

**Guide for**  
**Rehabilitation**  
**workforce evaluation:**  
project officer handbook



World Health  
Organization



# **Guide for rehabilitation workforce evaluation: project officer handbook**

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# Contents

<b>Abbreviations</b> .....	<b>iv</b>
<b>Glossary</b> .....	<b>v</b>
<b>Introduction</b> .....	<b>1</b>
<b>Phase 1. Evaluation</b> .....	<b>3</b>
Step 1. Rehabilitation workforce coverage assessment.....	4
Step 2. Political and economic analysis.....	6
Step 3. Labour market analysis for rehabilitation.....	10
Step 4. Workforce competency analysis.....	33
Step 5. Projection.....	37
<b>Phase 2. Data validation</b> .....	<b>41</b>
Step 6. Build consensus.....	41
<b>Phase 3. Conclusions and recommendations</b> .....	<b>43</b>
Step 7. Interpret findings and draw conclusions.....	43
Step 8. Establish recommendations.....	45
Step 9. Publish the GROWE (rehabilitation workforce evaluation) report.....	48
<b>Phase 4. Planning and implementation</b> .....	<b>49</b>
Step 10. Formulate and implement an action plan.....	49
<b>References</b> .....	<b>53</b>
<b>Annex 1. Templates for rehabilitation workforce stakeholder analysis</b> .....	<b>57</b>
<b>Annex 2. Potential responses to labour market failures</b> .....	<b>60</b>
<b>Annex 3. Template for interpretation of findings</b> .....	<b>70</b>
<b>Annex 4. Template for rehabilitation workforce evaluation report</b> .....	<b>75</b>

# Abbreviations

**AAAQ** availability, accessibility, acceptability, quality

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**FTE** full-time equivalent

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**GROWE** Guide for Rehabilitation Workforce Evaluation

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**RCF** Rehabilitation Competency Framework

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**RWTT** rehabilitation workforce task team

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**WHO** World Health Organization

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# Glossary

<b>Acceptability</b>	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).
<b>Accessibility</b>	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, such as disability-friendly buildings (i.e. physical accessibility), referral mechanisms (organizational accessibility) and the direct and indirect cost of services, both formal and informal (financial accessibility) (1).
<b>Accreditation (in professional education)</b>	The process of evaluation of education programmes against predefined standards 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).
<b>Attrition</b>	Refers to exits from the workforce for a variety of reasons including to emigration, voluntary exits (for example, to other sectors of employment), illness, death or retirement (3).
<b>Availability</b>	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).
<b>Certification</b>	The recognition that an individual has met certain qualification requirements (4).
<b>Competency</b>	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).
<b>Decent work</b>	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).
<b>Full-time equivalent</b>	Employment defined as the total hours worked divided by the average annual hours worked in a full-time job (7).

<b>Health labour market</b>	The structure that allows services of health workers to be sought (demanded) and offered (supplied) (4).
<b>Performance</b>	The responsiveness, productivity and effectiveness of health workers, in interaction with their environment.
<b>Policy dialogue</b>	The social debate and interaction between stakeholders that leads to translation of policy into strategies and plans (8).
<b>Productivity (technical efficiency)</b>	The outputs extracted from given inputs, such as people seen or interventions implemented per worker (4).
<b>Quality</b>	The delivery of a standard of health care determined to be acceptable, desirable, and capable of achieving optimal health outcomes.
<b>Regulation (for health workers)</b>	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).
<b>Rehabilitation workforce</b>	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).
<b>Retention (of health workers)</b>	Maintenance of health personnel in a specific position or organization, the health sector, region or country (4).
<b>Task sharing</b>	The rational redistribution and sharing of tasks among health workforce (4).
<b>Working conditions</b>	The environment in which an individual works, including terms of employment, benefits, physical and social climate (4).



# Introduction

The *Project officer handbook* (the Handbook – this document) describes the four phases and 10 steps conducted by the project officer when implementing the Guide for Rehabilitation Workforce Evaluation (GROWE) (the Guide) in a country (see Fig. 1). The Handbook includes:

- background information and guidance related to each phase;
- analysis exercises, with links to the relevant tools to complete them;
- potential data sources for completing the analysis exercises; and
- links to additional resources that provide further guidance when desired.

Relevant GROWE tools and templates, data sources and additional WHO resources are noted throughout the Handbook using the following icons:



**Tool**



**Data source**



**Additional resources**

It is suggested that the entire handbook be reviewed before commencing the evaluation to gain an overview of the process. The Guide, Handbook, *GROWE Data analysis toolbox* (the Toolbox) and *GROWE Workbook* (the Workbook) can all be accessed online on the [GROWE webpage](#).

Depending on the needs, priorities and resources of a country, some may choose to exclude or adapt specific analysis exercises. It is important to be clear on which, if any, analysis exercises will not be included or adapted before embarking on the evaluation. This is generally decided in the preparation phase and should be communicated during the first GROWE workshop.

**Fig. 1. The four phases and 10 steps of GROWE**



Members of the rehabilitation workforce task team (RWTT) are critical partners in successfully implementing GROWE. They will, along with other key rehabilitation stakeholders, be key sources of information for the analysis exercises (Phase 1); help build consensus around key data to validate it (Phase 2); help make sense of the findings and draw meaningful conclusions (Phase 3); and be fundamental to building and implementing an action plan (Phase 4). Before commencing the evaluation, it is worth taking the time to become familiar with the RWTT members and other key stakeholders and establish ways of working together throughout the process. Many of the analysis exercises require the RWTT to complete tasks as occupation (profession)-specific subgroups. It is important that the project officer:

- communicates these groupings to the members of the RWTT;
- ensures each subgroup has a designated leader;
- provides each RWTT subgroup leader with an electronic copy of the Workbook (Microsoft Excel document);
- provides the RWTT subgroup leaders with an e-mail address that they can use to send their completed workbooks and communicate any questions or concerns; and
- provides the RWTT with a clear timeline of key events and deadlines for the completion of exercises.

# Phase 1. Evaluation



Phase 1. Evaluation, encompasses steps one to five of the GROWE process. Each step involves one or more analysis exercises, as shown in Fig. 2. These exercises are completed by the RWTT and/or the project officer and involve a combination of desk-based reviews, key informant interviews, and consensus-based data generation. Instructions for completing the analysis exercises are provided in this handbook and in the Toolbox and the Workbook. Several of the exercises will require data to be inputted into the Toolbox. The Toolbox has been designed to automatically aggregate data and perform calculations, as well as generate figures in dashboards to interpret and communicate findings.

**Fig. 2. Analysis exercises encompassed in Phase 1. Evaluation**





# Rehabilitation workforce coverage assessment

## Objectives

1. Gauge the current state of the availability, accessibility, acceptability and quality (AAAQ) of each occupation included in the evaluation.
2. Identify barriers and opportunities for strengthening the effective coverage of the rehabilitation workforce.
3. Enable monitoring of the effective coverage of the rehabilitation workforce over time.

## Why assess rehabilitation workforce coverage?

**The state of rehabilitation workforce effective coverage indicates the scale and scope of action needed and provides valuable information for the labour market analysis.**

The scores assigned during the assessment are a useful measure of rehabilitation workforce strengths and weaknesses. Because scores are assigned to factors contributing to each of the AAAQ dimensions, they point to specific areas for further investigation during the evaluation. The scoring can also be used to explain discrepancies between need, supply, demand and absorption that may be revealed during the labour market analysis (Step 3). Importantly, the assessment draws attention to the broad range of factors that influence the coverage of the rehabilitation workforce, beyond those traditionally focused on in workforce evaluation, such as workforce production, retention and distribution.

**The exercise of scoring the coverage of rehabilitation workforce engages stakeholders in the evaluation and ensures their perspectives of the situation are captured.**

Completing the score cards is a highly participatory exercise completed by members of the RWTT. Beyond the value that their perspectives bring, especially in contexts of data scarcity, the engagement of the RWTT members is important in fostering commitment to ongoing workforce strengthening efforts. It can be anticipated that many of the actions recommended from the evaluation will require the input, if not leadership, of members of the RWTT. Involving them in the process of identifying problems and potential solutions helps ensure that they are invested in the implementation of workforce strengthening initiatives.

## Background

This step aims to capture the current state of rehabilitation workforce coverage in the country, based on the perspectives of the members of the RWTT. The assessment is concerned with the concept of “effective” coverage, which refers to not just the availability and accessibility of the workforce, but also their acceptability and quality. Effective rehabilitation workforce coverage is said to be achieved when the population can access and utilize the rehabilitation workforce to effectively meet their needs, and is ultimately what health systems endeavour to achieve (10, 11). As such, it is an important benchmark to measure against. Effective workforce coverage is only achieved when rehabilitation workers are available, accessible and acceptable to the population and provide quality care, which generally can only occur when the labour market is balanced (when need, supply and demand align).

Assessing the state of rehabilitation workforce coverage reveals strengths and weakness in the labour market. While countries often share common challenges, many are context specific. Therefore, where action should be targeted can be very specific (11, 12). Assessing workforce coverage, and examining each AAAQ dimension in depth, avoids neglecting important contributors of rehabilitation workforce development, as traditional approaches to workforce planning are prone to doing. Assessing rehabilitation workforce coverage further helps to explain the inter-relationships between the various dimensions of effective coverage and enables a better understanding of their dynamics (13).

Completing the assessment involves assigning scores to a range of criteria for each of the AAAQ dimensions for each of the occupations included in the evaluation. Scores are also assigned to a range of factors that influence these dimensions. The findings of the coverage assessment assist with prioritization by pointing to areas requiring particular attention, and potential opportunities for strengthening each dimension. The information gathered through the scoring process is also valuable in addressing key questions that arise during the labour market analysis (see [Step 3](#)), and further enable monitoring of the state of the rehabilitation workforce coverage over time, should the scoring be repeated in future years.

### Analysis exercise 1: Score rehabilitation workforce coverage

The rehabilitation workforce coverage assessment uses criteria addressing the AAAQ dimensions, as well as for contributing factors to gauge the progress of the workforce towards effective coverage. Scoring is completed in the Workbook by each RWTT subgroup. Scoring can be completed in-person or virtually and is likely to take approximately 2 hours to complete.

### Scoring

Subgroups work together to conduct the scoring in the Workbook. Instructions are included in the Workbook, but it is suggested that these are also communicated to the RWTT members before the exercise is started, such as through an e-mail, web conference or phone call with the subgroup leaders. The RWTT subgroup leaders will be responsible for organizing the web conferences for their group (if scoring is completed virtually) and will act as chair, inputting the group's scores in the Workbook. Once the scoring is completed, the workbooks are e-mailed to the project officer.

### Compiling and analysing scores

The Toolbox provides instructions for aggregating the scores from each RWTT subgroup's Workbook. This involves copy and pasting the score from each Workbook into the Toolbox where indicated. The results of the scoring, which will be automatically summarized in the coverage dashboard (located in the Toolbox), can be studied to identify areas warranting deeper examination during the evaluation. For example:

- Have any occupations scored significantly lower than others?
- Have any workforce dimensions, availability, accessibility, acceptability, or quality, scored lower than others across one or more occupations?
- Have any contributing factors scored lower than others, or considered particularly important?



#### Tools

Rehabilitation workforce coverage assessment (found in the Workbook and aggregated in the Toolbox).



## Political and economic analysis

### Objectives

1. Identify the stakeholders that influence the rehabilitation workforce and understand their respective roles and contributions.
2. Understand the political and legal environment in which the rehabilitation workforce exists and recognize how it can influence rehabilitation workforce development.
3. Understand the economic environment in which the rehabilitation workforce exists and what constraints and opportunities need to be factored into rehabilitation workforce recommendations and actions.

### Why conduct a political and economic analysis?

**Many policy and legislative interventions for workforce require political support and endorsement at the highest levels (4).**

It is not sufficient for a rehabilitation workforce evaluation to identify only what problems exist and what solutions are required to address them; workforce evaluation must also ascertain whether and how these solutions can be implemented. The “how” question is largely political and economic. Nearly every rehabilitation workforce strategy will need to progress through some level of bureaucratic process and compete for often scarce resources (12).

**Understanding the political and economic factors impacting the rehabilitation workforce helps identify constraints and opportunities (4).**

A political and economic analysis is necessary to ensure that the recommendations of the rehabilitation workforce evaluation report are acceptable and feasible and will be effective in the political and economic context. This is especially relevant where rehabilitation has historically been underprioritized and inadequately resourced. Convincing policy-makers to utilize their political capital in driving the rehabilitation workforce agenda requires pitching recommendations at the right level and at the right time considering political and economic constraints and opportunities. Furthermore, the success of policy interventions is determined by how these are implemented. Political and economic analysis for the rehabilitation workforce is needed to understand policy practices in the context, such as how they transform situations, where they encounter barriers, and who drives the policy practices as they move through the various levels of government to take life in the field (14).

**Gaining insight into political and economic dynamics ensures that recommendations can be targeted to specific actors and that the influence of the recommendations can be maximized.**

“Actor power” plays a tremendous role in developing the workforce, including for rehabilitation. Recognizing the influence that different stakeholders have, and their various agendas, can facilitate collaboration, accelerate progress and avoid barriers in the implementation of recommendations. The stakeholder analysis included in the political and economic analysis provides valuable information in this regard.

## Background

Political and economic analyses are core components of rehabilitation workforce evaluation; many problems underlying workforce challenges derive from political and economic issues, and likewise, many of the strategies to address them will be policy and economic interventions. The political aspect of this analysis is concerned with the environment that shapes the policy agenda, and the influences and interests of stakeholders, including civil society (14). For example, competition for resources, as well as professional hierarchies, have significant political dimensions. The economic aspect primarily examines the fiscal environment in which the health system exists and the budgets that determine where investment is directed, and what shapes economic decision-making.

### Analysis exercise 2: Conduct a stakeholder analysis

The stakeholder analysis seeks to identify and understand the needs, expectations, influence and interests of rehabilitation workforce stakeholders. It establishes where decisions are made, who makes these, and who they influence. The stakeholder analysis helps anticipate the behaviours or responses of stakeholders in implementation of rehabilitation workforce strategies.

There are various tools that can be employed when conducting the stakeholder analysis which can simplify the process. [Annex 1](#) provides a template for conducting a stakeholder analysis, which should be complemented by the information gathered through analysis exercise 3 below. The template includes:

- a table presenting significant stakeholder groups that may be included in the stakeholder analysis;
- a template to gather and record key stakeholder information, such as their role, technical capacity and agenda; and
- a power and interest grid for stakeholders mapping.



#### Tools

GROWE Stakeholder analysis template (found in Annex 1).



#### Data sources

Data to complete the stakeholder analysis can be gathered through interviews with members of the RWTT, as well as other stakeholders (consider the list of workshop participants). Where time and resources allow, and where the information is not already readily available, consider conducting a survey among the stakeholder groups to gather the information needed to complete the table provided in [Annex 1](#).



#### Further WHO resources

*Health labour market analysis guidebook*, Section 2, Modules 4-5 (4).

### Analysis exercise 3: Gather information on the political and economic context

The political and economic analysis does not gather numerical data, but rather descriptive information addressing key questions. These questions can be pre-empted to a degree; however, some will emerge organically as information arises. The questions below present a starting point and may be amended or expanded as required.

Not all questions listed in the following table need to be addressed, and some may be examined in more depth than others. Which questions are selected and the how deeply they are explored will be guided by where issues lie and what information is already available. Be sure to document findings clearly and systematically so that they can be analysed along with other data, such as in a well-organized Word document. Answers to these questions are particularly valuable when it comes to drawing conclusions and making recommendations (Phase 3).



#### Political and economic exploratory questions

<b>What are the current and historical drivers of rehabilitation workforce development in the country? How has this shaped the inclusion and degree of representation of rehabilitation workforce in health and workforce policies?</b>	<ul style="list-style-type: none"><li>• How have the agendas of various funding bodies and development agencies, and the strength of advocacy and actor power of specific groups influenced rehabilitation workforce strengthening efforts?</li><li>• Have emergencies, such as conflicts, natural disasters and disease outbreaks, drawn attention to insufficient numbers and distribution of rehabilitation workers, such as occurred during the Ebola outbreak in West Africa, the 2015 Nepal earthquake or the COVID-19 pandemic (15, 16)?</li></ul>
<b>How, and by whom, are health and workforce policies, legislation, regulation and strategic decisions made? To what degree are the rehabilitation workforce, and those using rehabilitation, represented in decision-making processes?</b>	<ul style="list-style-type: none"><li>• How is funding, service provision, and education and training for health workers, and rehabilitation workers specifically, organized and (potentially) coordinated across levels of government? What are the implications of this? For example, are they centralized or decentralized?</li><li>• Is there coordination and are there joint decision-making platforms, such as a national rehabilitation taskforce, that can develop and present rehabilitation policy recommendations to government ministries?</li><li>• Does the representation of rehabilitation in decision-making change from the national to local/district level? And if so, how?</li></ul>
<b>How are health and workforce priorities shaped? What is the weight of rehabilitation advocacy in priority-setting mechanisms, if any?</b>	<ul style="list-style-type: none"><li>• What data are available to inform rehabilitation workforce priorities? For example, are rehabilitation workforce data integrated into health information systems?</li><li>• Do coordination, collaboration and advocacy platforms exist for the rehabilitation workforce and how well are they functioning?</li><li>• Is there a focal point for rehabilitation within the government, and how well are they resourced (with both human and financial resources)?</li></ul>
<b>What policies and legislation currently concern the rehabilitation workforce? How do they portray the scale and scope of rehabilitation workforce challenges?</b>	<ul style="list-style-type: none"><li>• Are there rehabilitation objectives within existing health strategic plans and are they reflective of what needs to be done and the urgency for action?</li><li>• What health workforce legislation is currently relevant to rehabilitation workforce? For example, concerning wage limits and incentives.</li><li>• Which public and private actors are currently affected by rehabilitation and/or broader health workforce policies and legislation and to what extent? For example, education institutions, regulatory bodies, health facilities (standards for recruitment, etc.).</li></ul>



**How are health workforce policies and legislation monitored and enforced?**

- How are health workforce policies impacting rehabilitation enforced across levels of government, particularly when implementation is devolved to regional or district levels?
- What indicators or targets, if any, are used to monitor the rehabilitation workforce, and are data available to inform these?

**Is the fiscal space for health workforce expanding or contracting? Are there significant fiscal constraints that should be considered, such as a public budget deficit, fiscal space rules, or wage bill ceilings?**

- What, if any, development assistance/external sources of revenue does the ministry of health receive, and is this anticipated to change in the coming years? How has this been trending in recent years?
- Is any health budget currently allocated to rehabilitation, and is this expected to increase or decrease considering fiscal expansions or contractions?



**Data sources**

Data to address key areas of enquiry can be gathered through key informant interviews, including with government focal points, development partners and professional associations. Desk-based reviews, such as of policy and legislative documents, will likely also be useful.



## Labour market analysis for rehabilitation

### Box 1. Key labour market analysis terminology

In the context of this Handbook, key terms can be described as follows:

#### **Population needs**

The amount of rehabilitation worker time required by the population, expressed as the number of full-time equivalent (FTE) workers needed in each occupation.

#### **Workforce supply**

The number of rehabilitation workers available and willing to work, whether currently employed or not (may also be described as the “pool” of workers) (4, 17).

#### **Workforce demand**

The number of rehabilitation job posts, expressed as FTE positions, in both the public and private sector (18).

#### **Labour market absorption**

The employment of workers in rehabilitation jobs, expressed as the number of workers employed or proportion of jobs that are occupied or vacant.

### Objectives

1. Quantify the need, supply, demand and absorption of the rehabilitation workforce in the labour market.
2. Identify labour market failures and how they are manifesting in the context of the country.
3. Understand the factors underpinning labour market failures.

### Why conduct a labour market analysis?

**Analysing the health labour market helps achieve a deeper understanding of what issues underlie labour market failures.**

A labour market analysis of the rehabilitation workforce reveals the factors contributing to problems such as worker shortages and surpluses, skills mismatches, maldistribution and suboptimal performance, for example. Understanding the root causes of problems is critical to developing an effective plan of action to address them.

**A labour market analysis explains the roles and contributions of different sectors, including labour, education and health, and how these work together to impact the development of the rehabilitation workforce.**

The rehabilitation workforce is shaped by the policies, investment and action of multiple sectors, with the education, health and labour sectors often having the greatest influence. A

labour market analysis can achieve a deeper understanding of the intersectoral factors at play, promote intersectoral dialogue and support informed decision-making and investment.

**A labour market analysis can examine the role and influence of the private sector, and how it impacts the availability, accessibility, acceptability and quality of the rehabilitation workforce.**

The private sector can have considerable influence on the labour market, in both education and employment. A labour market analysis can reveal how the private sector can be harnessed to optimize the supply, demand and absorption of the rehabilitation workforce. This knowledge is critical to ensure that the contribution of the private sector, and potential risks associated with it, are appropriately addressed in the rehabilitation workforce action plan.

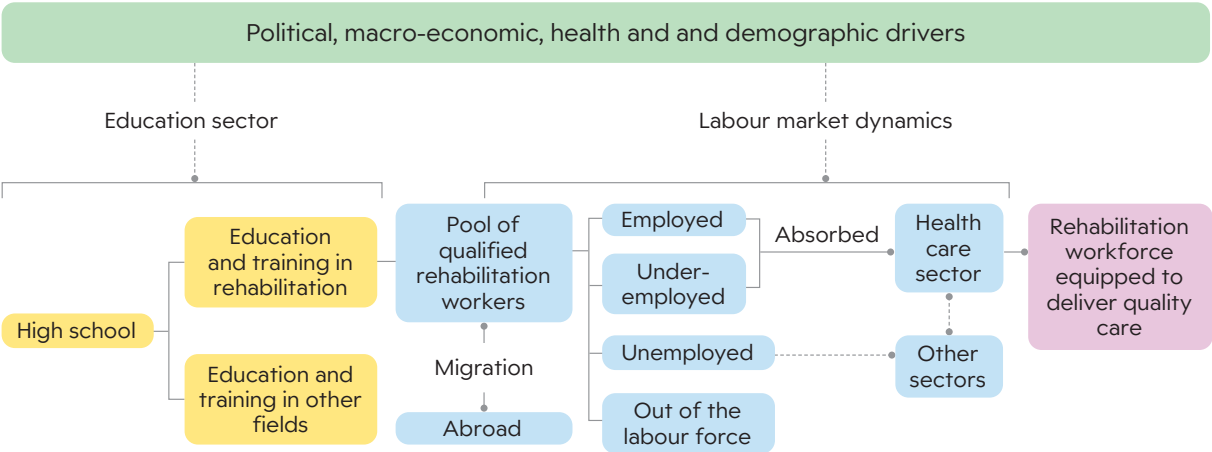
## Defining the labour market and its significance to the rehabilitation workforce

A labour market consists of how various variables work together to shape the capacity and performance of the workforce. The supply of workers, demand (jobs) for them in the health system, and whether and how they are employed are several of the key labour market variables (19, 20). While rehabilitation workforce challenges are often described as a crisis of supply, demand is also central to the issue (20–22). The tension between supply and demand creates an environment that greatly impacts the availability, accessibility, acceptability and quality of the rehabilitation workforce, as described in Table 1.

Labour market variables are driven and shaped by multiple historical, political, economic, health and demographic factors that interact in complex and context-specific ways (12, 20, 23). Understanding the labour market and the factors that shape it is essential to identifying effective interventions and policy solutions to address workforce challenges (21, 23). The labour market analysis described in Step 3 examines labour market variables and potential discrepancies between them that may be undermining the rehabilitation workforce (described as “labour market failures”). The analysis gathers a range of data in order to identify specific trends and forces that underpin labour market failures, describes how these manifest, and suggests potential responses (24).

The labour market is influenced by various sectors, including health, labour and education. The WHO Health Labour Market Framework, adapted specifically for the rehabilitation workforce (see Fig. 3), demonstrates the interconnectedness of the education sector and the labour market (21, 25, 26). Coherence between the health, education and labour sectors is necessary for a well-functioning health labour market for several reasons. Firstly, the production of health workers within the education system constitutes a significant inflow to the supply of rehabilitation workers. Secondly, the education sector shapes the competencies and characteristics of rehabilitation workers through its cohort intake and curricula (21, 27). The Health Labour Market Framework demonstrates the multiple junctures at which policies and other workforce interventions can influence the labour market; interventions may target educational capacity, migration, regulation or employment conditions, for example, depending on what priorities are identified through the labour market analysis.

**Fig. 3. The labour market in the context of rehabilitation**



Source: Adapted from Sousa et al., 2013 (25).

A balanced labour market relies on alignment between need, supply, demand and absorption. Such alignment is rare or non-existent in rehabilitation. Rehabilitation tends to face several major labour market imbalances, especially where it is still emerging in the health system. While the need for rehabilitation is substantial in all countries and is increasing with health and demographic trends, many countries fail to translate this need into demand by creating an adequate number of jobs in the health system (27). Simultaneously, low production and inflow of rehabilitation workers can greatly limit the pool of those qualified to fill the jobs. Poor working conditions, such as inadequate pay, equipment and infrastructure, can also deter workers from taking jobs. Such labour market failures manifest in a range of ways, impacting availability, accessibility, acceptability and quality, as can be seen in Table 1.

**Table 1. How the labour market influences the AAAQ dimensions**

DIMENSION	INFLUENCE OF THE LABOUR MARKET	EXAMPLES OF HOW LABOUR MARKET FAILURES PRESENT
<b>Availability</b>	<p>Demand for rehabilitation workers, among other factors, encourages worker production, which boosts their supply.</p> <p>Favourable employment conditions attract students to education programmes and increases their likelihood of accepting jobs, ensuring rehabilitation workers are <b>available</b> to the populations that need them.</p>	<ul style="list-style-type: none"> <li>• Shortages of rehabilitation workers (insufficient supply)</li> <li>• Rehabilitation workers not being employed in jobs that utilize their education and training</li> <li>• Inefficient skills-mix within the rehabilitation workforce</li> </ul>
<b>Accessibility</b>	<p>The distribution of demand (i.e. jobs) for rehabilitation workers across geographic areas, levels of health care, and public and private sectors impacts <b>accessibility</b>. Dual practice (workers holding two jobs simultaneously, usually between the public and private sector) can impact the time that workers are accessible to the public.</p>	<ul style="list-style-type: none"> <li>• Rehabilitation workers concentrated in hospitals, with insufficient access in the community</li> <li>• Inadequate distribution and reach of rehabilitation workers across rural and remote areas</li> <li>• Rehabilitation workers not being available to the public for a sufficient number of hours</li> <li>• Rehabilitation workers concentrated in the private sector, with out-of-pocket fees posing financial barriers to access</li> </ul>

<b>Acceptability</b>	Demand for rehabilitation workers with specific competencies and demographic characteristics can place pressure on the production of a more diverse demographic of rehabilitation workers. This in turn may encourage education programmes to ensure that they accept a diverse student cohort and deliver a curriculum that equips workers with competencies relevant to the population, so that they are <b>acceptable</b> to those that need them.	<ul style="list-style-type: none"> <li>• Rehabilitation workers graduating with competencies that do not align with population needs</li> <li>• Inadequate representation of certain population demographics within the rehabilitation workforce, e.g. not enough women/men or minority groups</li> <li>• Rehabilitation workers exhibiting or being perceived as having attitudes, values or beliefs that are not acceptable to some or all the population</li> </ul>
<b>Quality</b>	The dynamics between supply and demand can drive <b>quality</b> by incentivizing workers to become qualified and perform optimally to compete for jobs. Employers are also encouraged to provide optimal working conditions to attract and retain the best workers.	<ul style="list-style-type: none"> <li>• Rehabilitation workers without the knowledge, skills and behaviours to perform their activities safely and effectively</li> <li>• Unproductive rehabilitation workers</li> <li>• Rehabilitation workers not enabled with adequate working conditions and facilities</li> </ul>

The following sections address the various components of the labour market, need, supply, demand and absorption. They describe each component in depth, summarize the rationale for analysis, and include specific analysis exercises to facilitate data collection.

## Need for rehabilitation workforce

**Key messages**

- The need for rehabilitation workers is shaped by the health and epidemiological profile of the population and the characteristics of the health system, such as service delivery models. As such, it will vary from country to country.
- The efficiency of the workforce, determined by both internal (worker-specific) and external (environmental) factors, impacts workforce needs by influencing how much worker time is required to achieve the desired outcomes.
- The needs of the population and requirements of the health system for rehabilitation workers determines what knowledge, skills and behaviours should be prioritized in education, training and lifelong learning (28).

The need for rehabilitation workers refers to the number required to ensure that the health system meets the rehabilitation needs of the population (18). Traditionally, health workforce needs are determined either by standard population-to-provider ratios or by how many workers are needed to staff the health facilities in the country. Both are problematic for the rehabilitation workforce: population-to-provider ratios are often arbitrary and do not capture contextual factors that shape workforce needs, and facility-based need estimates fail to capture the workforce needs that exist outside of facilities, such as those that provide community-based services, and deliver care in homes, schools and workplaces (which is typically a large portion of the rehabilitation workforce).

Acknowledging these challenges, GROWE calculates the need for rehabilitation workers in a country based on its health and demographic profile and trends (see Box 3), as well as service delivery models and the efficiency of the workforce. It is important, however, that the results of the needs analysis are not interpreted in isolation when planning the production of the workforce, but considered alongside demand (the jobs available in the health system). While the number and distribution of jobs rarely reflects population needs due to multiple labour market factors at play (18, 29, 30), producing workers when there are inadequate jobs for them results in unemployment, which can have further negative ripple effects in the labour market. Data on population needs for rehabilitation workers can be an important advocacy tool to promote greater demand by highlighting the gap between the existing and required workforce, and linking this to unmet needs in the population.

### **Box 2. Measuring workers using full-time equivalent (FTE) versus a headcount**

Where possible, GROWE calls for availability to be measured through the number of FTE workers. The number of FTE workers is preferable to measurement by headcount, which does not accurately capture those that work part time or reduced hours. This is particularly significant considering the increasing feminization of the health workforce and the ongoing propensity for some women to work modified hours (27, 31, 32). A headcount approach to measuring absorption is likely to elicit a significant overestimation of rehabilitation workforce availability. However, FTE calculations may not be feasible as they require data on how many rehabilitation workers are employed full or part time, which can be hard to source in the absence of a comprehensive registry and employment records. The GROWE data analysis tools enable the number of FTE workers to be used, but where this is not possible, it can be substituted for headcount. When headcount is used, this should be explained in the rehabilitation workforce evaluation report, along with precautions for data interpretation.

### **Analysis exercise 4: Complete the GROWE population need data analysis**

The GROWE needs data analysis uses health condition prevalence and incidence data from the Institute of Health Metrics and Evaluation (Global Burden of Disease study) as well as estimates of rehabilitation workforce time requirements generated by the RWTT to determine the FTE of each rehabilitation occupation needed. Completing the population needs data analysis requires each RWTT subgroup to complete the need data analysis exercise in their Workbook. This exercise can be completed by the groups in-person when this is feasible, or virtually.

Subgroups are guided in their Workbooks to estimate:

- The proportion of people with a moderate or severe case of the health condition that needs care from their occupation.
- The time that should be spent by their occupation delivering rehabilitation in the context of select health conditions in the inpatient and outpatient/community setting over the course of 1 year.
- The time needed each month to perform non-clinical tasks.

These are then automatically calculated along with the prevalence or incidence of the health conditions in the country to generate an estimation of the FTE needed for each occupation.

The estimates RWTT members enter should be:

- reflective of what is thought to be needed, even if this is different to what is currently being provided, i.e. the desired amount of care, not the amount of care that may actually be being delivered due to contextual constraints;
- conservative (i.e. not overestimate the time required);
- sufficient to provide the dosage of care needed to be effective;
- suitable to the context of the health system, including the efficiency of service delivery models and the maturity of the health system; and
- capture the time required of the occupation to deliver care, not the time required to deliver care that they refer to other occupations to provide. For example, if a physical and rehabilitation medicine doctor prescribes rehabilitation interventions to be conducted by a therapist, the time the physical and rehabilitation medicine doctors enter should be the time required to assess and prescribe and follow up only. The time to deliver the intervention as prescribed will be captured within the therapist’s needs analysis.

It is essential that this is communicated within the RWTT so that subgroup estimates are comparable.

Once each RWTT subgroup has completed the needs estimation in their Workbook, they submit these via e-mail to the project officer, who copies and pastes the relevant data into the Toolbox (need data analysis tool).

Providing estimates for the need analysis can be challenging for the RWTT, especially the proportion of people needing care and the time required to deliver care. To assist RWTT members with the former, a global survey was conducted to generate “normative” estimates of proportions for each health condition. These estimates are presented as ranges (e.g. 30–50%) and are not context specific. They are intended to serve as a starting point for the RWTT and to facilitate decision-making around what proportion should be entered for the country context.

### Box 3. How is the need for rehabilitation workforce calculated?

GROWE calculates rehabilitation needs by facilitating country-specific estimates of rehabilitation worker time required (using the Workbook). These time requirements are based on clinical and non-clinical time needed to address the rehabilitation needs associated with a range of health conditions. GROWE then links these time estimates with country-specific prevalence and incidence rates of the health conditions (disaggregated across moderate and severe severity levels for certain conditions) using data from the Institute of Health Metrics and Evaluation (Global Burden of Disease study). The advantage of this method of calculating rehabilitation needs is that it is a) country specific; and b) can be projected over time according to health condition prevalence and incidence trends.



#### Tools

Need analysis tool (found in the *GROWE Data analysis toolbox*).



#### Data sources

Data on rehabilitation needs is provided by the RWTT.

## Rehabilitation workforce supply

### Key messages

- The supply of rehabilitation workers should align with demand to avoid high unemployment (linked to oversupply) or high job vacancies (linked to undersupply).
- Supply can influence demand, such as the health system not investing in jobs for rehabilitation workers because the workers are not available to fill them.
- The composition of the rehabilitation workforce, i.e. the occupations it comprises and their competencies, should reflect population needs.

The supply of workers refers to the pool of those qualified and willing to enter the labour market (4, 17). Supply should ideally align with population need but is also significantly influenced by demand, i.e. how many jobs there are. A situation where the supply of rehabilitation workers is greater than the number of jobs available to employ them results in unemployment, while a situation where supply is less than the number of jobs results in vacancies. A mismatch between need, supply and demand can have numerous adverse effects on the labour market, as it influences competition for work, quality and international mobility, for example (17, 27, 30, 31).

One of the complexities of evaluating rehabilitation workforce supply is determining what supply is desired, or required, in each context. Health provider (or personnel)-to-population ratios are occasionally looked to as a reference for supply planning; however, this is insufficient for several reasons:

- health workforce ratios reflect the desired number of health workers *available* per unit of population, which is contingent on supply being absorbed into the health sector (i.e. workers being employed in the health system); and
- there is not a commonly adopted “gold standard” for rehabilitation worker density; the size and composition of the pool of rehabilitation workers in a country depends on the health and demographic profile of the population, as well as the characteristics of the labour market (33, 34).

Thus, analysing rehabilitation workforce supply requires understanding it in the context of broader labour market dynamics, including how it relates to need and demand, and the impact it is having on achieving effective coverage. This diverts from traditional approaches, which have focused on needs-based workforce planning and neglected to account for labour market dynamics (4, 17, 28, 30). Considering supply in relation to demand and other labour market dynamics will ensure that the analysis can reveal where action is required, and effectively inform workforce planning.

The education sector plays a particularly pivotal role in rehabilitation workforce supply. Educational institutions determine a large proportion of workforce inflow (along with immigration) and play an important role in addressing worker shortages or surplus. Adequate institutional capacity is a major challenge in many low- and middle-income countries where education programmes are frequently underfunded, and a pool of qualified and experienced faculty is yet to be established. This can compromise the quality of education and training, restrict cohort size, and limit marketing and promotion capacity. Financial resources for institutions draw from a range of sources, including government or development funding, tuition fees (including from international students) and teaching hospitals. Any efforts to expand the production of rehabilitation workers will need to evaluate the financial feasibility of doing so in light of the available revenue from any or each of these sources (35). Where it is not feasible to adequately staff a rehabilitation education programme, students may need to seek qualification from foreign institutions, which can be costly



and limits opportunity for study to only a wealthy few. These students may also face challenges in accessing in-service education opportunities when they return home.

Education can be a highly profitable business. When the demand for specific programmes is high and regulatory policies allow, privately run education programmes are likely to emerge or expand. Liberalizing education can be highly effective in increasing the domestic production of workers but poses certain risks. Rapid expansion can be associated with a drop in the quality of education and can exacerbate or introduce new labour market imbalances if the growing supply exceeds demand in the labour market. Strong regulatory mechanisms and close monitoring of supply and the fiscal capacity of the health system to absorb new graduates over time are thus imperative (22, 35, 36).

Responses to a shortage or surplus of workers should carefully consider the trajectory of demand over time and the anticipated effectiveness of strategies being implemented to expand it. Potential strategies to address rehabilitation workforce supply are presented in [Annex 2](#). Which of these will be effective depends on where shortages or surplus arise from and is highly context specific, contingent on feasibility, and will only succeed when developed in parallel with strategies addressing the broader labour market (19, 25).

### Analysis exercise 5: Complete the GROWE education sector data analysis

The GROWE education sector data analysis tool requests information about the educational institutions providing rehabilitation programmes, student applications, admissions, graduations and faculty. This reflects the capacity for the domestic production of rehabilitation workers and how it is trending. Information on production from foreign institutions is also requested when this is applicable. In addition to revealing the extent to which the education sector is contributing towards rehabilitation workforce inflows, discrepancies between the number of applications and places offered can indicate the demand for rehabilitation programmes and how rehabilitation careers are perceived. Similarly, discrepancies between admissions and graduates sheds light on completion rates.



#### Tools

Education sector data analysis tool (found in the *GROWE Data analysis toolbox*).



#### Data sources

Data on the education sector can generally be acquired from educational institutions. The project officer may request written records (preferable) or gather data via verbal report from focal points within the educational institutions to input into the analysis tool. Information from the workforce coverage assessment (contributing factors) may also be useful in identifying factors influencing the capacity and performance of the education sector for the rehabilitation workforce evaluation report.



#### Further WHO resources

*Health labour market analysis guidebook*, Section 2, Module 6 (4).

*Using contextualized competency frameworks to develop rehabilitation programmes and their curricula*, Phase 5 (37).

## Analysis exercise 6: Complete the GROWE supply data analysis

The GROWE supply data analysis tool requests data points about the existing supply of rehabilitation workers, as well as inflows and outflows related to migration and other forms of attrition. These data provide a snapshot of the state of the pool of rehabilitation workers as well as how this is trending. Data about inflows and outflows suggest whether the pool of workers is expanding, contracting or stable, and the extent to which change is occurring.

The data entered in the supply data analysis tool, along with the data on rehabilitation needs, demand and absorption, contribute to generating projections of the rehabilitation workforce (see [Step 5](#)).



### Tools

Supply data analysis tool (found in the *GROWE Data analysis toolbox*).



### Data sources

Data on rehabilitation workforce supply may be acquired from regulatory bodies and/or from national professional associations who hold registers for rehabilitation occupations included in the evaluation. This information may be available online or may need to be acquired directly from focal points from either source.



### Further WHO resources

*Health labour market analysis guidebook*, Section 2, Module 7 (4).

## Analysis exercise 7: Gather additional information on rehabilitation workforce supply

Because GROWE aims to understand workforce challenges, not just identify them, it is important to complement the data from the education sector and the supply data analysis with information explaining the findings. The following questions may be useful in this regard. Select those considered relevant/of interest and add other questions that may be pertinent in the context. Be sure to document findings clearly and systematically, such as in a well-organized Word document, so that they can be analysed along with other data. Answers to these questions are particularly valuable when it comes to drawing conclusions and making recommendations ([Phase 3](#)).



## Workforce supply exploratory questions

<b>Who or what determines the number of places offered in rehabilitation education programmes?</b>	<ul style="list-style-type: none"><li>• Are there government policies or regulations influencing the number of places offered?</li><li>• Does institutional capacity limit the places offered, and if so, what aspects, e.g. faculty, resources, infrastructure?</li><li>• What trends are being observed with private educational institutions, e.g. are they emerging or expanding?</li></ul>
<b>How competitive is entrance into rehabilitation education programmes?</b>	<ul style="list-style-type: none"><li>• What are the entrance criteria for education programmes for different rehabilitation occupations? How is this changing over time, i.e. are they becoming more or less selective, or remaining the same?</li><li>• How do the entrance criteria for domestic rehabilitation education programmes compare with foreign programmes?</li><li>• Are entrance criteria notably different between private and public institutions?</li></ul>
<b>How does education for different rehabilitation occupations compare with other health occupations?</b>	<ul style="list-style-type: none"><li>• How do the entrance criteria for rehabilitation programmes compare with other health occupations, such as nurses or pharmacists?</li><li>• How does the cost of completing a rehabilitation programme compare with other health occupations?</li></ul>
<b>What is the composition of rehabilitation education programmes, and is this changing?</b>	<ul style="list-style-type: none"><li>• What is the proportion of different genders within rehabilitation education programme cohorts? How has this changed over time?</li><li>• What is the proportion of students of different genders, cultures, and ethnicities within rehabilitation programmes cohorts? How has this changed over time?</li></ul>
<b>Are there mechanisms to upskill rehabilitation workers?</b>	<ul style="list-style-type: none"><li>• 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?</li></ul>
<b>Are rehabilitation workers prepared for practice?</b>	<ul style="list-style-type: none"><li>• How much practical experience do students receive in pre-service education? Do they have supportive supervision?</li><li>• Do supervisors receive training on working with students?</li><li>• What settings do students get exposure to before they graduate?</li></ul>
<b>How are domestic rehabilitation educational institutions perceived internationally?</b>	<ul style="list-style-type: none"><li>• Are graduates of domestic rehabilitation institutions generally allowed to practice overseas?</li><li>• Do domestic rehabilitation education programmes attract foreign students? How is this changing over time?</li><li>• Do domestic rehabilitation education programmes attract foreign faculty? How is this changing over time?</li></ul>
<b>Where are rehabilitation workers that acquired their rehabilitation education and training abroad studying?</b>	<ul style="list-style-type: none"><li>• To which countries are students moving to obtain their education?</li><li>• Do regulatory bodies monitor and control what qualifications are accepted to practice domestically?</li></ul>
<b>Which countries do foreign rehabilitation workers primarily migrate from?</b>	<ul style="list-style-type: none"><li>• 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?</li></ul>
<b>What are the factors driving attrition?</b>	<ul style="list-style-type: none"><li>• 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?</li></ul>



## Data sources

Information on rehabilitation workforce supply can be gathered through interviews with members of the RWTT, as well as from development partners and rehabilitation educational institutions. The results from the rehabilitation workforce coverage assessment may also provide insights into the factors driving rehabilitation worker inflows and outflows.

## Rehabilitation workforce demand

### Key messages

- Demand signifies the potential capacity for the health system to absorb the supply of rehabilitation workers, i.e. how many jobs there are for rehabilitation workers.
- Demand can be influenced by need and supply, as well as the awareness and value of the contribution of rehabilitation to the health system among policy-makers.
- The private sector can significantly influence demand, creating jobs and competition. The demand that the private sector creates is typically reflective of what people will pay for, rather than population needs.

Demand for rehabilitation workers is reflected by the number of jobs allocated to them in the public or private sector, including not-for-profit organizations and the self-employed (4). Demand is highly significant to labour market dynamics as it signifies the potential capacity of the health system to absorb the supply of rehabilitation workers. Demand may also impact supply, as educational institutions are sensitive to the job market and may offer more programmes or places when more students, aware of their employment prospects, are competing to enrol (23).

Demand is a key force in determining competition; when there are a high number of jobs relative to supply, employers compete to attract the best workers, often through offering higher salaries or incentives. Conversely, a low number of jobs relative to supply generates competition among workers, providing incentive to present with more qualifications and valuable experience. With more workers than jobs however, salaries and working conditions may diminish without regulatory intervention.

While demand for rehabilitation workers should correlate with the population's need for their services, this is never the case; demand is determined by a range of factors, such as:

- The willingness and ability of the health system to pay for their services (invest in job posts), which can be severely limited in the context of fiscal constraints (17, 19, 20, 25, 38).
- The number of jobs in the private sector, which typically reflect the services people are willing to pay for, rather than what population needs are greatest (26).
- The supply of rehabilitation workers, as this impacts the likelihood that rehabilitation jobs will be generated and filled.
- The quality of rehabilitation delivered and how effective it is, as this motivates health services to invest in more rehabilitation workers.

- The awareness of rehabilitation and whether it is recognized as a core component of universal health coverage, or whether it is misconceived as relevant to only a few, such as those with disability.
- The perceived value of rehabilitation occupations relative to other health occupations for which job postings are allocated. This is significant, as there is finite budget to allocate to jobs, and therefore inevitable competition between occupations for the number of jobs allocated.

In many parts of the world, the supply of rehabilitation workers is very low, quality has been poor (for a range of reasons) and rehabilitation has been poorly understood and undervalued, all of which have contributed to lack of demand. Addressing these issues will likely be part of a comprehensive response of health system strengthening for rehabilitation.

Data on rehabilitation workforce demand can be gathered in analysis exercises 8 and 9, found at the end of the rehabilitation workforce absorption section below.

#### Box 4. The influence of the private sector on the labour market for rehabilitation

The private sector, which encompasses for-profit services, nongovernmental organizations and the self-employed, influences the labour market in important ways that can present both opportunities and threats to the health system, depending on the environment in which they operate. In the context of health, the private sector can:

- Increase the **supply** of workers through private education and training institutions, and through increased retention where workers have the opportunity for dual practice (39–41).
- Increase and distribute the **demand for and absorption** of workers, through employing workers in for-profit services (typically in urban areas) and nongovernmental services (often in rural, underserved areas).
- Increase **quality** through providing care that is generally timelier and uses superior infrastructure and equipment compared with the public system.

Studies indicate that, especially in low- and middle-income countries, a large proportion of the population uses private health services. In countries where rehabilitation was introduced by nongovernmental (often faith-based) organizations and has been underprioritized by the government, many people use private sector rehabilitation services, not necessarily because they are perceived to offer better care, but because there are few alternatives. This is especially true in rural and remote areas, where nongovernmental organizations tend to have a stronger presence.

In some instances, the private sector can also pose considerable workforce challenges. Where it is less regulated, the private sector (especially for-profit services) can provide higher wages than the public sector and attract workers away from public services that are more affordable. This can exacerbate workforce maldistribution, given that for-profit services tend to be concentrated in urban areas. An unregulated private sector can also result in less efficient use of the workforce as it can use perverse incentives to encourage unnecessary assessment and treatment (42).

The private sector constitutes a significant part of the health system, yet is not always used constructively to achieve effective rehabilitation workforce coverage. Several practices contribute towards a productive use of the private sector:

- strong regulation and accreditation;
- harmonization of wages, when appropriate;
- good use on contracting of the private sector to provide services to the public;
- full inclusion of the private sector in health information systems; and
- including the private sector in planning and coordination activities and platforms.

The findings of the rehabilitation workforce evaluation can be used to advocate for strengthening these practices and can help reveal their impact on strengthening rehabilitation workforce coverage.



#### Further WHO resources

*Health labour market analysis guidebook, Section 3, Module 10 (4).*

## Rehabilitation workforce absorption

### Key messages

- Absorption (employment) of rehabilitation workers reflects their true availability to the population (while supply and demand reflect the potential availability).
- Where rehabilitation workers are employed determines how they are distributed geographically, through the levels of health care and between public and private sectors, and thus significantly influences their accessibility.
- The private sector can greatly contribute to workforce absorption by employing additional workers. However, the private sector often offers different working conditions and incentives that may attract workers away from the public sector.

Rehabilitation workforce absorption refers to the employment of rehabilitation workers in the labour market. The number of FTE workers employed reflects their *actual* availability, as opposed to supply and demand, which only indicate *potential* availability. The absorption of rehabilitation workers in the labour market is therefore a critical element of workforce evaluation, and one that requires careful examination of the factors leading rehabilitation workers to accept or decline jobs, such as salary, incentives and location.

Employment decisions are motivated by many factors, including where the position is located, working conditions, opportunities for development and career progression, non-monetary incentives (such as free or subsidized housing) and wages (14, 38). Which of these factors influences employment decisions the most has been the subject of much research, although it is still largely inconclusive and generally concentrates on nurses and physicians (32). The power of different factors is also likely to be context specific, and some workforce evaluation and planning initiatives use surveys or discrete-choice experiments to establish what would most strongly influence the employment decisions of a specific workforce. These types of exercises are commonly used when exploring what would entice workers to take up employment in rural and remote areas, which are typically underserved and where recruitment and retention are an ongoing challenge.

Some studies have shown that higher wages and allowances are powerful recruitment and retention incentives (43–45). How feasible it is to change them, however, and the extent to which this will alter employment patterns is uncertain. The ability to influence wages can depend on government policies, the power of professional associations, unions or other representative bodies, and the broader economic environment (29). The diversity of employers also determines how varied and competitive wages are; where the public health system is the dominant employer, increasing wages may incur a significant cost that policy-makers may be reluctant to accept. Depending on the legislative environment, the private sector may have more agile wages (see Box 4), yet (for-profit) services are less prevalent in rural and remote areas where recruitment and retention are most problematic (17, 19).

Some studies have suggested that incentives that improve the employment prospects and the chance of longer term financial return for workers, such as opportunities for professional development, can be up to twice as effective as wages (46). These kinds of non-monetary incentives can be especially favourable as they benefit both the workers and the health system through developing competence and improving quality of care (43). However, even non-monetary measures to address maldistribution incur some cost, thus planning needs to occur in careful consideration of budgetary constraints (43). When it is not deemed feasible

or efficient to recruit rehabilitation workers to underserved areas, service delivery models that utilize outreach and task sharing may be more heavily relied on to enable access to care (38).

Dual practice, where a worker is simultaneously employed in two or more jobs (usually in the public *and* private sector), can also have an important impact on rehabilitation workforce absorption (see Box 5). Dual practice is widespread and can have positive and negative impacts on workforce availability, and the health system more broadly. It is important to understand how prevalent it is, what is driving it, what impact it is having, and whether and how negative impacts are being managed.

### Box 5. Dual practice

The ability to earn wages from multiple employers is an important factor in employment decision-making. Dual practice, typically within both the public and private sectors, exists throughout the world and can pose a substantial challenge for health systems. A frequently cited concern is that dual practice reduces workers' time within the public system, limiting their availability for those that cannot afford private health care (41). A severe version of this situation results in "ghost workers" drawing a wage from positions in the public sector that they are largely absent from in order to spend more time working in the private sector (19, 31). Dual practice has also been blamed for compromising quality of care and inducing undesirable behaviours, such as workers referring their public patients to their private services or diverting them there through increasing their wait times in their public services for example (47). Despite these risks, evidence from countries such as Bangladesh and Indonesia have found that the opportunity for dual practice has helped expand the availability and accessibility of health workers by enabling them to tolerate the economic losses associated with working in the public sector (39, 40). By allowing health workers to increase their income, dual practice has functioned as an effective retention strategy, reducing emigration and preventing workers from moving into *full-time* private practice (41).

The desire to undertake dual practice is motivated by factors beyond compensating for low wages in the public sector. Many workers seek additional employment within the private sector to achieve greater clinical autonomy, pursue professional aspirations, gain experience, access alternative facilities and equipment, and devote more time and attention to patients than they may be able to in strained public services (38, 47). Dual practice highlights how the private and public sectors can complement each other and foster competition within the labour market, although the risks need to be carefully managed (48–50). Mechanisms, such as regulations and their enforcement, are needed to ensure that dual practice does not elicit negative behaviours among the workforce or compromise access to care for those using the public system. Simultaneously, mechanisms to manage dual practice should not ignore its benefits for health workers and its role in retaining workforce within the country and public system, and serve to support these (47).

The adverse effects of dual practice tend to be experienced most severely in lower resource settings where regulatory mechanisms are weaker, thus working to impact the factors that motivate dual practice may be more effective in these contexts (50). The most successful strategies target multiple driving factors; there is little evidence that increasing wages alone will transform dual practice behaviours (41). While the opportunity to or feasibility of implementing strategies may be limited in the context of government wages and regulations, it is nevertheless important to understand the prevalence of dual practice, as well as its context-specific drivers and the implications it has for availability, accessibility and quality of the rehabilitation workforce.



The following analysis exercises examine demand and patterns of employment and vacancies to determine how effectively the rehabilitation workforce is being absorbed into the labour market, including within the public and private sectors, levels of health care, and across geographic areas. This information guides the type and prioritization of interventions required to make sure that rehabilitation workers are available where and when they are needed most.

### **Analysis exercise 8: Complete the GROWE labour market demand and absorption data analysis**

The GROWE labour market demand and absorption data analysis tool requests data points concerning the employment of rehabilitation workers and vacancies across geographic regions and within the public and private sectors. These data reflect the capacity for the labour market to realize the supply and demand for rehabilitation workers and translate them to actual availability. It further reveals where maldistributions exist and their scale. The data entered contribute to projection of the availability and accessibility of rehabilitation workers, which is valuable in the context of workforce planning.



#### **Tools**

GROWE labour market demand and absorption data analysis tool (found in the *GROWE Data analysis toolbox*).



#### **Data sources**

Data on labour market demand and absorption may be available through the health information system, the registries of regulatory bodies or professional associations. Multiple sources of data may be required, especially to understand employment and vacancies within the private sector. Information from the rehabilitation workforce coverage assessment ([Step 1, Analysis exercise 1](#)) may also be useful.



#### **Further WHO resources**

*Health labour market analysis guidebook*, Section 2, Modules 8 (4).

### **Analysis exercise 9: Gather additional information on rehabilitation workforce demand and absorption**

Because GROWE aims to understand workforce challenges, not just identify them, it is important to complement the data from the labour market demand and absorption data analysis with information regarding the following questions. Select those considered relevant/of interest and add other questions that may be pertinent in the context. Be sure to document findings clearly and systematically, such as in a well-organized Word document, so that they can be analysed along with other data. Answers to these questions are particularly valuable when it comes to drawing conclusions and making recommendations ([Phase 3](#)).



## Labour market demand and absorption exploratory questions

<b>What factors are primarily limiting demand (the investment in jobs) for rehabilitation workers?</b>	<ul style="list-style-type: none"><li>• To what extent is workforce supply restricting demand?</li><li>• Are rehabilitation jobs perceived as a good investment in the health system, i.e. are they valued relative to those allocated to other health occupations?</li></ul>
<b>What impact (positive, negative or neither) does dual practice have on rehabilitation workforce availability, accessibility, and quality and why?</b>	<ul style="list-style-type: none"><li>• Is dual practice perceived as a problem or advantage overall by rehabilitation workers?</li><li>• Does dual practice lead to excessive absenteeism and compromise quality of care, or does it serve to strengthen retention, or a combination of both?</li></ul>
<b>What factors drive rehabilitation workers to undertake dual practice?</b>	<ul style="list-style-type: none"><li>• 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?</li></ul>
<b>To what extent does regulation influence dual practice behaviours among rehabilitation workers?</b>	<ul style="list-style-type: none"><li>• Are there regulations concerning dual practice that apply to rehabilitation workers, and what do they stipulate?</li><li>• Are regulations actively enforced? Are they effective in managing dual practice behaviours?</li></ul>
<b>What factors “pull” rehabilitation workers towards employment opportunities in underserved areas/sectors?</b>	<ul style="list-style-type: none"><li>• Which factors appear to have the greatest effect on attracting rehabilitation workers to underserved areas?</li><li>• Which factors are currently used, and are they considered to be effective/sufficient?</li><li>• Which factors are potentially underutilized to attract and retain rehabilitation workers in underserved areas/sectors?</li></ul>
<b>What factors “push” rehabilitation workers away from employment opportunities in underserved areas/sectors?</b>	<ul style="list-style-type: none"><li>• Which factors are thought to be the greatest deterrents for rehabilitation workers taking up employment in underserved areas/sectors?</li></ul>
<b>How does the absorption of rehabilitation workers compare with other health occupations?</b>	<ul style="list-style-type: none"><li>• Do other health occupations, such as nurses, doctors and pharmacists, experience similar patterns of vacancies and maldistribution as for rehabilitation workers?</li><li>• What strategies have they applied to address maldistribution and vacancies, and how do these differ from what is used for rehabilitation workers?</li></ul>



### Data sources

Information on the demand and absorption of the rehabilitation workforce into the labour market, dual practice and maldistribution can be gathered through interviews with key informants from members of the RWTT, as well as from development partners, academics, representatives from other health occupations and employers.



### Further WHO resources

*Health labour market analysis guidebook*, Section 2, Modules 8 (4).

## Common labour market failures

Misalignment between need, supply, demand and absorption of rehabilitation workers can manifest as labour market failures. These take multiple forms, such as maldistribution, inefficiencies and attrition, among others. Understanding these failures, their scale, impact, and what factors are contributing towards them is a key component of labour market analysis and will expose where investment and interventions should be targeted. Several key labour market failures are described below, and potential responses are summarized in [Annex 2](#).

### Maldistribution of rehabilitation workers

Maldistribution of the rehabilitation workforce occurs when the distribution of workers does not align with the distribution of the population or is disproportionate to the demand for care. Maldistribution can occur geographically (observed as an over-concentration of workers in urban settings), between health care settings (observed as an over-concentration of workers in tertiary hospitals or in the community, for example), and between the public and private sectors (may be observed as an over-concentration of workers in the private sector) (19, 51). Whatever its forms, maldistribution can pose barriers to access and exacerbates workforce scarcity and thus has a particularly profound impact on lower resourced settings (38, 51). Maldistribution can lead to inequalities in access and issues with continuity of care, resulting in people developing otherwise preventable complications and not achieving their potential outcomes, which can incur additional costs for the health system.

Where jobs are available largely determines the potential distribution of workers. A lack of investment in rehabilitation worker jobs in certain geographical areas, the public sector, or health care settings can result in maldistribution. Particularly in lower resource countries, rehabilitation has historically struggled with inadequate jobs in rural areas, primary health care and secondary levels of care. There can also be a shortage of jobs in the public sector, with nongovernmental organizations offering most of the jobs for rehabilitation workers. While nongovernmental organizations often employ workers in rural and remote areas, geographic maldistribution is still a frequently cited workforce challenge, as jobs offered in these areas often fail to attract workers (38). The lack of jobs and workers in rural and remote areas is in part due to low patient density in these areas. Low patient density can demotivate workers and can be associated with poorer quality of care. The distribution of education and training institutions, which are typically located in urban areas, can exacerbate this geographic maldistribution, as they tend to attract workers from urban areas, in which they are based (38).

The other half of the maldistribution equation is employment decisions; a range of monetary and non-monetary factors influence whether and where rehabilitation workers seek employment. Opportunities for learning and career development, access to supervision and support, working environments, living conditions, equipment and infrastructure and wages all contribute to people's decisions about where they work. These employment decisions, and what influences them, are therefore key determinants of rehabilitation workforce distribution and subsequent accessibility (19, 38).

Studies have been conducted exploring which recruitment and retention strategies best resolve health workforce maldistribution. The results suggest that the combination of strategies likely to be most effective depends on the context, but in general they comprise approaches that both create "pull" factors (those that attract workers) and alleviate "push" factors (those that deter workers) (38). Examples of strategies used to address maldistribution are provided in [Annex 2](#).



### Further WHO resources

*WHO guideline on health workforce development, attraction, recruitment and retention in rural and remote areas (45).*

### Attrition

Attrition occurs when rehabilitation workers leave the health system to move to alternative jobs or a different country. It can be driven by several motivations, such as seeking experiences or professional development opportunities not available at home, receiving a salary, benefits, working conditions or a lifestyle superior to those available at home, or avoiding unemployment when there is a shortage of jobs. International experience can have benefits for both the worker and the health system, as it can provide opportunities for learning and provide experience and mentorship that may not be otherwise available. However, when workers fail to return, these benefits nor the investment in their education are fully realized by the home country. This is a major problem for many, especially lower income, countries which can struggle to retain their workforce.

### Malalignment between the rehabilitation workforce and population needs

Malalignment between the rehabilitation workforce and population needs occurs when there is a mismatch between the knowledge, skills and behaviours of the workforce and the needs of the population (52). This can occur as the consequence of the composition of the rehabilitation workforce; when the density or proportion of occupations is incongruent with the need for their services (17). It can also occur when the curricula for pre- or in-service education and training do not equip workers with the competencies most needed by the population. A malalignment between the rehabilitation workforce and population needs is a labour market failure that can arise when:

- there is poor awareness of rehabilitation need in the population;
- there is more funding or investment for certain occupations than others, that is not driven by health and demographic data;
- rehabilitation education and training curricula have an exclusive focus on knowledge acquisition, rather than on learning outcomes and ensuring these align with population needs; and/or
- a demand for certain competencies is based on what people are willing or able to pay for, rather than what the majority of the population requires most.

When a rehabilitation workforce is emerging in a country, there will likely be a need for more workers across all occupations and for enhancing all rehabilitation knowledge, skills and behaviours. It is important, however, that investment in the rehabilitation workforce is managed to develop a composition of occupation groups that will best meet population needs. It is equally important that rehabilitation education and training is equipping workers with the learning they need to address the needs of the population in the national context (28).

### Inefficiencies of the rehabilitation workforce

Rehabilitation workforce availability is determined not only by how many rehabilitation workers there are and how many are absorbed into the labour market, but by how well their time is utilized. In situations where there are not enough rehabilitation workers, and where the opportunities to expand their supply and demand are limited, it is more important than ever that they are working to their full potential (15, 27, 31). Inefficiencies of the rehabilitation workforce can take many forms and compound worker shortages and maldistribution of workers.

Efficiency thus constitutes an important component of workforce evaluation, particularly when supply and demand deficiencies are severe (19).

- **Know-do gap**

A know-do gap refers to a disconnect between what the workforce can do from a competence perspective, and what they can carry out in practice (they know what to do but cannot do it). Such a situation occurs when workers are required to practice in inadequate environments that prevent them from performing the activities they would otherwise be capable of performing, confining their scope of practice. A know-do gap makes poor use of the workforce and the investments made in their education, demotivates and de-skills workers, and prevents populations from enjoying the full benefit of the rehabilitation workforce (38).

- **Low productivity**

Productivity is understood in this context to be the relationship between what can be achieved (outputs) relative to what is put in (inputs) (19, 27). Low productivity of the rehabilitation workforce can be caused by the workers themselves (such as low motivation, poor effort or absenteeism) and/or by factors relating to the working environment, such as excessive bureaucracy, inefficient or ineffective technology, or poorly functioning service delivery models. Productivity typically improves as the performance of the workforce and service delivery improve. However, in some situations, increased productivity can lead to compromised performance, such as when the number of people receiving rehabilitation in a day grows and the workers cannot give adequate attention to all (19).

- **Ineffectiveness**

When the interventions delivered by the rehabilitation workforce do not achieve their aims, the health system is not receiving a return on its investment (or the investment of the education sector) and is less likely to value and prioritize jobs for rehabilitation workers. Ineffectiveness can result from inadequate education, lack of evidence-based practice, limited access to required equipment and infrastructure, or insufficient dosage (when a person does not receive the intervention for the duration and frequency needed for it to have an effect) (35).

While it can take decades to see significant growth in rehabilitation worker supply and demand, interventions to improve their efficiency and performance can be implemented more rapidly, with considerable impact on workforce availability. There are multiple approaches to addressing rehabilitation workforce inefficiencies and performance deficiencies yet selecting which combination to prioritize requires a deep understanding of the context, including financial constraints, technical capacity, social and cultural factors, and working conditions. Taking the time to examine the context of labour market failures is essential to targeting response efforts appropriately and ensuring the highest return on investment. Examples of strategies used to address labour market failures are provided in [Annex 2](#).



### **Further WHO resources**

*Health labour market analysis guidebook, Section 3, Module 11 (4).*

## Analysis exercise 10: Gather information on rehabilitation workforce labour market failures

Gather information on rehabilitation workforce labour market failures by examining the following questions. Select those considered relevant/of interest and add other questions that may be pertinent in the context. Be sure to document findings clearly and systematically, such as in a well-organized Word document, so that they can be analysed along with other data. Answers to these questions are particularly valuable when it comes to drawing conclusions and making recommendations (Phase 3).



### Labour market failure exploratory questions

**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 practice?
- 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 telehealth, 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 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 under-represented 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?



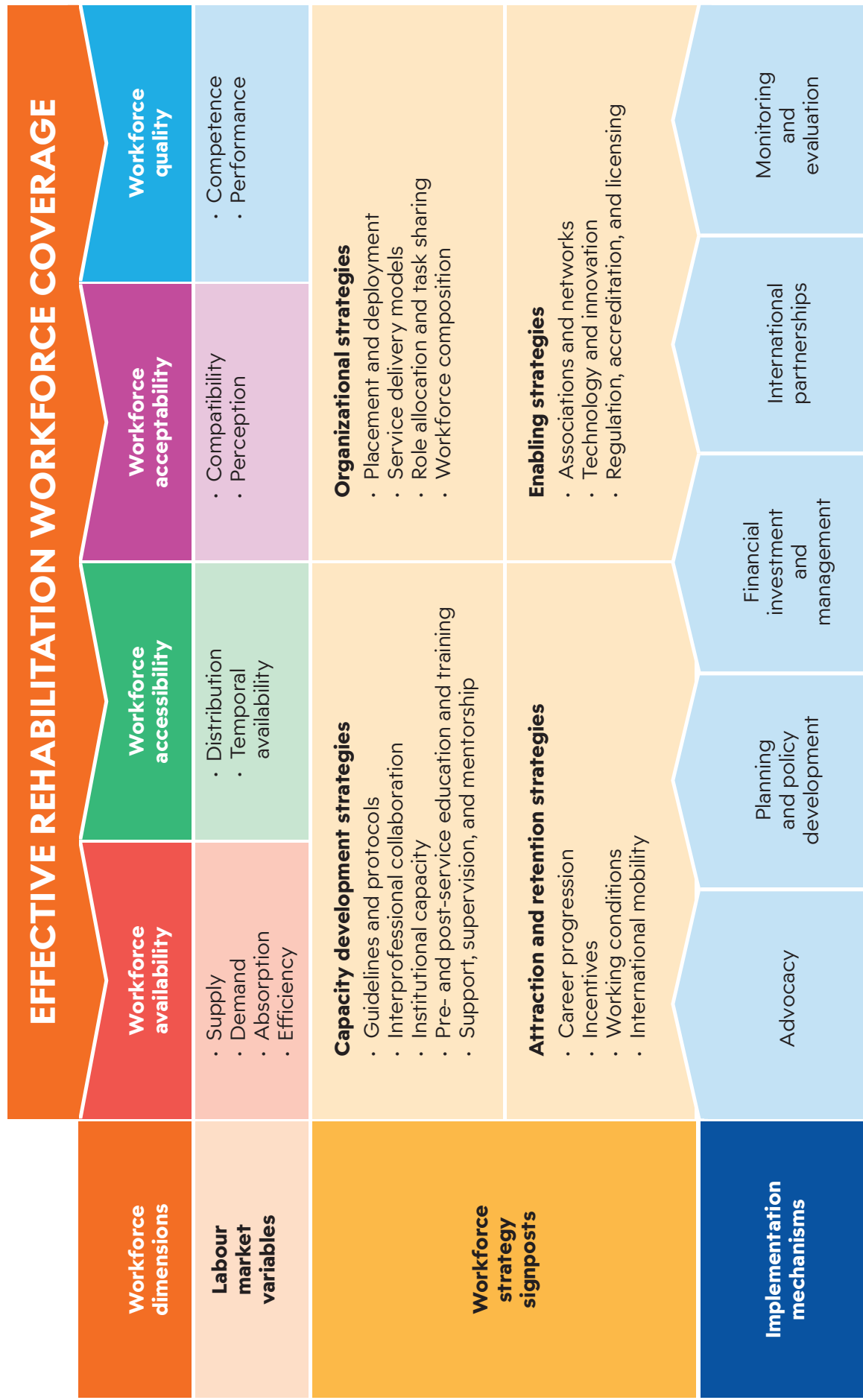
## Data sources

Information on labour market failures of the rehabilitation workforce can be gathered through interviews with key informants from the RWTT. Members of the RWTT may suffice as key informants, but the project officer may also wish to seek input from additional experts, such as representatives from additional education institutions, regulatory bodies and accreditation agencies, as well as from development partners and academics. Information can also be gathered from the results of the rehabilitation workforce coverage assessment.

## Responding to labour market failures of the rehabilitation workforce

Responses to labour market failures call for a holistic approach that addresses their root causes and draws on synergistic/complementary combinations of strategies. While many countries will experience similar labour market failures, the response to them may vary considerably based on a) what factors underlie the failures; b) the needs and priorities of the country; and c) what is feasible and acceptable in the context. It is typical for a strategy or intervention to address multiple labour market variables (e.g. supply, demand, absorption, etc.) concurrently, and ultimately impact several workforce dimensions (e.g. availability, accessibility, acceptability and quality). Fig. 4 show a range of “strategy signposts” (in the yellow boxes), which indicate areas where action may be taken to address a range of labour market failures. There are generally a range of actions which could occur for each strategy signposted. Which are implemented will depend on the factors listed above. The strategy signposts are elaborated in [Annex 2](#), with examples of potential actions provided, as well as considerations for implementation, and which labour market variables they may address. [Step 8, Establish recommendations](#), and [Step 10, Formulate and implement an action plan](#), provide guidance around how the results of the evaluation can be interpreted to ensure that the appropriate actions are identified for the country.

Fig. 4. Strategy signposts towards effective rehabilitation workforce coverage







## Workforce competency analysis

### Objectives

1. Capture the proficiency of the rehabilitation workforce across a range of performance domains, including practice, professionalism, learning and development, management and leadership, and research.
2. Identify gaps in the performance of rehabilitation tasks relevant to select health conditions and opportunities to expand access.
3. Understand how rehabilitation workforce availability impacts the provision of care for people with select health conditions.

### Why conduct a competency analysis?

#### **Competency analysis complements labour market analysis by providing information about the performance of the workforce.**

The GROWE competency analysis explores the proficiency of the workforce across a range of areas of performance related to the delivery of rehabilitation. The proficiency of the workforce reflects how autonomously they work, how independent they are in decision-making, and their depth of knowledge and skill. This information reveals areas where education and training can be strengthened, and may guide recommendations concerning workforce models, such as how supervision and support are managed.

#### **Competency analysis reveals the availability of rehabilitation assessment and intervention for people with a range of health conditions.**

The GROWE competency analysis maps a range of rehabilitation assessment and intervention tasks across the occupations included in the evaluation. This information is used to expose gaps in care, and, when paired with worker availability, show how readily available different assessments and interventions are to the people that need them. Importantly, the competency analysis also reveals opportunities for how the allocation of rehabilitation tasks may be optimized to ensure maximal access to care considering the current availability of each occupational group.

Workforce competency analysis complements the workforce coverage assessment and labour market analysis. Using the WHO Rehabilitation Competency Framework (RCF) as its basis, workforce competency analysis comprises of two parts: proficiency profiling and task mapping. The proficiency profiling aims to capture the general level of proficiency of each occupational group in the areas (“domains”) of practice, professionalism, learning and development, management and leadership, and research (5). The task mapping identifies which rehabilitation assessments and interventions are being performed, and by what occupational group(s). The GROWE workforce competency analysis looks beyond occupations and numerical labour market data, to the rehabilitation competencies and activities needed and provided in the country. Such an analysis is highly valuable to planning and workforce optimization, including through task sharing.

## Profiling the proficiency of the rehabilitation workforce

The RCF defines proficiency as a person's level of performance (5). However, in the context of GROWE, the proficiency of entire occupations is assessed at the national or subnational level. Here, the intention is to broadly characterize the level of performance of rehabilitation occupations to identify strengths and weaknesses that point to areas for further attention and action. The RCF describes four levels of proficiency across each domain, which reflect an evolution in autonomy, the complexity of tasks undertaken, and depth of knowledge and skills. Typically, rehabilitation workers will align with different levels of proficiency in different domains and will shift up and down levels over the course of their careers. It can be useful to identify what proportion of each occupational group aligns with each level of proficiency for each domain, as this can show where further investment in education and training and/or recruitment are needed.

## Task mapping

The RCF defines tasks as components of the activities that rehabilitation workers perform. The GROWE task mapping exercise focuses on clinical practice and aims to capture which occupations are delivering which rehabilitation assessments and interventions, and the proportion of each occupational group that are confident in doing so. GROWE assesses the distribution of assessment and intervention tasks associated with the rehabilitation of a select group of health conditions. These health conditions were selected because, collectively, they cover tasks relevant to all functioning domains, including communication, cognition, emotional functions (mental health), mobility and vision, among others. They are thus a proxy for the full range of rehabilitation assessment and intervention tasks. The health conditions are amputation, musculoskeletal conditions, chronic obstructive pulmonary disease, ischaemic heart disease, cerebral palsy, stroke, spinal cord injury, hearing loss, vision loss and schizophrenia.

Task mapping reveals several important pieces of information for workforce evaluation and planning:

- **What tasks are currently not being performed, i.e. what gaps exist?** This question reveals potential areas for expanding the education and training of rehabilitation workers, and opportunities for workforce optimization strategies, such as task sharing. Gaps in assessment and intervention tasks are likely to be common in situations where the rehabilitation workforce is still emerging, and some occupations may not yet exist.
- **What is the general availability of assessment and rehabilitation tasks to populations that need these?** Once the distribution of tasks among rehabilitation workers has been mapped, it is possible to determine how readily available tasks are to populations by looking at the availability of the occupations the tasks have been mapped to.
- **How comprehensive is the care being provided by the rehabilitation workforce?** Task mapping reveals the impact of gaps on the comprehensiveness of care being provided. For example, if there are gaps associated with speech and language assessment and intervention, whether because they are not being provided by any occupational group, or because the occupational group they are provided by is very scarce, a person with stroke who experiences impairments in these areas of functioning will likely not receive the full scope of rehabilitation they need.

This answers to these questions help reveal gaps and opportunities for improving efficiency that may increase access to rehabilitation care. The data are also used alongside workforce supply and health condition prevalence and incidence data to determine the impact that the state of the rehabilitation workforce has on the delivery of rehabilitation care.

### **Analysis exercise 11: Profile the proficiency of the rehabilitation workforce**

This component of the analysis asks the RWTT subgroups to state what proportion (none, few, most or all) of their occupational group aligns with each proficiency level (1–4) across each of the RCF domains: practice, professionalism, learning and development, management and leadership, and research. A description of a worker at each level is provided to guide their choice.

When completing the exercise, it is important that the subgroups are instructed to only enter “Most” for one level in each domain, with all other levels either being “None” or “Few”. Similarly, they can only enter “All” for one level in each domain, with all other levels being “None”. It is likely that for each domain, at least one level will be scored as either Most or All.

While the proficiency levels are not strictly aligned with educational levels, it is unlikely that an occupation with a bachelor’s level qualification or higher would perform at a level 1 in the domains of practice and professionalism. When they do, the reasons should be explored in more depth. Conversely, it is unusual for an occupation with less than a bachelor’s degree qualification (such as those with a diploma, certificate or informal education) to perform above a level 2 in the practice or professionalism domains, although a few with extensive experience may. When most or all of such occupation are performing above a level 1 in the practice or professionalism domains, the reasons for this should be examined.

Performance in the domains of learning and development, management and leadership, and research can be highly variable across occupations with different levels of qualification, thus, while it may not be the desired situation, it is not unusual for most or all bachelor-qualified occupations to perform at a level 1 or 2 for these domains.

When the subgroups have completed the proficiency profile exercise, they proceed to analysis exercise 12: task mapping.

### **Analysis exercise 12: Map the tasks performed by the rehabilitation workforce**

The task mapping exercise occupies three sheets of the Workbook. RWTT subgroups are required to map: 1) assessment tasks; 2) provision of assistive products and pharmacological agents (medicines); and 3) other intervention tasks. For each, the subgroups use an X in to indicate which tasks their occupation typically delivers in the context of the various health conditions. The task mapping tables include two columns in which the subgroups can indicate the tasks they deliver: The first indicates that the task could be delivered by the majority of the population (> 75% of workers), and the second indicates that it could be delivered by those with a subspecialization (< 25% of workers). Any task not delivered by the occupation is left blank. It is important that the RWTT understand that the lists of tasks are not occupation-specific, and that the inclusion of a task does not suggest that it *should* be delivered by their occupation.

A description of each can be seen when the mouse is held over it.

For this exercise, a task is considered to be within the scope of practice of an occupation when it can be delivered confidently, with or without a referral. Subgroups *should not* select a task if they refer to other occupations to perform it.

When the RWTT subgroups have completed the proficiency profile exercise and task mapping, the subgroup leaders submit their Workbooks to the project officer via e-mail. The project officer then compiles the results in the Toolbox, as indicated. Once the data are entered, figures are generated in the competency analysis dashboard of the Toolbox.



### **Tools**

GROWE workforce proficiency profiling and task mapping tools (found in the *GROWE Workbook* and aggregated in the *GROWE Data analysis toolbox*).



### **Data sources**

Data on the mapping of tasks to occupations is based on consensus among the members of each RWTT subgroup. The members of these subgroups may wish to discuss the mapping with their colleagues outside of the RWTT if required.



### **Further WHO resources**

Rehabilitation Competency Framework (5).



## STEP 5 Projection

### Objectives

1. Capture how rehabilitation workforce need, supply and demand change over time (up to 20 years into the future).
2. Observe the potential impact of different amounts of change on rehabilitation workforce inflows and outflows over time.

### Why generate rehabilitation workforce projections?

**Workforce projections show how the situation is likely to change over time, and what scale of action is needed.**

Workforce projections assist with planning by estimating how the state of the workforce will change over time considering current trends. This information indicates the scale and urgency of action required, which can be weighed against factors such as feasibility, competing priorities and value-based criteria to help set realistic yet ambitious targets for workforce planning.

**The GROWE strategy impact analysis reveals how changing various inflows and outflows of workers will alter current trends.**

The GROWE strategy impact analysis, where projections are generated, allows for toggling different inflows and outflows to observe how they impact workforce supply over time, and what this would mean for the number of jobs needed in the health system. This is a useful tool for planning, as well as for advocacy, and helps set context-specific goals and targets for rehabilitation workforce development.

### What is workforce projection in the context of GROWE?

Projection is used to estimate the future rehabilitation workforce need, supply and demand to inform the development of policies and plans. Projection is also used to test the potential impact that changes to worker inflows and outflows would make to the supply of workforce and the implications of this for jobs. GROWE projects trends in 5-year intervals up to 20 years. The reason for generating projections is that it is useful to rationalize decision-making about what changes need to be made and to what extent, based on foreseeable impact, and what is feasible and sustainable in the context (53). For example, if the projections reveal that domestic production of a specific occupation needs to be increased to a certain amount per year in order to achieve an agreed target within 20 years, strategies that aim to build capacity for domestic educational institutions can be identified and prioritized.

### What approach is used to generate projections in GROWE, and how can results be interpreted?

There is a range of approaches to generating workforce projections, each of which model slightly different data, are based on different assumptions, and produce different information. For example, some workforce projections are based on workforce supply trajectories, and

others, on workforce demand, while some consider workload and workforce movement (20, 53). GROWE uses a combination of approaches, using need and trends to predict the supply of the rehabilitation workforce over time and determine the implications this has for the number of jobs that are needed. GROWE projections are deterministic, in that they will always produce the same results for the same data inputs and do not factor in potential events which may cause these results to change. Deterministic projections are the most commonly used in workforce planning, as the results are unambiguous and easier to interpret, and their computation does not require sophisticated software compared with those projections that take uncertainties into account (53). However, there are innate risks and inaccuracies when projections are deterministic, such as:

- Any uncertainties or errors in the data entered, such as supply or demand data, can result in inaccuracies in the results, which are compounded over time, i.e. the amount of inaccuracy will increase the longer the time period (20).
- Projections assume the consistent continuation of existing trends, which in reality can shift over time (20).
- There are factors that are not integrated in the projection model that can also impact results, such as improved performance and efficiency of workers or changes to service delivery models. For example, these factors can improve the productivity of the workforce and change supply needs over time (53).

Furthermore, changes to government, funding and other aspects of the political and economic environment may impact workforce trends in ways not reflected in projections. When communicating projections and interpreting them in the context of planning and policy-making, it is important to acknowledge and be explicit about the parameters of their uncertainty based on the underlying assumptions (12, 53). The primary purpose of projection is to identify what actions need to be taken to shift trends in a desirable direction. It also aims to determine which actions are likely to have the greatest impact, and the scale to which they need to be implemented to elicit the shift in trends that are desired (53). Projections should be re-run and results re-evaluated as new data become available, particularly when relevant action plans or policies are being revised.

## What information is incorporated in GROWE's rehabilitation workforce projections?

GROWE projections draw on the following labour market analysis data:

- **Rehabilitation workforce needs:** Country-specific workforce need estimates, which are based on rehabilitation requirements for a range of health conditions, are modelled with epidemiological trends to predict the required FTE of each occupation included in the evaluation.
- **Rehabilitation workforce supply:** The current supply, as well as the number of graduates each year, the number of workers immigrating and the number emigrating each year are modelled together to estimate the supply of each rehabilitation occupation included in the evaluation.
- **Rehabilitation workforce demand:** The current number of job vacancies is used to determine how many additional jobs are needed in the labour market in order to absorb the supply of workers.

Importantly, the GROWE Impact analysis tool does not identify *how* change in inflows and outflows should come about. Potential strategies to implement the changes can be found in [Annex 2](#). Which strategies are best suited for the context will be determined by the results

of the various analysis exercises and in discussion with the RWTT and other rehabilitation stakeholders (see [Phase 3](#)). These decisions will be informed by the projections but will also consider factors not included in them, such as strategies that target workforce quality and performance. The strategies selected and why they were chosen can be included in the recommendations of the rehabilitation workforce evaluation report.



### Further WHO resources

*Health labour market analysis guidebook*, Appendix 11.2 (page 229) (4).

## Analysis exercise 13: Conduct a strategy impact analysis

GROWE uses the data entered in the needs analysis, education sector analysis, and supply analysis to automatically create supply projections for each rehabilitation occupation. Completing the strategy impact analysis requires new figures to be entered for inflows and outflows to observe how this changes supply over time.

The project officer, either independently or with the RWTT, can run several projection simulations using the strategy impact analysis tool (i.e. input a range of figures, from conservative to ambitious, that elicit a range of results). The impact of each strategy can be observed in figures (line graphs) within the tool. The graphs can be used to communicate the projections to the RWTT and other stakeholders (see [Phase 2, Step 6](#)) and entered in the report if required.



### Tools

GROWE strategy impact analysis tool (found in the *GROWE Data analysis toolbox*).



### Data sources

No additional data are needed to complete the strategy impact analysis. Rather, figures are estimated and entered in the cells as indicated and adjusted (toggled) based on the observed impact on the factor of interest (need, supply, demand and absorption).





## Phase 2. Data validation



### STEP 6

### Build consensus

Numerical rehabilitation data used in GROWE may be sought from a range of sources of varying reliability. At times, there may be discrepancies in what is reported by different sources. This can be a particular issue where rehabilitation workforce data are not routinely collected and stored, such as through national health information systems or national health workforce accounts. Data validation involves the RWTT and other stakeholders reviewing the data collected, identifying and discussing any discrepancies or concerns, and coming to consensus on the most correct figures to use. This process is greatly aided when the project officer records the sources of the data at the time of collection (there is space within the Toolbox for sources to be recorded). The process of data validation is most efficiently performed in the context of a workshop. However, due to the magnitude of data collected through the evaluation, the validation process can be time consuming. It is therefore suggested that the data be compiled and circulated, in the form of a zero draft report, for example, among the members of the RWTT and other rehabilitation stakeholders prior to the workshop, allowing participants time to familiarize themselves with the data and identify issues they wish to raise. The workshop can then be used to systematically review and discuss the data before proceeding to the steps of interpretation, drawing conclusions and defining recommendations, which can occur within the same workshop. These latter steps are addressed in [Phase 3](#).

#### Participants

Much like the introductory workshop, this workshop should include the project officer, members of the RWTT, and any additional stakeholders who should be informed and/or engaged in decision-making regarding the findings and recommendations, such as personnel from the ministry of health, labour or education, development partners, or from the WHO country or regional office. The workshop is intended to be highly interactive and involve substantial discussion, therefore participants should be kept to a moderate number that does not prohibit engagement from participants.

#### Format

The workshop is most effective when held in-person. It is likely to take 2.5 days. E-mail communication and feedback or consensus-building surveys can be used in conjunction with the workshop to achieve the objectives in a timelier manner.

## Objectives

The workshop has the following objectives regardless of the format in which it is held (these may vary based on context):

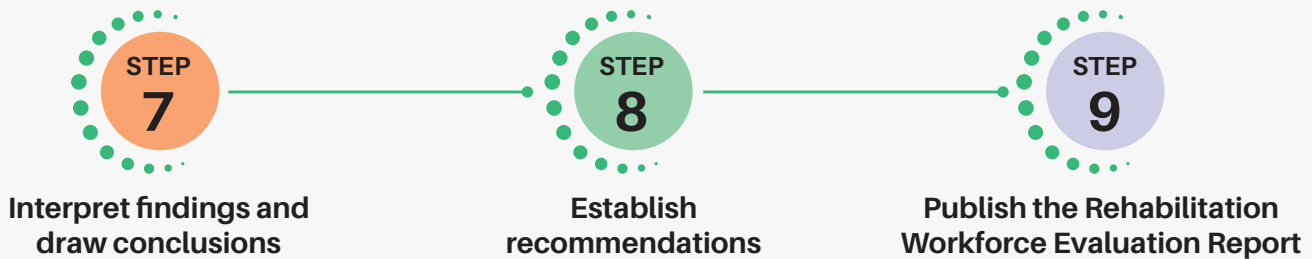
1. Present the findings of the evaluation to the members of the RWTT and any additional participants.
2. Validate the quantifiable rehabilitation workforce data.
3. Interpret the findings and establish the main conclusions of the evaluation.
4. Formulate the recommendations of the Rehabilitation workforce evaluation report.

## Agenda

The agenda of the second workshop should also be adapted to the context, but will generally consist:

- Welcome and opening addresses.
- Presentation of findings from the evaluation (including the assessment of workforce coverage, labour market analysis, competency assessment and workforce projections).
- Plenary discussion of findings and data validation.
- Establishing key conclusions.
- Identification of recommendations (through a plenary discussion or combined with breakout group discussions).
- Next steps.

# Phase 3. Conclusions and recommendations



## STEP 7 Interpret findings and draw conclusions

Evaluation is the process through which the findings of various analyses are compiled, examined and interpreted to inform conclusions and recommendations. GROWE encompasses multiple analysis exercises which collectively provide rich information about the availability, accessibility, acceptability and quality of the rehabilitation workforce. To successfully communicate these findings so that they can lead to meaningful action a systematic approach is required.

While the compilation of findings can be largely conducted by the project officer, the interpretation, drawing of conclusions and identification of recommendations require strong stakeholder engagement. Reporting the findings is also within the mandate of the project officer, but it too benefits from broader stakeholder review and input before being finalized. Much of this process occurs in the context of the second GROWE workshop.

### Compiling and presenting findings

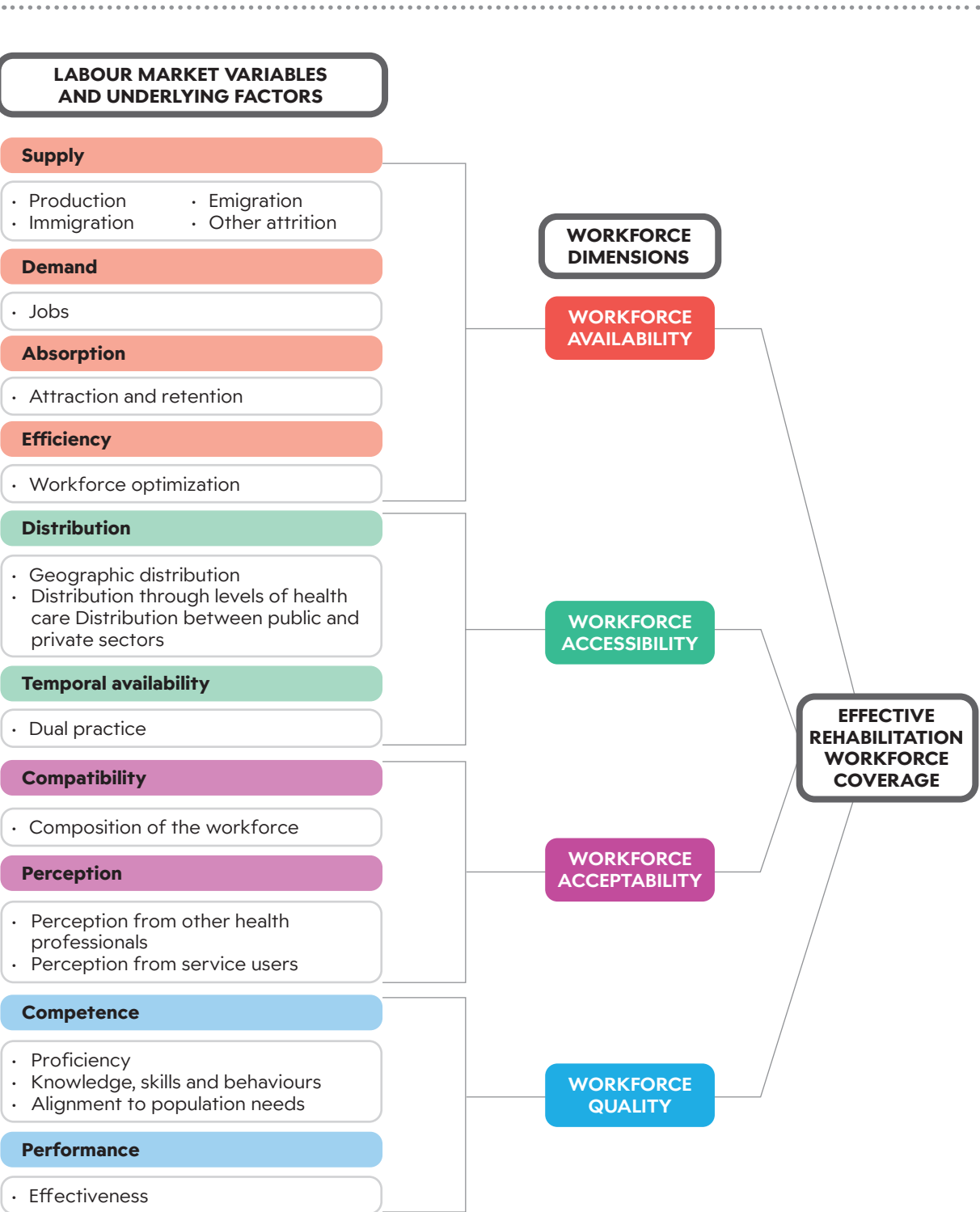
With a significant amount of data to compile, the project officer will need to present information efficiently and in a structured manner. This may take the form of a zero draft of the report. This draft can include gaps and comments for workshop participants and should be circulated to workshop participants at least a week prior to the workshop to enable them to review the content.

### Interpreting findings and drawing conclusions

Interpreting findings involves considering alternative explanations for the results and extracting meaning from them, i.e. where do problems or strengths and weakness lie, and why? This interpretation or discussion informs the conclusions, which translate the “what” (findings) and the “why” (interpretation) into concise statements. These statements need to reflect the significance of the findings separately and collectively, what these mean for different stakeholders, and the relative importance (timing) of action required. These conclusions are critical in shaping and prioritizing the recommendations of the final rehabilitation workforce evaluation report (Step 9).

Interpreting and drawing conclusions from broad and rich data can be challenging, especially when it is performed by a large group of people. It is useful to have the framework presented in Fig. 5 to organize the findings and to capture the interactions between different issues. This framework also aids structuring workshop discussions as it addresses all key areas and draws links with the various AAAQ dimensions and effective rehabilitation workforce coverage. [Annex 3](#) provides a template that workshop participants can use, together or in groups, to help interpret the findings and generate conclusions.

**Fig. 5. Suggested organization of evaluation data for interpretation**





## Establish recommendations

Recommendations convert the conclusions of the evaluation into specific areas for action. While conclusions can be orientated around the key problems identified, recommendations should be solution orientated (54). A recommendation may address multiple conclusions (problems) relating to different workforce dimensions. This is why recommendations are organized and presented in a different format to conclusions, i.e. not organized by workforce dimensions as shown in Fig. 5. Recommendations may be better organized by type of strategies (as shown in Fig. 4): capacity development strategies, attraction and retention strategies, organizational strategies, and enabling strategies. While not an exhaustive list, the signposts included in Fig. 4 point to a broad range of ways in which the workforce can be strengthened. These are useful in prompting discussion and helping avoid the less commonly considered strategies from being neglected.

### Considerations for identifying recommendations

For recommendations to be translated into meaningful actions, they need to be feasible and appropriate according to economic, sociopolitical and legal analysis.

- **Feasibility analysis:** Feasibility analysis relates to whether the implementation of each recommendation is practical in the country and in light of other health priorities, technical capacity and resource availability (4). The feasibility of any recommendation is influenced by broader health workforce or labour market policies and regulations governing rehabilitation workers and their conditions.
- **Economic analysis:** The cost-benefit of implementing any recommendation influences how acceptable it is likely to be to policy-makers (4). Depending on the type and scale of the recommended action, a basic economic analysis needs to consider the anticipated cost and potential impact of implementation, or a more comprehensive economic evaluation if the scale of the recommendation warrants this (such as for implementing a new education programme or occupation). Currently, there is very limited published evidence on the cost-effectiveness of health system strategies or policy interventions for rehabilitation; however, inference may be drawn from evidence related to other health workers where available.
- **Sociopolitical analysis:** Sociopolitical analysis relates to the social values and interests of the stakeholders concerned, and those espoused by overarching health policies and strategic plans (4). Sociopolitical analysis is particularly important in considering recommendations for strengthening rehabilitation workforce coverage because of the impact on a diverse range of occupations and sectors; a recommendation targeting the development of one occupation, for example, may be at the cost of further investment in another. Sociopolitical analysis therefore involves considering potential adverse effects of a recommendation on any stakeholders, as well as its benefits. Where advancements for some stakeholders have a direct or indirect adverse effect on another, it may be useful to use the objectives of the evaluation and the overall vision of stakeholders as the orientation point for decision-making.
- **Legal analysis:** Recommendations need to be considered against laws and rules that may impede their implementation. Legal analysis will be particularly pertinent in the context of recommendations concerning task sharing, incentives or wages, and regulatory systems, for example.

Due to the limited time available within the workshop, it is suggested that participants attempt to generate a *preliminary* list of recommendations only. These can then more formally analysed against the above considerations by the project officer afterwards, and be amended through the course of the rehabilitation workforce evaluation report review process.

### **Prioritizing recommendations**

Decisions on prioritization can be guided by the urgency of taking action; the importance of the problem to achieving equitable access to, affordability, or quality of rehabilitation; and the amenability of a problem to interventions that are expected to be acceptable and achievable in the context (4). Depending on the scenario in which GROWE is implemented (such as whether it is conducted within or after a broader rehabilitation or health workforce situation assessment), there may be different stages of prioritization of the recommendations. If GROWE is integrated in the WHO Guide for Action process, workforce recommendations will be prioritized along with recommendations concerning other health system building blocks that will collectively inform the national rehabilitation strategic plan. When, or if, the rehabilitation recommendations are integrated in general health policies and plans, they will be prioritized against an even greater range of health objectives. When GROWE is implemented as a standalone process, the prioritization of the recommendations will directly influence timelines and where investment and efforts are focused.

Regardless of scenario, prioritization is always necessary, as resources are never infinite, and it should be guided by pre-determined criteria. These criteria, and how they are weighted, will be determined by the stakeholders, but may include:

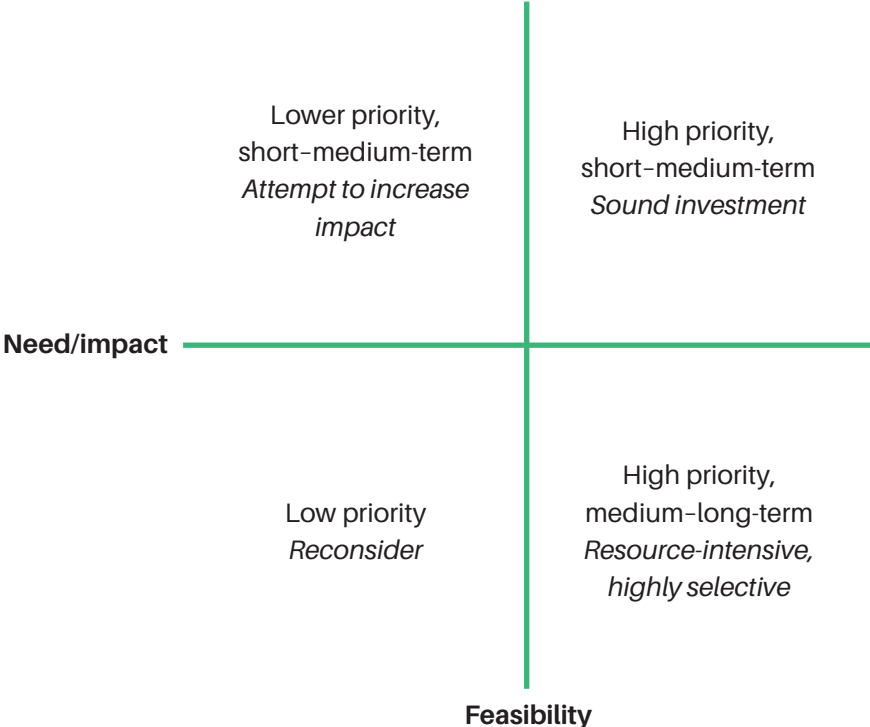
- burden of the health issue(s) the recommendation is addressing;
- effectiveness of implementing the recommendation;
- cost of implementing the recommendation;
- acceptability of the recommendation; and
- fairness (4, 54).

Should the recommendations serve the Sustainable Development Agenda, explicit equity-related criteria should be included (55). It is useful to position recommendations on a two-by-two grid that positions feasibility and impact on the x and y axes respectively, as shown in Fig. 6. Additional criteria can then be considered to finalize prioritization.

Recommendations that fall on the low end of the feasibility and need axis (lower left quadrant) should be reconsidered; those that fall on the low end of the feasibility axis, but high end of the need axis (lower right quadrant) are likely to require greater investment and a longer timeframe (address longer term strategies) but can yield a high impact on the workforce. Such recommendations may be considered a high priority, but too many will likely overwhelm stakeholders and consume a large portion of investment. Recommendations that fall on the high end of both the need and feasibility axes (upper right quadrant) will generally be highly prioritized, depending how they measure against additional criteria (such as fairness/equity). Those that are low need, high feasibility (upper left quadrant) are unlikely to be a sound investment, and, if deemed important, may need to be modified to increase their impact (54).

**Fig. 6. Two-by-two grid for mapping rehabilitation workforce priorities (54)**

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## STEP 9

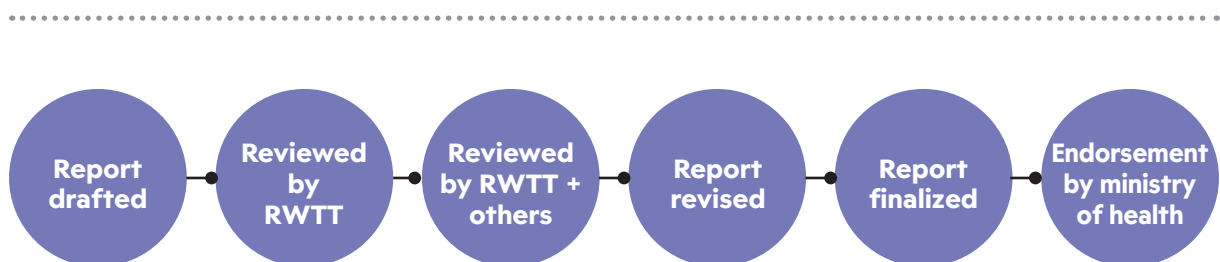
# Publish the GROWE (rehabilitation workforce evaluation) report

The rehabilitation workforce evaluation report communicates the methodology and findings of the evaluation, as well as the conclusions and recommendations of the RWTT and additional stakeholders. The report can act as a useful reference document for the rehabilitation workforce community, as well as an advocacy tool to promote strengthening the rehabilitation workforce. The key messages of the evaluation need to be clear, easily understood and organized in a logical narrative. [Annex 4](#) includes a template for the rehabilitation workforce evaluation report, that can be adapted as desired. The template reflects the structure presented in Fig. 5.

An executive summary is needed in the report due to the scope and depth of evaluation data; however, it is suggested that this only be written after the report has been reviewed. This will encourage reviewers to read the report more comprehensively, and signals that the contents are not finalized until their feedback has been considered. Visualizing data in figures and summarizing findings in tables enables effective communication; visualizations of data can be powerful advocacy tools to convey the magnitude of a problem or the scale of an opportunity. As mentioned previously, the Toolbox automatically generates figures of much of the GROWE data in dashboards that can easily be extracted for inclusion in the report or other advocacy materials.

The process of preparing the report is an opportunity to clarify priorities, ensure all relevant stakeholders have an opportunity for input, and build buy-in within the rehabilitation workforce community. It is suggested that the report be drafted, disseminated for feedback among the members of the RWTT and additional stakeholders (this may be the zero draft), revised, and then disseminated a second time to the RWTT as well as a wider pool of stakeholders who can add a valuable perspective, provide political backing, or who will be at the forefront of implementation. The report is then revised again, finalized and submitted to the ministry of health for endorsement (see Fig. 7).

**Fig. 7. Process of developing the rehabilitation workforce evaluation report**





## Phase 4. Planning and implementation

### STEP 10

### Formulate and implement an action plan

The rehabilitation workforce evaluation report is responsible for clearly defining what actions are needed based on the findings of the evaluation. To ensure these actions occur, stakeholders need to be guided by a plan that defines how they will be implemented, including who is doing what, when, and with what resources. When the rehabilitation workforce action plan is written and how it is positioned with a national rehabilitation strategic plan (if one exists) will depend on the scenario in which GROWE has been conducted:

- If GROWE is *integrated in* the Guide for Action process, i.e. within a broader rehabilitation situation assessment, then workforce actions will be included the national strategic plan, which will also include actions for all health system building blocks. The national strategic plan may be complemented by a second, more detailed, rehabilitation workforce-specific action plan.
- If GROWE is implemented *after* the WHO Guide for Action process, the rehabilitation workforce action plan will follow the national rehabilitation strategic plan, aligning to it but providing more detailed, workforce-specific direction.
- If GROWE is implemented as a *stand-alone process*, the workforce action plan may be the only guiding operational document, until such time as a national rehabilitation strategic plan is developed.

Beyond being a critical resource for communication and coordination, the rehabilitation workforce action plan assists with budgeting, as it can be difficult to quantify the specific amount of investment needed without the finer details of activities being identified (54). Just as the conclusions and recommendations of the report were collectively agreed upon, the operational details of the action plan also require active input from stakeholders, especially those from different levels of the health system. This is particularly pertinent in decentralized health systems (54, 56).

Action plans can take a variety of forms, but should generally include:

- objectives that reflect the broad areas of action (these may reflect the thematic grouping of the recommendations in the report);
- activities required to achieve the objectives;
- the person/people who will be responsible for the activities (this may be divided into leading and supporting roles);
- the timing and sequencing of activities; and
- the budget required for implementing the activities and its source (54).

The implementation of the action plan will be greatly influenced by how realistic it is. Although it is important to acknowledge the magnitude of action needed, it is equally important that the action plan aligns outputs with available inputs and build expectations of outcomes accordingly. There is a risk that an action plan is neglected soon after it is created, either because:

- outputs were not reflective of available inputs (i.e. the resources needed to implement the plan are not available);
- there is no accountability for its implementation; or
- actions do not effectively translate into what is achievable at each level of the health system (56, 57).

Disproportionate detail on outcomes compared with process, including through a lack of specificity in the process, can be the downfall of an action plan (54, 58). It is imperative that these risks are acknowledged and mitigated for. Fortunately, there is a growing body of evidence suggesting factors that help ensure action plans are effectively implemented (59-62). These are described below.

### Critical success factors for implementation of the action plan

**Include rehabilitation workers from different levels of the health system, including district and primary health care, in decision-making regarding activities and resource requirements.**

One barrier to implementation of an action plan is a lack of relevance or practicality to those “on the ground”, especially in decentralized health systems where decision-making and resource allocation is devolved (57). One way to avoid this is to ensure that those responsible for implementing activities, including those who will be required to advocate and negotiate at the district and primary care level, are engaged in the identification of objectives, activities and resource requirements (60). The process of constructing the action plan is in and of itself a critical opportunity to involve key stakeholders, ensure activities are calibrated to the reality of health workers in different settings, and that there is broad buy-in and support (54).

**Empower rehabilitation workers at all levels of the health system to effectively support the implementation of the action plan.**

Many of the activities included in an action plan will be implemented in contexts characterized by high needs, competing priorities and resource constraints. In order for rehabilitation activities to be actualized, they need to be promoted and enforced by empowered stakeholders (54). This can be challenging when few, if any, rehabilitation workers are included in local decision-making and resource allocation forums, or have the ability to leverage power when they are (57). For example, it is common for rehabilitation workers to be “promoted” to a managerial position by default, without an official title or any preparation or support to perform the role, because nobody else is there to take on the role (especially in rural and remote settings), (57). Empowering frontline rehabilitation managers with evidence/information and a support network, developing their agency, as well as taking steps to ensure they are included in decision-making and resource allocation forums, could greatly advance the implementation of an action plan (57, 63, 64).

**Ensure clear communication through all levels of the health system, including easy access to evidence.**

Being able to both communicate the objectives and activities of the action plan effectively among rehabilitation workforce stakeholders, and provide ready access to the evidence on

which it is based is a key driver of implementation (58). Too often, weak dissemination of an action plan among stakeholders and poor communication regarding its implications for different people hinder it from being taken up. Furthermore, evidence, such as the findings from the rehabilitation workforce evaluation, are not made accessible to time-poor stakeholders, who are highly unlikely to read a lengthy report. Experience has shown that evidence needs to be readily accessible (easy to find) and digestible (such as condensed into a three-page summary) (44, 59, 60).

The implications of an action plan for different stakeholder groups (such as different occupations, academic institutions, development partners, etc.) at different levels of the health system also need to be communicated clearly (54). This may mean that the report and action plan need to be customized to be particularly meaningful to specific audiences.

### **Foster ownership and a positive perception of the action plan and its objectives**

Attitudes towards rules, incentives and policies have been found to impact implementation (61, 64). Increasing the proximity of stakeholders, especially those who are needing to change behaviours or practices, to the evidence and rationale for the action plan's objectives and activities, may prevent negative perceptions and enhance uptake (61).

Considering the importance of effective communication and strategic implementation, it is worth considering the development of a communication and implementation strategy that can accompany and support the action plan. This can be regularly reviewed and revised based on assessing the success of the action plan's implementation over the course of its rollout.



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# Annex 1. Templates for rehabilitation workforce stakeholder analysis

Stakeholder groups for potential inclusion in the GROWE stakeholder analysis (the list is not exhaustive and will vary based on context).

Stakeholder group	Justification for inclusion
Ministry of health	Ministries of health define and resource policy priorities in health and manage the interactions with other ministries. They develop plans that determine the strategic direction of the rehabilitation workforce and integrate it within broader health policies and plans. Ministries of health may also recruit and manage health staff, although this is often devolved to other levels of government.
Other ministries (e.g. education, labour, finance)	Ministries of education, labour, finance, and social security, among others, often make decisions with direct implications for the rehabilitation workforce. For example, they influence wages, regulation and legislation related to health workers. In some instances, they may also employ rehabilitation workers.
Regional and district/ local government authorities	Where governance is devolved, provincial/state, districts or local municipalities will have varying levels of influence over the rehabilitation workforce, such as how many jobs are allocated to rehabilitation workers and where these are distributed.
Regulatory bodies	Regulators define and assess compliance with standards and conditions for entering the workforce and help maintain registers with valuable data for workforce evaluation.
Accreditation authorities	Accreditation authorities can determine who can run an education institution and/or programme and whether a qualification will be recognized nationally or internationally. Accreditation authorities may also be concerned with services, such as auditing whether they comply with human resource standards and service delivery protocols.
Professional associations	Occupation - and condition-specific professional associations are key advocacy bodies and often provide in-service education and training opportunities. In some instances, they create guidelines and protocols and may also provide specific certifications.
Educational institutions	Educational institutions define curricula, determine standards for entry/acceptance and graduation, and can shape the quality of rehabilitation through the calibre of their faculty and infrastructure.
Employers (public and private)	Employers manage recruitment, work conditions, incentives, deployment and systems of payment.
Development partners	Development partners, such as international, faith-based or nongovernmental organizations, can contribute to the education and training and employment of rehabilitation workforce. They can also play an advocacy and leadership role, especially where rehabilitation is emerging in a country.
WHO	WHO can offer guidelines and technical support to support health system strengthening for rehabilitation, including in the context of workforce evaluation, planning and development.
Rehabilitation user groups (e.g. organizations of persons with disabilities and patient associations)	Rehabilitation user groups can communicate what competencies are required by the population, and what workforce values and attitudes are valued and accepted. They can also advocate for the rehabilitation workforce, including to government ministries. Organizations of persons with disabilities and patient associations can hold government accountable and play a key role in the governance of health services, including rehabilitation.

Source: Adapted from WHO *Health labour market analysis guidebook* (Table 4.2, p. 57) (4).

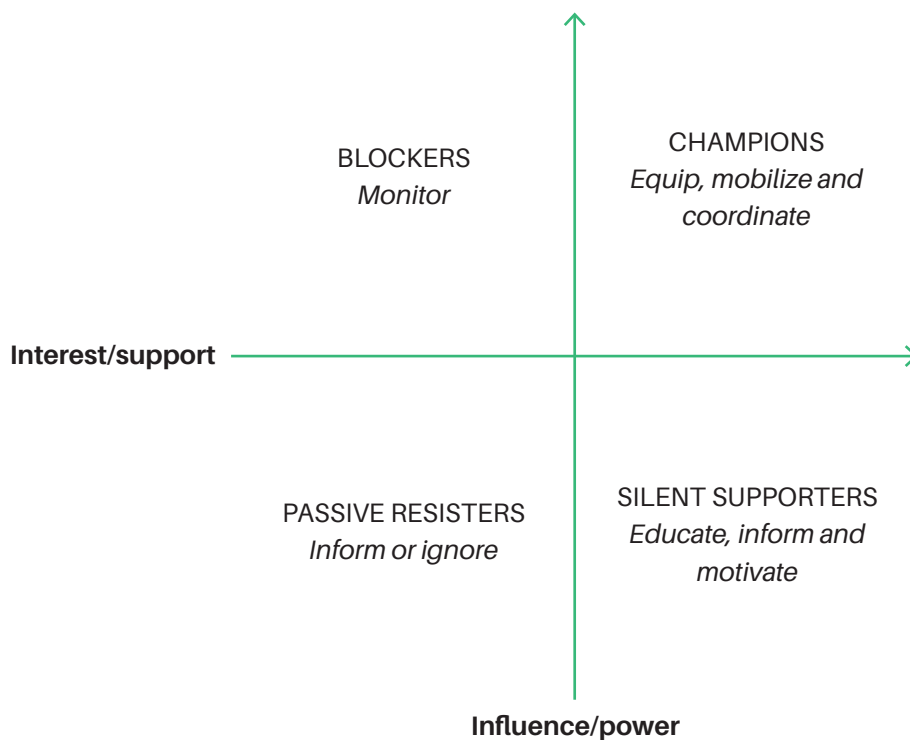
List rehabilitation stakeholders in the appropriate section of the table and add details per column. Note that the number of roles is not indicative of number of stakeholders; rows should be added or deleted as needed in a country.

Stakeholders (by group)	Key role (pertaining to rehabilitation workforce)	Technical capacity (low, medium, high) <i>How equipped (with human resources, funding, etc.) is the stakeholder to perform their role?</i>	Agenda (e.g. occupational group, specialization, all workers) <i>Who or what is their work concerned with?</i>
<b>Ministry of health</b> (e.g. nation, regional, district)			
<b>Other ministries</b> (e.g. education, labour, finance)			
<b>Regulatory bodies</b>			
<b>Accreditation authorities</b>			
<b>Professional associations</b>			
<b>Education institutions</b>			
<b>Employers</b> (public and private)			
<b>Development partners</b>			
<b>WHO</b> (e.g. regional and country office)			

Stakeholders (by group)	Key role (pertaining to rehabilitation workforce)	Technical capacity (low, medium, high) <i>How equipped (with human resources, funding, etc.) is the stakeholder to perform their role?</i>	Agenda (e.g. occupational group, specialization, all workers) <i>Who or what is their work concerned with?</i>
<b>Rehabilitation user groups</b> (e.g. organizations of persons with disabilities and patient associations)			

### Power and interest grid

Place rehabilitation stakeholders within the quadrants according to their interest/support, and influence/power.



# Annex 2. Potential responses to labour market failures

The following table presents several strategy signposts that may be relevant to different labour market failures. The strategies signposted and the actions suggested under each are not an exhaustive list, but offers a starting point to generate discussion and help identify context-specific actions. The various labour market variables that the actions primarily address are also indicated. It should be noted that actions may have a less direct impact on a much wider range of labour market variables than is indicated in the table.

Strategy signposts	Considerations, actions and labour market variable targets
<p><b>Guidelines and protocols</b></p>	<p>National clinical guidelines and protocols define best practice for the context. They can promote evidence-based practice, harmonize or standardize care and ensure worker time is not spent on ineffective interventions. In this regard, guidelines and protocols can strengthen the workforce though increasing efficiency and performance, while helping workers expand their knowledge and skills. Strategies to ensure guidelines and protocols effectively support the rehabilitation workforce may include:</p> <ul style="list-style-type: none"> <li>• Ensure guidelines and protocols are <b>up to date</b>.</li> <li>• Ensure guidelines and protocols are <b>appropriate to the context</b> in which they are being used.</li> <li>• Ensure guidelines and protocols are being <b>effectively disseminated</b> and promoted to encourage uptake and compliance. This may include providing training.</li> </ul>
<p><b>Inter-professional collaboration</b></p>	<p>Interprofessional collaboration involves different occupations working together to achieve common goals. It can enhance workforce performance, improve patient care, and expand knowledge and skills (65). Interprofessional collaboration can also build greater awareness and respect for different scopes of practice and facilitate effective communication and efficient service delivery. Interprofessional collaboration needs to be nurtured at the service level, but can be promoted in the national context through:</p> <ul style="list-style-type: none"> <li>• <b>Ensuring multidisciplinary teams</b> at all levels of health care.</li> <li>• <b>Promoting interprofessional events</b>, such as conferences and professional development courses.</li> <li>• <b>Supporting interprofessional research</b>, such as through funding grant incentives.</li> </ul> <p>Interprofessional collaboration should ideally involve members from occupations such as doctors, therapists, nurses and community health workers, according to the context.</p>

Strategy signposts	Considerations, actions and labour market variable targets
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**Institutional capacity**

Adequate educational institution capacity is a pre-requisite to increasing domestic production of workers. Strategies to strengthen educational institution capacity for rehabilitation workers may include:

- **Recruiting and supporting qualified and experienced faculty.** Faculty may need to be recruited from abroad, along with stronger incentives to attract the best people, such as increased salaries, career development or providing subsidized housing (25).
- **Equipping educational institutions.** Ensuring that the equipment and infrastructure are conducive to learning needs plays an important role in an institution’s capacity to support learning. Infrastructure, such as adequate space, equipment and technology, is perhaps less complex to acquire than human resources, but depends on the availability of financial resources (66).
- **Investing in authentic learning experiences.** Ensuring that students have access to learning experiences that prepare them for work is a key aspect of competency-based education. This can involve placements in a range of practice setting and simulating real-life environments and scenarios (66).
- **Setting competitive entrance criteria** that restrict admission into rehabilitation education institutions to those that have a record of a certain level of academic performance (52, 67).

Supply	Absorption	Distribution	Compatibility	Competence
Demand	Efficiency	Temporal availability	Perception	Performance

**Pre- and in-service education and training**

The competencies of the rehabilitation workforce have a direct impact on the quality and effectiveness of care provided, and the relevance of their competencies to population needs determines the extent of their contribution to population health. It is therefore important that efforts to scale up the production of the rehabilitation workforce are accompanied by steps to assure the quality of education and training and the alignment of curricula with the needs of the population and the health system (67). Strengthening pre-service education and training of the health workforce has been found to have a high return on investment, especially in low-resource settings (35). Strategies to strengthen pre- and in-service education and training may include:

- **Implementing competency-based education.** Competency-based education is orientated around developing the knowledge, skills and behaviours required to meet population needs, rather than an exclusive focus on knowledge acquisition. It places emphasis on what students should be able to do, more than what they should know, and uses authentic learning experiences (such as working in rural/remote settings and with multidisciplinary teams) to prepare students for practice (37, 68). This is especially important in helping student develop behaviours for effective performance, such as person-centred care, communication and collaboration skills, and lifelong learning, as well as familiarizing them with the structure and operation of the health system (52, 68). Incorporating competency-based education is thus a key mechanism through which the workforce can be aligned with population needs and ensuring that the investments made in education are fully appreciated by the health system (52). The WHO RCF and corresponding guide, *Using the WHO Rehabilitation Competency Framework to develop rehabilitation programmes and their curricula: a stepwise guide for curriculum developers* offer a starting point for the delivery of competency-based rehabilitation education (5, 37).
- **Investing in in-service education opportunities.** In-service education has also been recognized as imperative to building a competent workforce and ensuring its continued relevance to population needs. It is also a means of professional development and career progression, which help retain rehabilitation workers and keep them motivated. Moreover, investment in in-service education harnesses opportunities to capitalize on valuable worker experience and foster leadership (35).

Strategy signposts	Considerations, actions and labour market variable targets
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- **Implement regulatory mechanisms for lifelong learning**, such as making participation in in-service education a requirement of certification/licensing (67, 69). Such measures are contingent on rehabilitation workers having access to in-service education opportunities, which can be a challenge in lower resource settings and where rehabilitation occupations are still emerging. Here, the expanding utilization of technology and online learning, and cooperation with professional associations hold great promise.
- Making education and training institutions **accessible to students in more rural areas** by offering distance education or establishing or locating programmes in rural areas (19, 43).
- **Selecting students from rural and remote areas**, and/or offering them scholarships (43, 69).
- **Include rural health topics** in curricula to raise awareness of needs and to equip workers with the competencies needed to work effectively in rural and remote settings (45).

Supply	Absorption	Distribution	Compatibility	Competence
Demand	Efficiency	Temporal availability	Perception	Performance

**Support, supervision, and mentorship**

Support, supervision and mentorship can be important not only in facilitating professional development, but also in workforce motivation and retention. For example, a lack of support, supervision, and mentorship for workers in rural and remote areas can deter workers from seeking employment in these settings and make it harder to retain them. Support, supervision and mentorship may be strengthened through strategies such as:

- **Promoting structured supervision** within rehabilitation departments.
- Using outreach and telecommunications to **create greater connectivity** between workers in different areas, such as between rural and urban workers (45).
- **Creating communities of practice** to foster support, supervision and mentorship within practice/subspecialist groups.
- **Providing opportunities for networking**, such as rehabilitation forums and conferences.

Supply	Absorption	Distribution	Compatibility	Competence
Demand	Efficiency	Temporal availability	Perception	Performance

**Career progression**

Pathways and opportunities for career progression can be powerful attraction and retention factors for workers. In addition to providing workers with a way to increase their remuneration and achieve more seniority, career progression can provide workers with a sense of attainment, recognition of their experience and expertise, and provide them with clinical credibility. Career progression is typically facilitated through in-service education, which is key to building and maintaining competence. However, it can lead to increasing specialization of the workforce, which can be problematic, especially in the context of worker scarcity. The global health workforce agenda has placed increasing emphasis on the need to equip the workforce for primary health care and with a generalist skill set, acknowledging that the concentration of workers in tertiary settings and with high levels of subspecialization is ill-aligned with the rising prevalence of chronic conditions and multimorbidity, and the objectives of the health system pertaining to health promotion and disease prevention. Ensuring that workers can follow a path of career progression and continue to develop competence through the course of their working lives, while avoiding the negative implications of over specialization, requires careful planning; workers should be incentivized to pursue paths that provide competencies most relevant to population needs (67). Career progression may be strengthened through strategies such as:

- **Formally recognize experience and performance**, such as by instigating or improving systems that acknowledge and reward rehabilitation workers for their experience and performance, through the use of professional bands or levels, for example.

- **Invest in senior jobs for rehabilitation workers**, ensuring rehabilitation departments have an optimal balance of junior and more experienced workers.
- **Ensure opportunities** for professional development and lifelong learning, harnessing digital technology to ensure it is widely available.
- **Promote career progression for workers in rural and remote areas**, ensuring their opportunities for professional development are not diminished due to their work setting.
- **Enable upskilling**, such as through upgrading qualifications, e.g. from diploma to bachelor, where appropriate.

Supply	Absorption	Distribution	Compatibility	Competence
Demand	Efficiency	Temporal availability	Perception	Performance

**Incentives**

Monetary and non-monetary incentives play a key role in rehabilitation worker recruitment and retention. Monetary incentives (wages) greatly impact the attractiveness of a career and are frequently used within the health sector to address worker scarcity and maldistribution (17, 38, 70). They also play a role in attracting prospective workers to rehabilitation educational programmes; when choosing education and training programmes, prospective students weigh the cost of tuition against expected salary. When the return on investment is deemed inadequate, students are likely to pursue alternative programmes (17, 19). However, wages can be hard to change (especially in the public sector) and do not always respond to workforce supply, nor does supply always respond to wages (38, 66, 71). Enhancing non-pay incentives may be a more cost-effective way to attract more prospective workers to rehabilitation careers, and will be especially important when wages are inflexible (71). Which factors a prospective worker considers and how they are weighed can be hard to predict, but gender has been found to be a factor. A study of female nursing and midwifery personnel found that women tend to value access to in-service training and flexible working over some other factors (14).

Enhancing the attractiveness of rehabilitation as a career will be essential in the context of rehabilitation workforce scarcity. How attractive rehabilitation will be to prospective workers depends on both social, value-based, practical and financial factors. The altruistic nature of rehabilitation may play a part in drawing people towards rehabilitation as a career, but it will compete with benefits from other health careers and alternative sectors. Incentives can be strengthened through strategies such as:

- **Examining worker preferences**, such as through discrete choice experiments. These should only be conducted when the findings will be meaningfully used.
- **Strong negotiation** for rehabilitation worker wages and non-monetary benefits, considering those afforded to other health occupations.
- **Offering competitive wages**, including to attract workers to underserved areas (43-45).
- **Financial allowances**, such as hardship allowance for jobs in rural and remote areas (43-45).
- **Offering free or subsidized housing and education, or access to a vehicle** to attract workers to underserved areas (14, 45).
- **Offering attractive contracts**, such as those that offer long-term job security (51).
- **Offering accelerated promotion** or opportunities for career progression to attract workers to underserved areas (46).

Supply	Absorption	Distribution	Compatibility	Competence
Demand	Efficiency	Temporal availability	Perception	Performance

Strategy signposts	Considerations, actions and labour market variable targets
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**Working conditions**

Working conditions, including physical infrastructure and equipment, workload, supervision and mentorship, and health system organization play a major role in how the workforce performs (22, 38, 69). Working conditions impact not only the practical ability of workers to undertake rehabilitation activities, but also greatly influence their motivation, which is a key driver of performance (22, 38). Motivated workers are known to provide higher quality of care, make fewer errors and exercise better decision-making (22). Working conditions can also contribute to greater efficiency and productivity. For example, an environment in which workers communicate and coordinate effectively can save time and reduce errors, and allow a smaller number of workers to provide better care to a greater number of people (27). Working conditions, including hours, the professional and built environment, and benefits offered, factor into career decision-making (67). Strategies to improve working conditions for rehabilitation workers may include:

- **Promote and protect decent work.** Ensure rehabilitation workers are represented by unions that effectively advocate for decent work (including hours, benefits and other worker rights).
- **Invest in the built environment** so that workers have the space and tools to conduct their work and can practice in an environment that reflects their value to the health system (45, 46, 51).
- Ensuring supportive **supervision and management** (45, 46).
- **Build strong professional networks** to avoid professional isolation (45).
- **Ensure rehabilitation is represented in key decision-making bodies** concerning working conditions at the various levels of government.

Supply	Absorption	Distribution	Compatibility	Competence
Demand	Efficiency	Temporal availability	Perception	Performance



Strategy signposts	Considerations, actions and labour market variable targets
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**International mobility**

Migration inflows (immigration) can be a powerful mechanism to increase rehabilitation workforce supply, while outflows (emigration) have been identified as one of the biggest challenges facing lower income countries (17, 38). The option to source workers from other countries has strong appeal in light of the time and cost of educating and training workers domestically; however, a high dependence on foreign workers can result in a sustainability challenge for health systems, especially as international competition for workers grows (12). It also intensifies scarcity issues in source countries, which are typically lower income countries that struggle to provide the same incentives as higher income countries while facing significant escalations in need (17).

Strategies to retain the domestic rehabilitation workforce and attracting foreign workers tend to focus on incentives, such as higher wages and favourable working conditions, although their effectiveness is still being studied. Employment prospects and living conditions, which are harder to control through policy levers, have been found to be key factors in migration decisions (14, 72).

Decisions on how to use migration inflows and outflows to address rehabilitation workforce supply challenges need to consider the WHO Global Code of Practice on the International Recruitment of Health Personnel, which acknowledges that migration is a human right and stipulates that countries can accept foreign workers but should not actively recruit them, and should work to reduce their reliance on foreign workers (73).

Strategies to strengthen the rehabilitation workforce through international mobility may include:

- **Reviewing and revising** policies concerning international rehabilitation worker mobility, ensuring that they are best serving the rehabilitation labour market and complying with the code of practice. This is more likely to be feasible in the context of a broader health workforce review, as the policies will likely apply to all health workers.
- **Adjusting regulation and requirements** for foreign workers according to the need for additional supply, ensuring minimum standards of quality and safety are not being compromised. Regulations and requirements may be loosened to attract more workers in the context of worker scarcity, or tightened when there is a surplus of workers relative to jobs.

Supply	Absorption	Distribution	Compatibility	Competence
Demand	Efficiency	Temporal availability	Perception	Performance

**Placement and deployment**

Placements and deployments can be a mechanism to both improve the distribution and accessibility of the workforce and ensure workers gain valuable experience in a diverse range of settings. Placements and deployment strategies can be harnessed through initiatives such as:

- **Providing (or mandating) rural student placements** to expose students to these environments, and building relevant competencies and confidence to work in resource-constrained contexts (35).
- **Promoting (or mandating) placements** in rural, remote or otherwise underserved settings post-graduation (44, 51).

Supply	Absorption	Distribution	Compatibility	Competence
Demand	Efficiency	Temporal availability	Perception	Performance

Strategy signposts	Considerations, actions and labour market variable targets
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**Service delivery models**

Service delivery models impact the rehabilitation workforce by shaping how workers are distributed across settings and levels of health care, how they use their time, and how they connect and refer to each other, for example. Service delivery models can be used to strengthen the rehabilitation workforce through strategies such as:

- **Minimizing or streamlining administrative duties** to optimize time available for patient care.
- **Use of telehealth and other digital tools** to support continuity of care and minimize time and resources spent on travel.
- **Ensure robust and efficient referral systems are used.** This can help facilitate handover and avoid patients requiring additional care for preventable complications that can arise due to lack of follow-up.

Supply	Absorption	Distribution	Compatibility	Competence
Demand	Efficiency	Temporal availability	Perception	Performance

**Role allocation and task sharing**

Task sharing involves intervention(s) typically performed by one occupation or specialty being delegated to another. Tasks can be shared vertically, from a more highly specialized to a less specialized worker, or horizontally, between two similarly skilled workers (27, 38). Rational and efficient task delegation is critical for effective service delivery and has been widely used to increase access to care and improve cost efficiency, especially in the context of workforce scarcity and maldistribution (27, 28). Shifts in the allocation of tasks may also be beneficial in the context of changes to the health care system, such as the introduction of new technology, or changing models of care, for example (28).

While task sharing can be a powerful tool for enhancing rehabilitation workforce efficiency and productivity, its implementation requires careful consideration and planning. Implementing task sharing effectively to strengthen the rehabilitation workforce may involve:

- **Ensuring quality assurance mechanisms** (such as adequate training, supportive supervision and certification), recognition or endorsement, and an enabling regulatory framework are in place and utilized (35).
- **Centring decisions regarding task sharing, especially between multiple occupations, on competencies and the rehabilitation needs** of the population and in careful consideration of the context in which it will be implemented (28).
- **Ensuring decisions about task sharing are made at the lower levels of the health system or are modified to suit the local context** given that context is such a critical determinant of the success of task sharing. This enables a more specific assessment of service delivery models, workforce culture and workforce configuration can be undertaken (28). It can be possible, however, for task sharing decisions to occur at a national level, especially when the education and training for the delivery of the interventions being shared needs to be integrated in pre-service education. Similarly, the formal recognition of adjusted scopes of practice by regulatory bodies generally requires national-level endorsement (35).

Supply	Absorption	Distribution	Compatibility	Competence
Demand	Efficiency	Temporal availability	Perception	Performance

Strategy signposts	Considerations, actions and labour market variable targets
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**Workforce composition**

Workforce composition can refer both to the composition of occupations and the composition of demographics, such as gender, ethnicity, language, religion etc. The composition of occupations should reflect population needs and the context of the health system and service delivery models. What composition of demographic characteristics is desirable within a workforce may vary as it is highly dependent on what is acceptable to the population. Strategies to strengthen workforce composition may include:

- **Targeting efforts** at bolstering the development of occupations that have been underprioritized in accordance with population needs and priorities.
- **Targeting students from rural areas or from minority groups** and promoting their equitable access to education programmes (such as through scholarships) (45, 68).

Supply	Absorption	Distribution	Compatibility	Competence
Demand	Efficiency	Temporal availability	Perception	Performance

**Associations and networks**

Professional associations and networks are important stakeholders in rehabilitation workforce development. In many contexts, they are key advocates for their occupation or specialization, provide opportunities for professional development and lifelong learning, can be platforms for communities of practice, and map and track data on the supply, mobility and employment of their workforce. They can also build the profile of an occupation, and connect workers with the broader workforce community, including abroad. Strategies to strengthen rehabilitation associations and networks may include:

- **Providing grants or funding** to associations and networks, such as building their administrative capacity or capacity to hold events.
- **Strengthening the communication and coordination** between professional associations and networks and government and regulatory bodies to ensure they are working effectively and efficiently towards the same aims.
- **Provide platforms** for professional associations and networks representing different rehabilitation occupations and specializations to collaborate, such as through a national rehabilitation technical working group, or similar.

Supply	Absorption	Distribution	Compatibility	Competence
Demand	Efficiency	Temporal availability	Perception	Performance

Strategy signposts	Considerations, actions and labour market variable targets
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**Technology and innovation**

The use of technology and rapid digitalization of health care is an increasingly important factor in rehabilitation workforce planning and can have a substantial impact on efficiency and performance. Technology has the potential to facilitate communication, assist clinical decision-making, reduce travel requirements, and provide easier access to information, which can greatly enhance the productivity and performance of rehabilitation workers (28, 72). It is therefore a useful and increasingly feasible strategy to expand both the availability and accessibility of rehabilitation workers without increasing their supply or demand (17, 72). One challenge is the relative speed at which technology is evolving and the subsequent limited availability of evidence to guide decision-making regarding its use (30). Strategies to strengthen the use of technology and innovation within the rehabilitation workforce may include:

- **Integrating knowledge and skills** related to the use of technology and innovation in pre- and in-service education.
- **Ensuring adequate funding** to support the use of technology and innovation, especially in underserved areas.
- Using technology and innovation that is **accessible** to the populations being served and **appropriate** to the context.
- **Integrating research** into the use of technology and innovation to ensure its benefits and limitations can be captured and examined to inform future use.
- **Scaling up the use of technology and innovation**, using subregions (such as a select group of districts) to pilot before expanding more broadly.

Supply	Absorption	Distribution	Compatibility	Competence
Demand	Efficiency	Temporal availability	Perception	Performance

Strategy signposts	Considerations, actions and labour market variable targets
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**Regulation, accreditation, and licensing**

Regulation, accreditation and licensing can be used to address a range of rehabilitation workforce issues by supporting the establishment and enforcement of competency standards for rehabilitation workers. Accreditation can also help to strengthen education institutions, especially in the context of multiple public and private institutions. Importantly, accreditation should consider the ability of the institution to deliver education and training that equips workers to perform in the national context (67). Accreditation, especially international accreditation, can be costly to acquire however, and governments may need to offer incentives, or enforce accreditation to promote its uptake (35). Similarly, licensing systems can provide a checkpoint for assuring that all rehabilitation workers entering the health system meet required competence standards (23).

Government policies and regulation may be used to manage both situations of workforce scarcity and surplus. In the context of surplus, student quotas or caps can be used to limit the places offered within a rehabilitation education programme and setting, or raising standards regarding the number or qualification of faculty or entrance criteria can demotivate the establishment of new programmes and reduce admissions respectively (25, 66). Governments may also raise the cost of undertaking a programme to de-incentivize students from enrolling. In the context of scarcity, governments may intervene to increase production by offering subsidies or scholarships to students, and funding international faculty to bolster institutional capacity for education. Strategies to strengthen regulation, accreditation and licensing for the rehabilitation workforce may involve:

- **Providing incentives** for educational institutions to be accredited.
- **Introduce and/or strengthen the enforcement of licensing** of rehabilitation workers.
- **Ensure that the public can access up-to-date information** regarding whether a worker is registered or licensed.
- **Ensure that national regulating, accreditation and licensing bodies have the technical capacity to effectively conduct their work.** This requires adequate financing to support human resource and infrastructure requirements.

Supply	Absorption	Distribution	Compatibility	Competence
Demand	Efficiency	Temporal availability	Perception	Performance

# Annex 3. Template for interpretation of findings

The following template can be distributed to participants of the second GROWE workshop to facilitate the understanding and interpretation of evaluation findings with the purpose of developing conclusions. The template is organized around the four dimensions of effective workforce coverage: availability, accessibility, acceptability, quality (AAAQ). Participants are prompted to reflect on findings from all aspects of the evaluation, including the assessment of rehabilitation workforce coverage, the labour market analysis, the competency analysis and projections, and to extract key findings, consider contributing factors, and identify implications for stakeholders. This template can be completed in a plenary with all members inputting collectively, or in smaller groups. The template can also be completed for the rehabilitation workforce as a whole or for each occupational group included in the evaluation.

The template is based on the framework presented in Fig. 5, which aligns key underlying variables to each AAAQ dimension. The template for completion by members of the workshop links the variables with key topics addressed in the evaluation.

**OCCUPATIONAL GROUP(S):** \_\_\_\_\_

\_\_\_\_\_

**WORKSHOP PARTICIPANTS:** \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

## AVAILABILITY

Variable: Supply	
Key findings regarding: <i>(What?)</i>	Major contributing factors <i>(Why?)</i>
Production	
Immigration	
Emigration	
Other attrition	

Variable: Demand	
Key findings regarding: <i>(What?)</i>	Major contributing factors <i>(Why?)</i>
Jobs	

Variable: Absorption	
Key findings regarding: <i>(What?)</i>	Major contributing factors <i>(Why?)</i>
Attraction and retention	

Variable: Efficiency	
Key findings regarding: <i>(What?)</i>	Major contributing factors <i>(Why?)</i>
Workforce optimization	

**CONCLUSIONS ON THE AVAILABILITY OF THE WORKFORCE**

*What are the “take home messages”? What is their significance, e.g. what do the findings mean for different stakeholders? How urgently is action required (consider in relation to other conclusions)?*

**ACCESSIBILITY**

Variable: Distribution	
Key findings regarding: <i>(What?)</i>	Major contributing factors <i>(Why?)</i>
Geographic distribution	
Distribution through levels of the health system	
Distribution between public and private sectors	

Variable: Temporal availability	
Key findings regarding: <i>(What?)</i>	Major contributing factors <i>(Why?)</i>
Dual practice	

**CONCLUSIONS ON THE ACCESSIBILITY OF THE WORKFORCE**

*What are the “take home messages”? What is their significance, e.g. what do the findings mean for different stakeholders? How urgently is action required (consider in relation to other conclusions)?*



**ACCEPTABILITY**

Variable: Compatibility	
Key findings regarding: (What?)	Major contributing factors (Why?)
Composition of the workforce*	

\* Gender, ethnicity, and religions, etc.

Variable: Perception	
Key findings regarding: (What?)	Major contributing factors (Why?)
Perception from other health professionals	
Perception from service-users	

**CONCLUSIONS ON THE ACCEPTABILITY OF THE WORKFORCE**

*What are the “take home messages”? What is their significance, e.g. what do the findings mean for different stakeholders? How urgently is action required (consider in relation to other conclusions)?*

**QUALITY**

Variable: Competence	
Key findings regarding: (What?)	Major contributing factors (Why?)
Proficiency*	
Knowledge, skills, and behaviours**	
Relevance***	

\* Standards and expectations around performance (consider level of autonomy, decision-making, etc.).  
 \*\* Scope and depth of knowledge, mastery of skills, etc.  
 \*\*\* Does the workforce have the competencies most needed by the populations they work with and to be effective in the settings in which they work?

Variable: Performance	
Key findings regarding: (What?)	Major contributing factors (Why?)
Effectiveness	

**CONCLUSIONS ON THE QUALITY OF THE WORKFORCE**

*What are the “take home messages”? What is their significance, e.g. what do the findings mean for different stakeholders? How urgently is action required (consider in relation to other conclusions)?*

# Annex 4. Template for rehabilitation workforce evaluation report

## Table of contents

*Include a list of tables and list of figures.*

## Acronyms

## Glossary

## Executive summary

*A 2/3-page synopsis of the evaluation, highlighting the key findings, conclusions and recommendations.*

## Background

*Describe:*

- *The rationale and objectives of the evaluation.*
- *The scope of the evaluation (e.g. which occupations are included, which are not and why).*
- *A brief history of the rehabilitation workforce in the country.*
- *Describe the commitment of government and/or development partners to address the issue.*

## Methodology

*Describe the methodology used in the assessment, including the modes of data collection, use of the RWTT and other stakeholders, timeline and funding. Reference the Handbook for further information as appropriate.*

## Findings

*Present the findings of the evaluation. The following structure, based on the effective rehabilitation workforce coverage assessment, is a useful way to synthesize the data from the evaluation (see Fig. 4 and Annex 2). Draw on the interpretations of the RWTT submitted in the second GROWE workshop and use tables and figures from the GROWE Data analysis toolbox as appropriate.*

### **Overview of the occupations included in the evaluation**

List each occupation

### **The need for rehabilitation workers**

Methods used to conduct the needs analysis

Results of the need analysis

### ***The availability of rehabilitation workers***

Supply

Demand and absorption

Efficiency

Factors underpinning the availability of rehabilitation workers

### ***The accessibility of rehabilitation workers***

Distribution

Temporal availability

Factors underpinning the accessibility of rehabilitation workers

### ***The acceptability of rehabilitation workers***

Compatibility

Perception

Factors underpinning the acceptability of rehabilitation workers

### ***The quality of rehabilitation workers***

Competence

Performance (include task allocation and efficiency)

Factors underpinning the quality of rehabilitation workers

## **Workforce implication for the provision of rehabilitation care**

*Use the results of the task mapping and needs analysis to present how the state of the rehabilitation workforce may impact on the rehabilitation care available to people with a range of health conditions, the potential unmet needs across a range of functioning domains.*

## **Conclusions**

*Present the conclusions of the evaluation. It may be useful to present these under the headings of the four workforce dimensions (availability, accessibility, acceptability, quality). Refer to the input of the RWTT and other stakeholders provided during the second GROWE workshop.*

## **Recommendations**

*Present the recommendations based on the findings of the evaluation, as well as the considerations and criteria for prioritization. It is useful to present these under the workforce strategy signpost headings of the effective rehabilitation workforce coverage assessment, (Capacity Development, Attraction and Retention, Organizational, Enabling). Link the recommendations to the variables and dimensions that they will address, recalling that there is likely be more than one variable and dimension addressed by each recommendation.*

## **References**

### **Annex 1. Contributors**

*List those that provided to the evaluation and report, including:*

- *government, WHO, development partners and/or academic institutions*
- *project officer*
- *members of the RWTT*
- *additional stakeholders*
- *peer reviewers of the report, if not part of the RWTT or additional stakeholders (add to final version only)*
- *funders.*

*(this may be replaced by an Acknowledgments section at the beginning of the report)*

### **Annex 2. Stakeholder analysis**

### **Annex 3. Distribution of rehabilitation worker time required across selected health conditions**

### **Annex 4. Results of the rehabilitation workforce coverage assessment** *(dashboard figures)*

### **Annex 5. Rehabilitation workforce proficiency profiles** *(dashboard figures)*





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