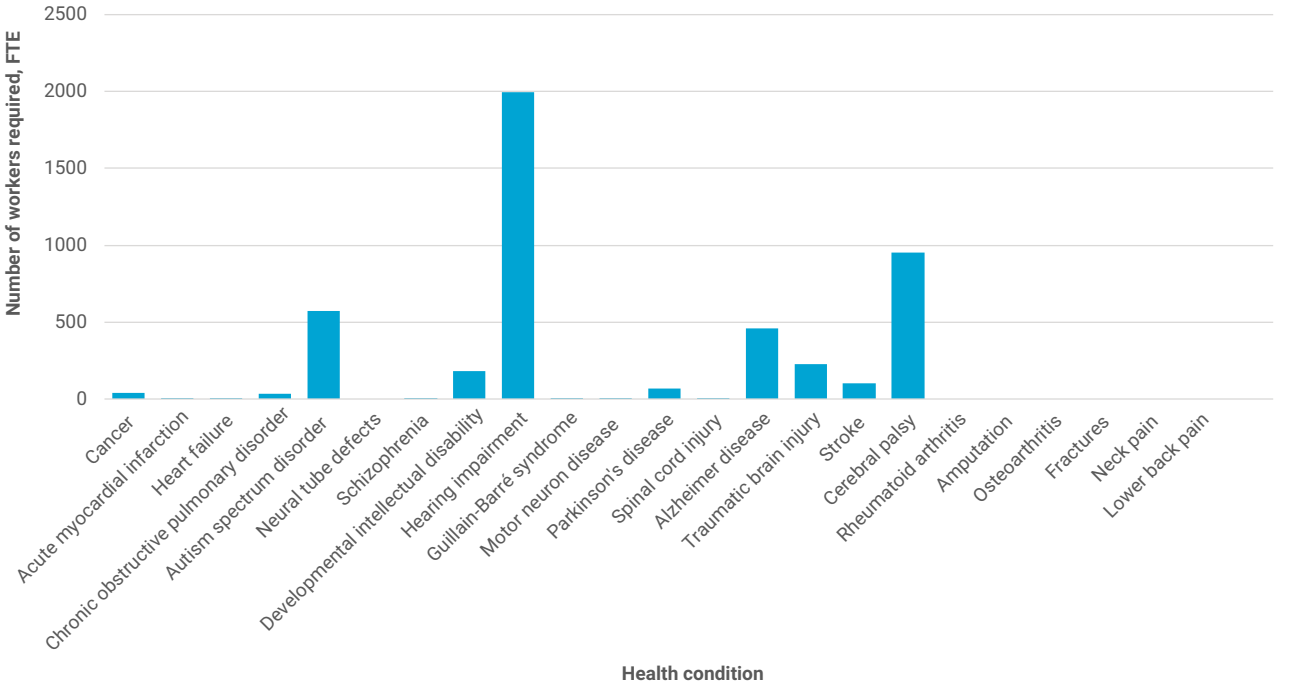


Fig. A7.7. Speech and language therapists



Annex 8. Educational institutions: places, applicants and graduates in 2019 and 2024

Table A8.1. Data on educational institutions

Educational institution and programme	Programme duration	Programme start year	Programme interruptions	Total number of places offered		Total number of places filled		Total number of applicants		Total number of graduates	
				2019	2024	2019	2024	2019	2024	2019	2024
Occupational therapy											
ASPU, bachelor's	4	2009	Yes, due to educational programme amendments	—	—	—	—	—	—	—	—
ASPU, master's	2	2017	No	15	15	9	14	9	15	9	9
Physiotherapy											
ASIPCS, bachelor's, full-time	4	1996	No	60	55	53	11	59	34	30	33
ASIPCS, bachelor's, distance	5	—	—	30	36	28	18	30	32	17	26
ASIPCS, master's, full-time	1	2007	No	25	25	25	25	20	27	22	24
ASIPCS, master's, distance	1.5	—	—	20	20	20	20	9[a]	25	27b	23
Psychology											
YSU, bachelor's	—	—	—	NA	NA	NA	NA	NA	NA	NA	NA
YSU, master's	2	2009	No	NA	30	22	26	NA	30	20	16
ASPU, bachelor's	—	—	—	—	—	—	—	—	—	—	—
ASPU, master's	2	2016	No	9	10	8	9	8	15	5	13
RAU, bachelor's	—	—	—	30	50	20	26	71	69	21	26
RAU, master's	2	2014	No	20	18	17	8	22	26	17	18
NAS, bachelor's	—	—	—	—	—	—	—	—	—	—	—
NAS, master's, full-time NAS, master's, distance	2 2.5	2013	Yes, 2014–2018, due to lack of applicants	40	40	29	28	33	37	—	19
URARTU, bachelor's	—	—	—	100	100	47	56	52	58	42	51
URARTU, master's	2	2005	No	35	35	18	23	21	25	23	29

Table A8.1 contd.

Educational institution and programme	Programme duration	Programme start year	Programme interruptions	Total number of places offered		Total number of places filled		Total number of applicants		Total number of graduates	
				2019	2024	2019	2024	2019	2024	2019	2024
Social work											
YSU, bachelor's	4	1996	No	76	20	70	20	77	28	72	46
YSU, master's	2	2000	The last programme admission was in 2012/13[c]	NA	NA	NA	NA	NA	NA	NA	NA
ASPU, bachelor's	4	2008	No	35	32	21	10	22	10	27	14
ASPU, master's	2	2011	No	15	15	3	10	3	10	8	2
SSU, bachelor's, FTE	4	2007	No	25	25	5	7	7	16	22	11
SSU, bachelor's, distance learning	—	—	—	20	25	19	3	18	21	7	22
SSU, master's	2	2017	No	20	20	16	20	22	18	12	15
URARTU, bachelor's	4	2005	No	45	45	28	31	32	34	33	38
URARTU, master's	2	2005	No	35	35	20	25	22	28	28	32
Speech and language therapy											
ASPU, bachelor's	4	2004	No	50	50	34	15	34	16	49	38
ASPU, master's	2	2010	No	30	30	19	26	20	28	25	12
Rehabilitation medicine (residency)											
YSMU	2	2003	No	—	—	4	3	9	7	—	—
YSMU	< 2	—	—	—	—	5	4	—	—	—	—
YSMU, paediatric	2	—	—	—	—	—	2	1	6	—	—
YSMU, paediatric	< 2	—	—	—	—	1	4	—	—	—	—
Prosthetics and orthotics											
YSMU	NA	NA	NA	NA	NA	NA	—	—	—	—	NA

NA: not applicable; RAU: Russian-Armenian University; SSU: Shirak State University named after Mikayel Nalbandyan; URARTU: Urartu University of Practical Psychology and Sociology.
Source: MESCS.3
[a] 2019–2020 applicants
[b] 2018–2019 graduates
[c] In subsequent years, YSU offered two related programs: "Social policy and administration" (2 years) and "Social Work and social policy" (1 year).

Annex 9. Results of the rehabilitation workforce coverage assessment

This section contains the results of the rehabilitation workforce coverage assessment, firstly according to the dimensions of effective coverage, with the scores awarded by the RWTT to each profession (Table A9.1) and then broken down by occupational group (Figs. A9.1–A9.7).

Table A9.1. Scores awarded according to the dimensions of effective coverage, by profession

	Criteria	Clinical psychologists	Occupational therapists	Physical medicine and rehabilitation doctors	Physiotherapists	Prosthetists and orthotists	Social workers	Speech and language therapists
Availability	Supply	3	2	2	3	4	1	2
	Demand	2	2	2	4	4	1	3
	Absorption	1	3	3	2	2	1	1
	Efficiency	2	2	3	2	3	2	2
Accessibility	Distribution	1	1	1	1	3	1	1
	Temporal availability	2	2	2	4	3	1	2
Acceptability	Compatibility	2	2	2	3	3	4	2
	Perception	3	2	2	2	2	2	2
Quality	Competence	1	3	2	2	3	3	2
	Performance	2	3	3	3	3	3	2

Scores range from 1 to 4, indicating the level of system strength and corresponding action needed:

- 4 **Strong:** No immediate action required
- 3 **Moderate:** Minor strengthening needed
- 2 **Emerging:** Major strengthening needed
- 1 **Weak:** System requires establishment

Fig A9.1 Clinical psychologists

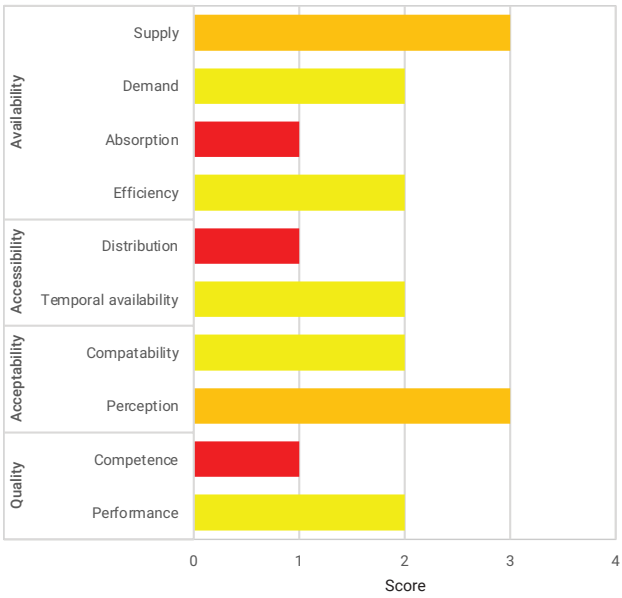


Fig A9.2 Occupational therapists

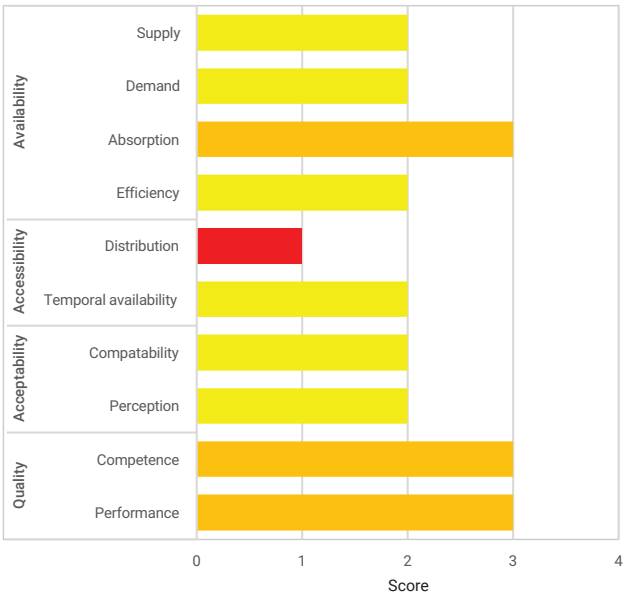


Fig A9.3 Physical medicine and rehabilitation doctors

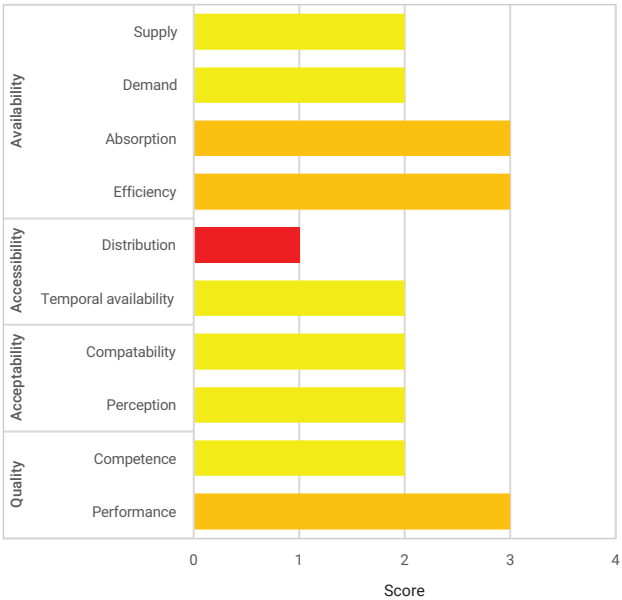


Fig A9.4 Physiotherapists

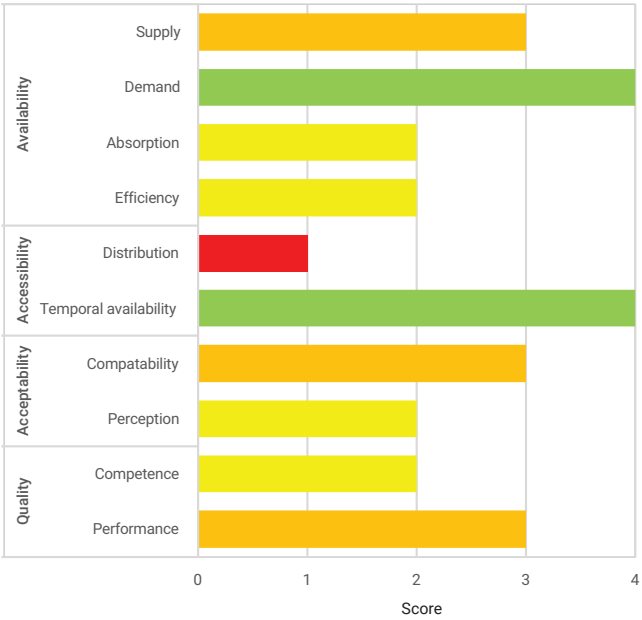


Fig A9.5 Prosthetists and orthotists

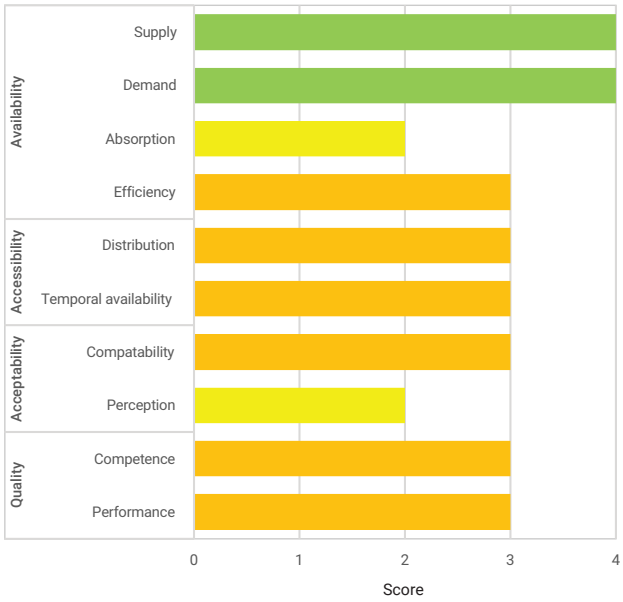


Fig A9.6 Social workers

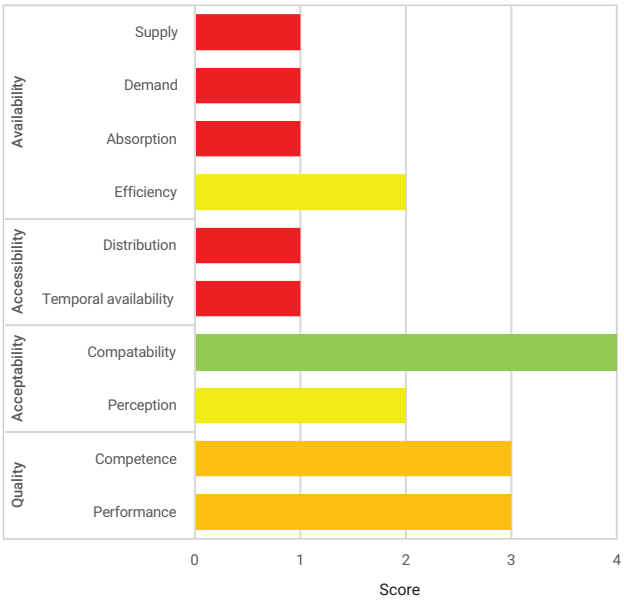


Fig A9.7 Speech and language therapists

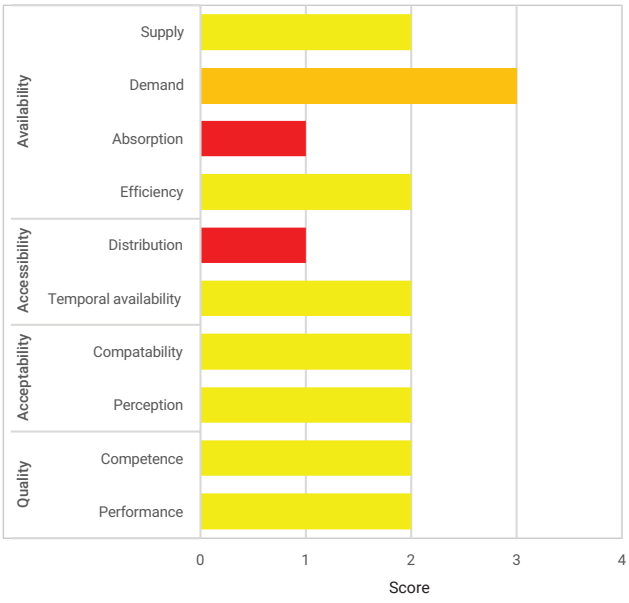


Table A9.2 contains the scores awarded according to contributing factors to effective coverage, with the breakdown by occupational group for this table shown in Figs. A9.8–A9.14.

Table A9.2. Scores awarded according to contributing factors to effective coverage

Criteria	Rehabilitation occupations						
	Clinical psychologists	Occupational therapists	Physical medicine and rehabilitation doctors	Physiotherapists	Prosthetists and orthotists	Social workers	Speech and language therapists
Existence of guidelines and protocols	1	1	2	2	2	1	1
Utilization of guidelines and protocols	1	1	2	2	2	1	2
Collaboration for timeliness and care continuity	2	2	2	2	2	2	2
Faculty	3	3	3	2	2	4	3
Facilities	1	3	3	3	3	3	3
Accreditation	1	3	3	3	3	4	3
Entrance standards	2	3	4	3	2	2	2
Curriculum	2	3	3	2	3	3	3
Subspecialization	3	2	3	3	2	1	3
Research skills	2	3	2	3	2	2	3
Pre-and post-service education for meeting diverse needs	1	2	2	3	2	3	3
Pre-and post-service education for cultural competence	1	2	2	3	3	4	3
Awareness building of non-rehabilitation workforce	2	2	2	2	2	1	3
Knowledge and skills for rural and remote practice	2	2	2	2	2	4	3
Access to supervision and mentorship	2	1	2	2	4	2	2
Peer support	3	2	2	2	4	2	3
Career opportunities	2	2	2	2	2	2	2
Benefits for rural and remote practice	1	2	2	2	2	1	2
Infrastructure	1	2	2	3	3	2	2
Equipment and consumables	1	2	2	2	3	2	2
Policies, culture and practices	2	2	2	3	3	2	3
Placement and deployment mechanisms	1	1	2	1	3	1	1
Utilization of outreach services	1	1	2	2	4	1	1
Jobs in the public and private sectors	2	2	2	2	2	1	2
Implementation of role allocation and task sharing	1	2	2	2	3	2	2
Demographics	2	3	4	4	4	3	2
Language	2	4	4	2	4	3	4
Opportunities for knowledge sharing and skill development	2	2	2	2	3	3	2
Promotion	2	3	3	2	2	3	3
Utilization of technology and innovation	2	3	2	2	3	1	2
Standards for practice	1	1	2	2	2	1	1
Immigration of workers	1	1	3	1	2	1	1

Scores range from 1 to 4, indicating the level of system strength and corresponding action needed:

4 **Strong:** No immediate action required

3 **Moderate:** Minor strengthening needed

2 **Emerging:** Major strengthening needed

1 **Weak:** System requires establishment

Fig A9.8 Clinical psychologists

Fig A9.9 Occupational therapists

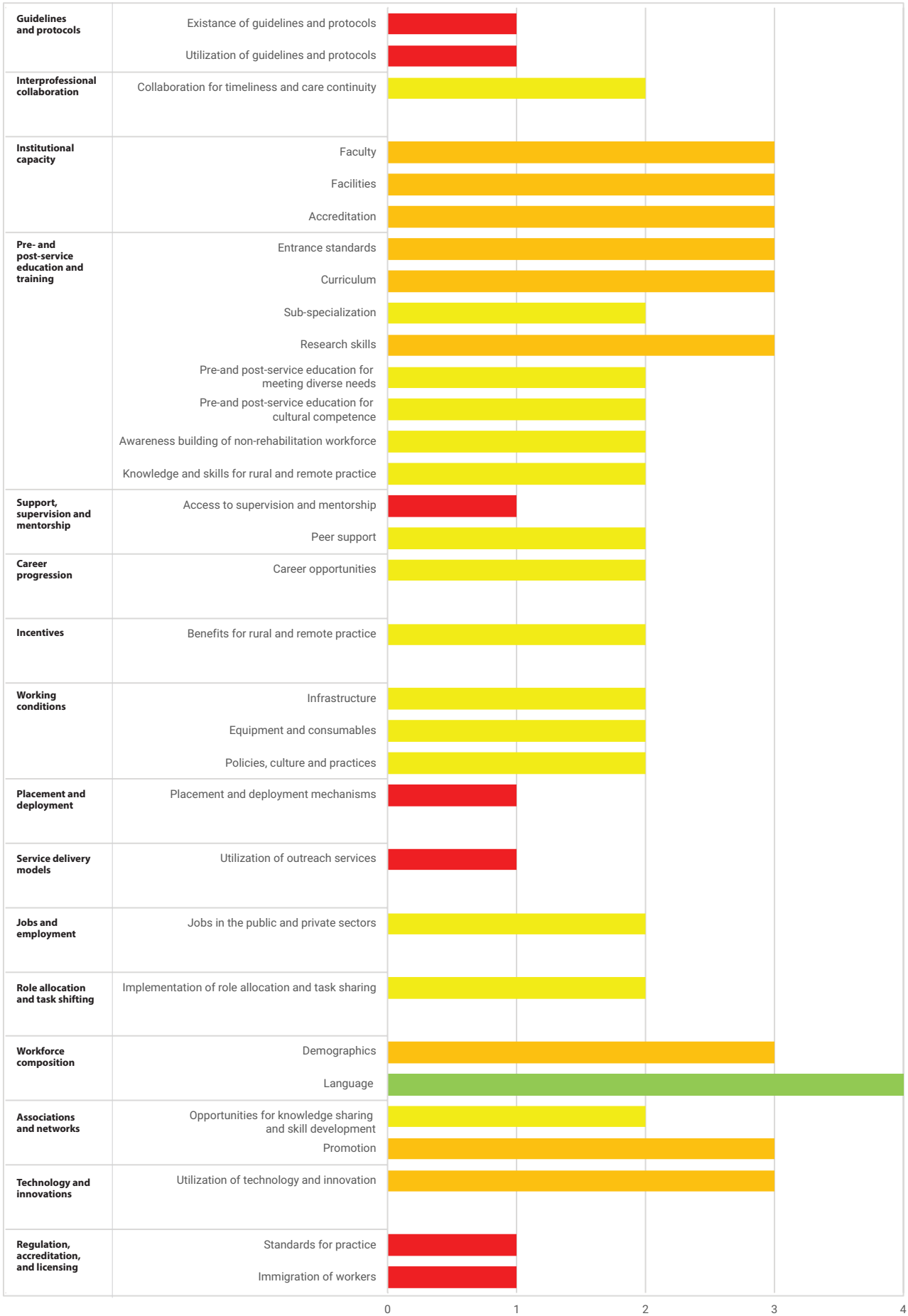


Fig A9.10 Physical medicine and rehabilitation doctors

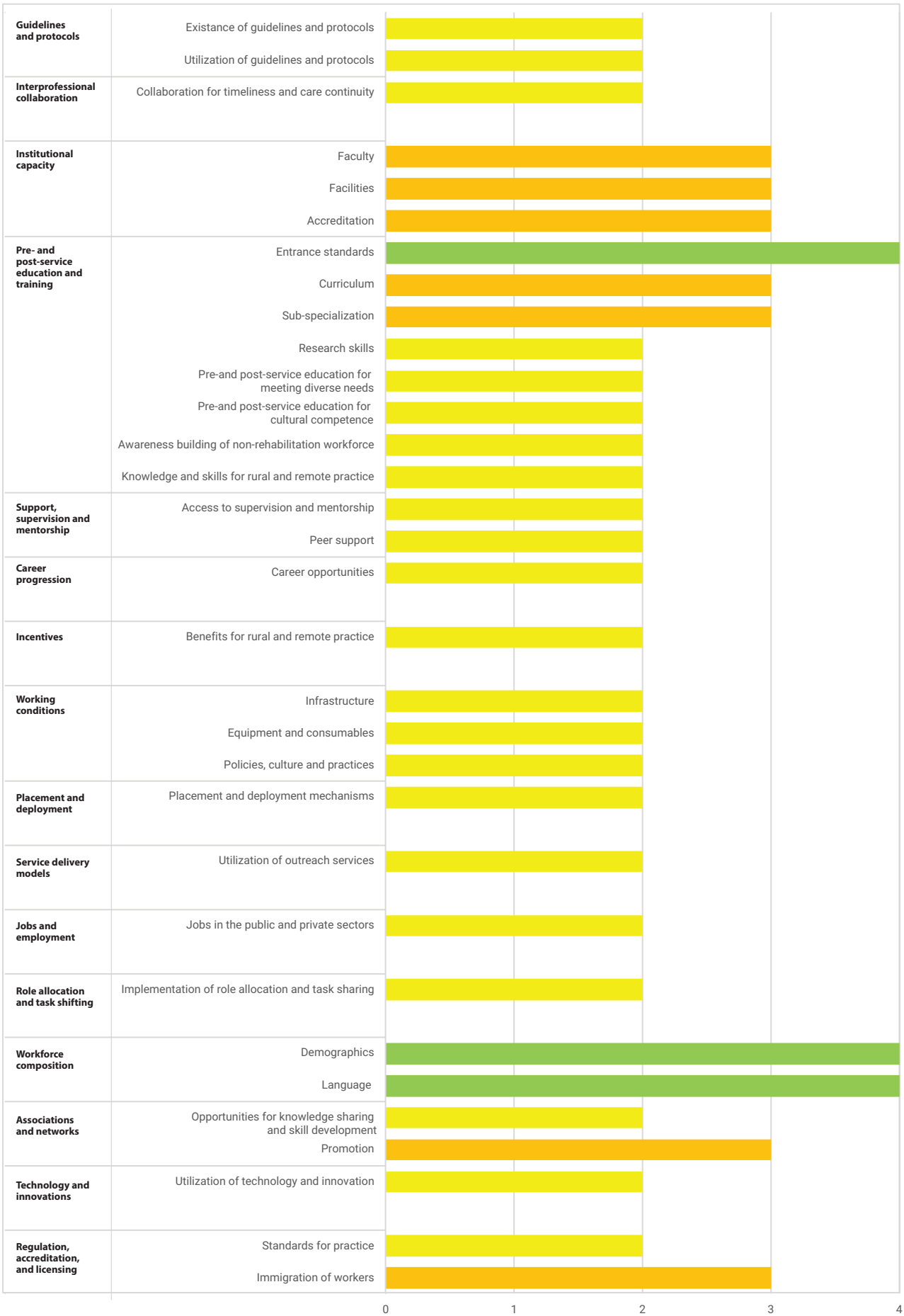


Fig A9.11 Physiotherapists

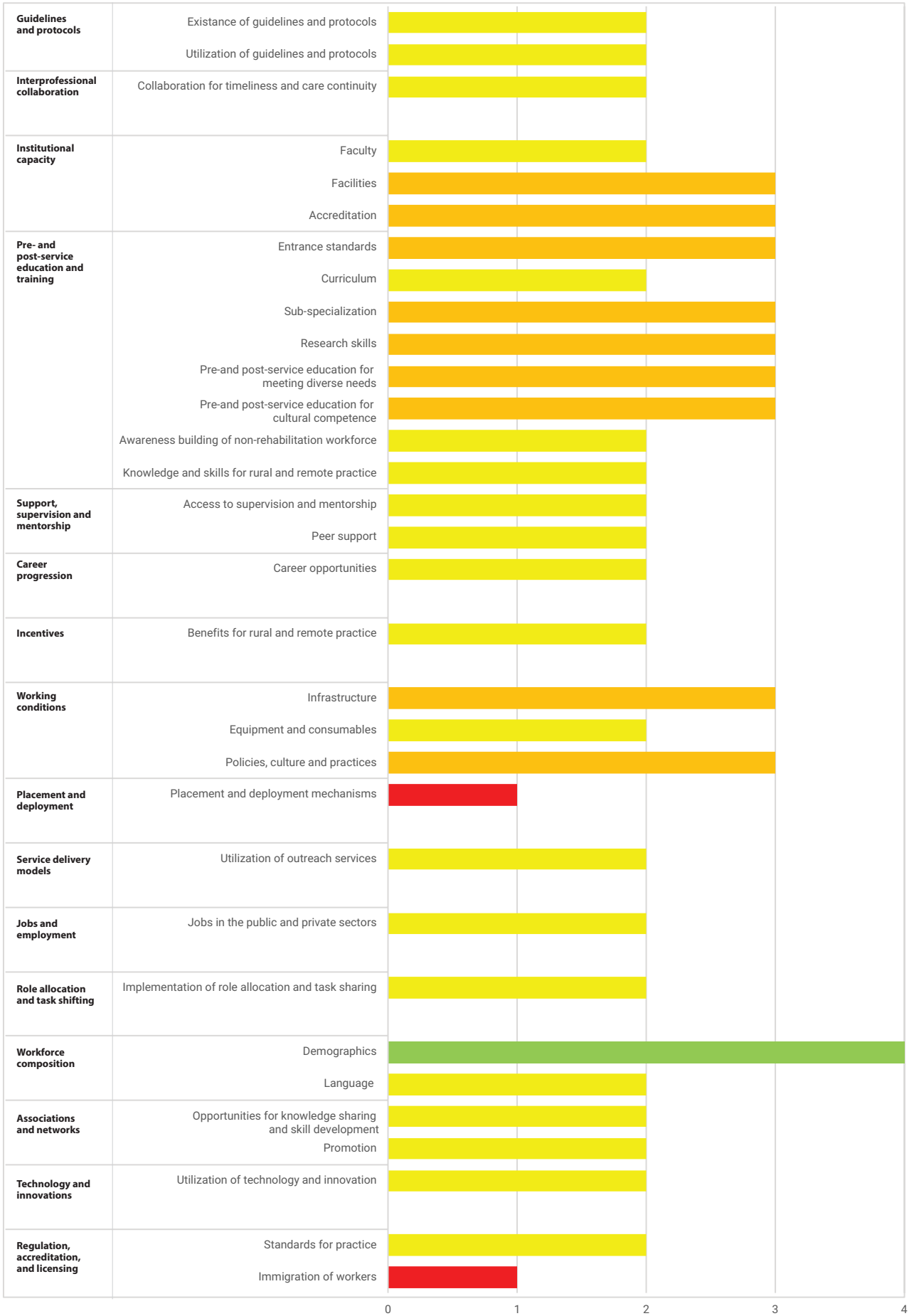


Fig A9.12 Prosthetists and orthotists

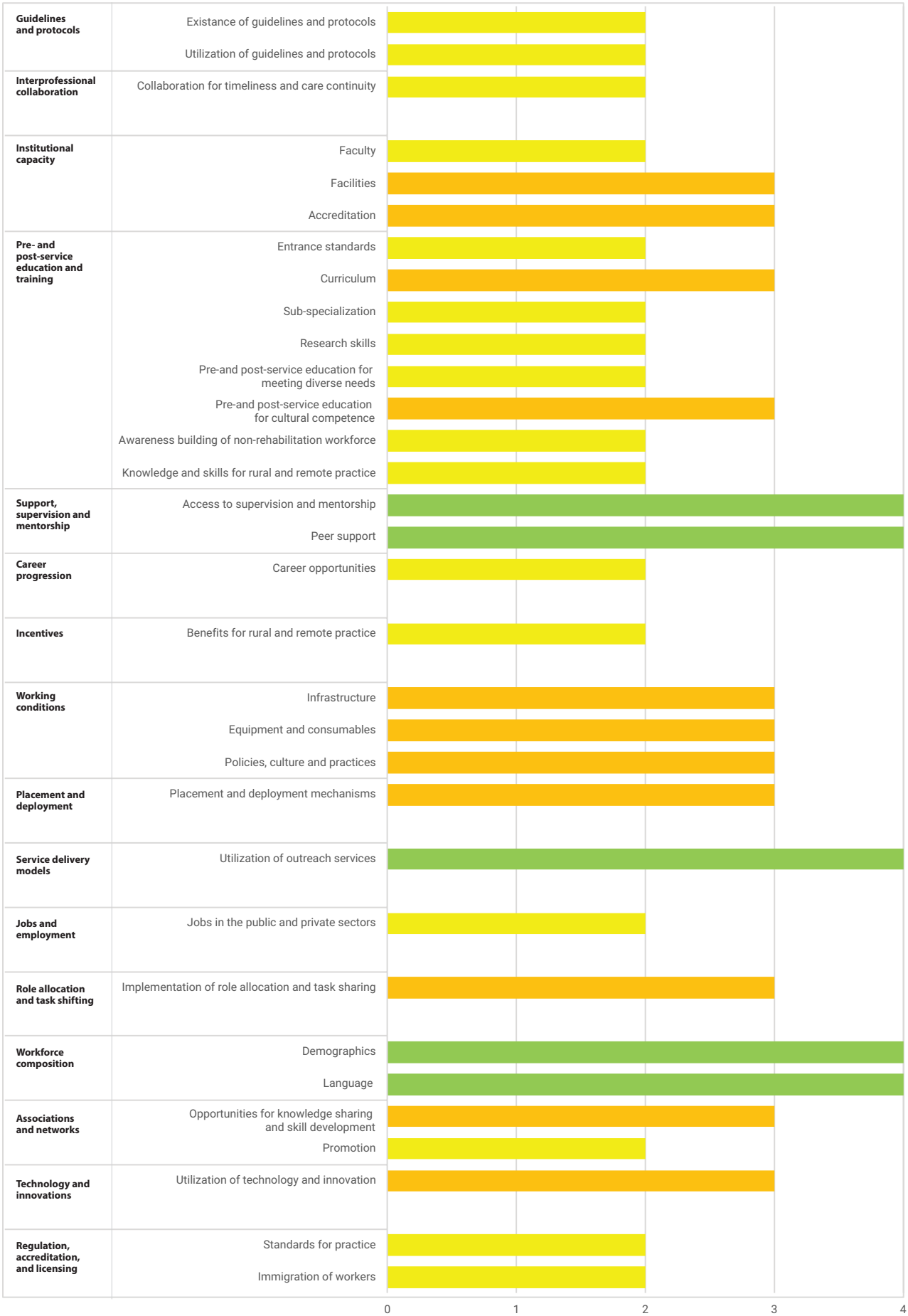


Fig A9.13 Social workers

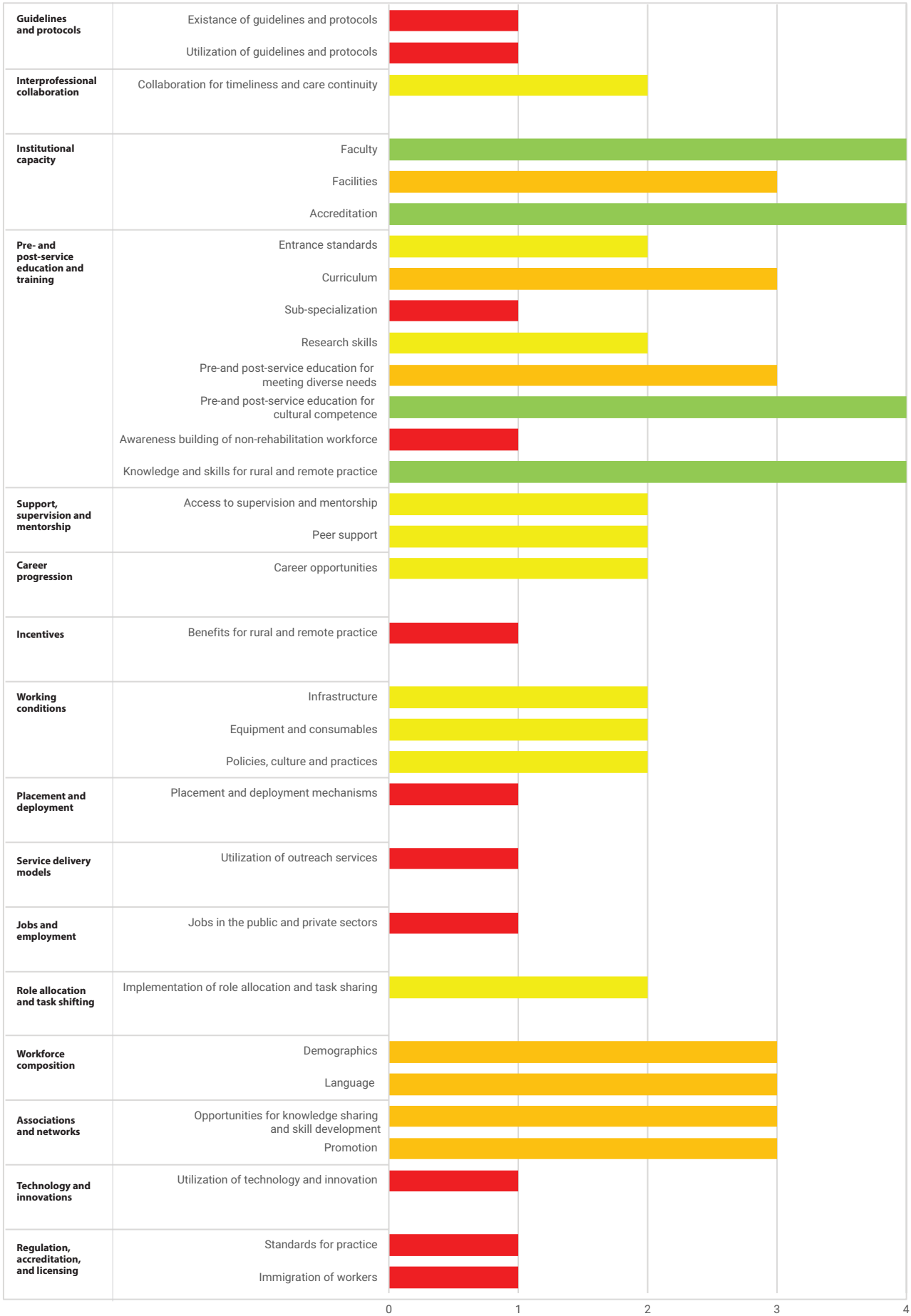


Fig A9.14 Speech and language therapists

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:2025-12653-52427-80870 (PDF)
WHO/EURO:2025-12653-52427-80938 (print)

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