



World Health  
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# Rehabilitation in health financing

Opportunities on the way to  
universal health coverage



HEALTH SYSTEMS  
STRENGTHENING  
ACCELERATOR

Rehabilitation  
2030



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universal health coverage





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## Foreword



More than 2.4 billion people, almost a third of the global population, have health conditions that benefit from rehabilitation. These include people that experience both communicable and noncommunicable diseases, accidents and various other health problems that arise over the life course. Rehabilitation is a health service that addresses the impact of a health condition on a person's life by enhancing their daily functioning and reducing disability. While advances in health care allow recovery from illnesses and overcome disease, the impact of these health conditions, and at times their treatment, is most effectively addressed through timely rehabilitation. However, rehabilitation services are not available nor affordable for many in the world.

The World Health Organization (WHO) is pleased to present this new resource on health financing for rehabilitation. As a core pillar of health systems, health financing plays a crucial role in achieving universal health coverage (UHC) and ensuring access to quality care without financial hardship. Rehabilitation is an essential health service that is necessary for achieving UHC. However, the knowledge on how health financing practices can be harnessed to promote the delivery of rehabilitation services is limited. This document fills that gap by providing insights into current practices, framing major challenges and opportunities, and offering guidance to decision-makers engaged in strengthening rehabilitation within health systems.

Rehabilitation 2030, a global call for action, underscores the importance of strengthening health systems and integrating rehabilitation services. This document aligns with the goals of Rehabilitation 2030 and provides guidance in achieving lasting health systems change. Developed by WHO's Department of Noncommunicable Diseases and Department of Health Systems Governance and Financing, in collaboration with the United States Agency for International Development (USAID) Health Systems Strengthening Accelerator project, this resource draws on an extensive desk review, key informant interviews and engagement with country decision-makers. It represents a comprehensive effort to understand and address the financing aspects of rehabilitation.

WHO would like to express our gratitude to all the partners, experts and stakeholders who contributed to the development of this resource. Their invaluable insights and expertise have ensured that this resource is evidence-based, relevant and actionable.

We hope that this resource will serve as a catalyst for policy dialogue, informed decision-making and transformative action for rehabilitation in health systems. By leveraging health financing practices, we can enhance access, ensure quality and provide financial protection against catastrophic or impoverishing out-of-pocket (OOP) expenditure. Together, let us work towards a future where everyone can access the rehabilitation services they need, without suffering financial hardship.

**Dr Jérôme Salomon**

Assistant Director-General  
Universal Health Coverage/Communicable and Noncommunicable Diseases  
World Health Organization

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# Abbreviations



<b>ADRES</b>	Administradora de los Recursos del Sistema General de Seguridad Social en Salud [Administrator of the Health Care Social Security Resources] (Colombia)	<b>RCPD</b>	Rede de Cuidados à Pessoa com Deficiência [Integrated Health Service Network for People with Disabilities] (Brazil)
<b>ACC</b>	Accident Compensation Corporation (New Zealand)	<b>RHIS</b>	routine health information systems
<b>CBID</b>	community-based inclusive development	<b>SENADIS</b>	Servicio Nacional de la Discapacidad [National Disability Service] (Chile)
<b>CBR</b>	community-based rehabilitation	<b>SHA</b>	System of Health Accounts 2011
<b>CER</b>	specialized rehabilitation centre (Brazil)	<b>STARS</b>	Systematic Assessment of Rehabilitation Situation (WHO)
<b>COPD</b>	chronic obstructive pulmonary disease	<b>SUS</b>	Sistema Único de Saúde [Unified Health System] (Brazil)
<b>DHIS2</b>	District Health Information Systems 2	<b>UHC</b>	universal health coverage
<b>FIM</b>	functional independence measure	<b>USAID</b>	United States Agency for International Development
<b>FONASA</b>	Fondo Nacional de Salud [National Health Fund] (Chile)	<b>WHO</b>	World Health Organization
<b>GBD</b>	Global Burden of Disease (study)		
<b>GES</b>	Garantía Explicitas en Salud [Explicit Health Guarantees Law] (Chile)		
<b>GHED</b>	Global Health Expenditure Database		
<b>ICF</b>	WHO International Classification of Functioning, Disability and Health		
<b>ISAPRES</b>	Instituciones de Salud Previsional (Chile)		
<b>KII</b>	key informant interview		
<b>LMICs</b>	low- and middle-income countries		
<b>MVA Fund</b>	Motor Vehicle Accident Fund (Botswana)		
<b>NDIS</b>	National Disability Insurance Scheme (Australia)		
<b>NGO</b>	nongovernmental organization		
<b>NHS</b>	National Health Service (United Kingdom of Great Britain and Northern Ireland)		
<b>NHSB</b>	National Health Security Board (Thailand)		
<b>NHSO</b>	National Health Security Office (Thailand)		
<b>OOP</b>	out-of-pocket		
<b>PHC</b>	primary health care		
<b>PIR</b>	WHO Package of Interventions for Rehabilitation		



# Glossary

Selected health financing and rehabilitation terms are defined below as a convenient reference for non-specialist readers.

<b>Assistive product</b>	Any external product (including devices, equipment, instruments or software) especially produced or generally available, the primary purpose of which is to maintain or improve an individual's functioning and independence, and thereby promote their well-being. Assistive products are also used to prevent impairments and secondary health conditions. Examples of assistive products include hearing aids, wheelchairs, communication aids, eyeglasses, prostheses and pill organizers.	<b>Expenditure</b>	Financial outlay by an agent (such as a government, donor or individual) for goods and services during a certain period <sup>(6)</sup> .
<b>Assistive technology</b>	The application of organized knowledge and skills related to assistive products, including systems and services. Assistive technology is a subset of health technology.	<b>Fee-for-service</b>	A provider payment method whereby the provider is reimbursed for each individual service provided <sup>(7)</sup> .
<b>Beneficiary</b>	A person who receives benefits under a given financing mechanism.	<b>Financial protection</b>	A goal of health coverage wherein direct payments made by people to obtain health services do not lead to financial hardship or threaten their living standards <sup>(8)</sup> .
<b>Benefits package</b>	A set of services and commodities that is financed on behalf of a beneficiary population so that those people have access for free or with a co-payment.	<b>Fiscal space</b>	Budgetary room to increase government spending for a purpose such as health without jeopardizing broader macroeconomic and fiscal stability.
<b>Capitation</b>	A provider payment mechanism whereby a fixed payment per person is made to providers prospectively for a defined benefits package over a specific period, regardless of what services in the package are ultimately provided. Also called <i>per capita provider payment</i> <sup>(1)</sup> .	<b>Fragmentation</b>	The presence within a health system or subsystem of multiple health insurance organizations, risk pool mechanisms, benefits packages, and/or payers and provider payment mechanisms <sup>(9)</sup> .
<b>Case-based financing</b>	A provider payment method whereby providers are paid a fixed amount per admission or discharge depending on the patient and clinical characteristics such as department of admission/discharge, diagnosis and other factors <sup>(2)</sup> . Also called <i>activity-based financing</i> .	<b>Gatekeeping</b>	A system in which individuals are required, or have strong financial incentive, to see a primary care provider to gain access to higher level services <sup>(10)</sup> . Gatekeeping practices can also be used within and between other levels of health care.
<b>Catastrophic health expenditure</b>	Payment for health care that exceeds a household's capacity to pay or a specified threshold of household income (defined by WHO as 40% of household income after subsistence needs are met) <sup>(3)</sup> .	<b>Health accounts</b>	An international accounting framework for systematically tracking health spending <sup>(11)</sup> .
<b>Compulsory contribution</b>	An individual contribution to a health financing mechanism that is mandatory by law for the entire population or for defined groups within the population.	<b>Health financing</b>	A health system function that makes funding available to pay for health services, including through raising revenues and pooling funds <sup>(12)</sup> .
<b>Contract</b>	A negotiated agreement between a purchaser and a provider that specifies the mix and volume of services to be purchased, how services will be purchased, and market entry requirements for providers.	<b>Incentive</b>	An economic signal that directs individuals or organizations toward a specific behaviour <sup>(6)</sup> .
<b>Costing</b>	Valuing, in monetary terms, the inputs required to provide a service, conduct an activity or achieve a goal <sup>(4)</sup> .	<b>Insurance</b>	A contract between a company and a consumer wherein the company agrees to pay all or some of the person's health care costs in return for monthly payments.
<b>Coverage</b>	Legal entitlement to payment or reimbursement for health care costs, generally under a contract with a health insurance company, a health plan offered in connection with employment, or a government programme.	<b>Outcome measure</b>	A tool used to assess a patient's status. Outcome measures can be used to establish baseline data to help determine the course of treatment or as part of serial assessments to determine whether the patient has improved over time <sup>(13)</sup> .
<b>Earmark</b>	A portion of total revenue set aside for a designated purpose <sup>(5)</sup> .	<b>Out-of-pocket payments (OOP)</b>	Fees paid by individuals directly to health care providers at the time of service.
		<b>Per diem</b>	Payment of a fixed amount per day for each admitted patient (for instance, to a hospital). The per diem rate may vary by department, patient, clinical characteristics or other factors <sup>(14)</sup> .
		<b>Pooling</b>	The accumulation of prepaid health care revenues on behalf of a population <sup>(4)</sup> .



# Glossary

Selected health financing and rehabilitation terms are defined below as a convenient reference for non-specialist readers.

<b>Prepayments</b>	Payments that individuals make before service use and typically before any identified need for health services. Prepayments can take the form of taxes or voluntary or compulsory insurance plan contributions.
<b>Prospective payment</b>	Payment for a set of services before the services are delivered <sup>(7)</sup> .
<b>Provider payment mechanism</b>	A method for transferring resources from purchasers of health services to providers. Provider payment mechanisms can include global, line-item, bundled, capitation, fee-for-service and performance-based payment <sup>(7)</sup> .
<b>Public health funding</b>	Funding for health care sourced from public revenues, such as tax receipts or natural resource revenues.
<b>Purchaser</b>	An entity that transfers pooled health care funds or resources to providers to pay for services, goods and interventions for a defined population. A purchaser might be a government, a health insurance company or a scheme in which health personnel are paid to provide a particular health service (such as prenatal care) <sup>(4,7)</sup> .
<b>Purchasing</b>	Allocation of pooled funds or resources to providers that deliver health care goods and services to the population covered by the defined benefits package <sup>(4)</sup> .
<b>Rationing</b>	Restricting some people's access to useful or potentially useful health services due to budgetary limitations.
<b>Rehabilitation</b>	Rehabilitation refers to a set of interventions designed to optimize functioning and reduce disability in individuals with health conditions in interaction with their environment.
<b>Retrospective payment</b>	Payment for a set of services after the services are delivered <sup>(7)</sup> .
<b>Revenue collection</b>	Collection of funds from different sources (such as taxes, insurance contributions or user fees) to pay for services <sup>(14)</sup> .
<b>Risk pooling</b>	Aggregating resources to spread risks among lower need and higher need users.
<b>Service provider</b>	An organization specializing in delivery of health services. Service providers can include hospitals, clinics, diagnostic centres and health centres staffed by doctors, nurses, pharmacists, rehabilitation health workers, dentists physical, occupational and/or speech and language therapists and/or other health workers <sup>(7)</sup> .
<b>Social health insurance</b>	Prepayment for health coverage through employee payroll taxes and employer contributions or through premiums paid by individuals to a quasi-independent fundholder or agency. Social health insurance is usually publicly administered through a national system <sup>(14)</sup> .
<b>Stewardship</b>	Responsibility for the effective planning and management of health resources to promote equity and population health and well-being <sup>(15)</sup> .
<b>Strategic health purchasing</b>	Active determination of the health interventions and services to which a population will be entitled, the providers who will provide those services, and how the providers will be paid. The goal of strategic purchasing is to incentivize providers to manage expenditures and provide high-quality services equitably and to link payments to provider performance and health needs <sup>(16)</sup> .
<b>Subsidization</b>	The use of public funds to fill the gap between the total cost of providing a service to a user and the user fees charged for that service <sup>(17)</sup> .
<b>Universal health coverage (UHC)</b>	Universal health coverage is defined as all people receiving quality health services that meet their needs without being exposed to financial hardship in paying for the services. UHC means every individual and community receive the full spectrum of care they need, from health promotion to prevention, treatment, rehabilitation and palliative care <sup>(18)</sup> .
<b>User fee</b>	Payment by a beneficiary at the point of service delivery <sup>(19)</sup> .
<b>Vertical programme</b>	A health programme focused on people and populations with a specific health condition <sup>(15)</sup> .
<b>Voluntary contribution</b>	Payment to a health care financing entity for entitlement to services as part of voluntary participation in an insurance scheme.
<b>Voucher</b>	A token that can be exchanged for a specified set of goods or services. Health care vouchers are used for health services (such as medical consultations or laboratory tests) or health care consumables (such as drugs) <sup>(20)</sup> .



# Executive summary

## Overview

Health financing is a core pillar of health systems and encompasses the three functions of how revenues for health are collected, pooled and paid out to providers of health care services. It can be leveraged to pursue key UHC goals of enhancing access, ensuring quality and financial protection against **catastrophic or impoverishing** OOP expenditure <sup>(21)</sup>. But knowledge on how health financing practices can be harnessed to promote the delivery of rehabilitation services is limited. This document is the first WHO resource on health financing for rehabilitation. It considers current practices for financing rehabilitation services, frames major challenges and opportunities, and offers guidance to decision-makers engaged in strengthening rehabilitation within health systems.

Rehabilitation is an essential health service and necessary for achieving UHC. It addresses the impact of a health condition on a person's life by enhancing their daily functioning and reducing disability. It benefits people with a wide range of health conditions, through all stages of life, and during all phases of acute, subacute and long-term care. But access to rehabilitation services is limited and profound unmet needs exist in many populations, especially in low- and middle-income countries (LMICs). In many countries rehabilitation is overlooked during health planning and prioritization and its funding is inadequate. Rehabilitation is also often separated from key health financing mechanisms, omitted from essential health service packages <sup>(22)</sup>, donor-dependent and incurs high OOP costs for consumers.

This resource draws on a review of the evidence and practices regarding rehabilitation in health financing along the following continuum of health financing functions:

Revenue raising	Pooling	Purchasing
Revenue raising (or collection) refers to the process through which countries raise funds to support the organization and delivery of health services. These revenues are commonly classified as public, private and external.	Pooling refers to the accumulation of prepaid health revenues on behalf of a covered population. Pooling is a more efficient way to manage revenues and direct resources to individuals with the greatest health needs.	Purchasing refers to the transfer of funds from a purchaser to providers to pay for health care services delivered to the population covered <sup>(16)</sup> . Strategic purchasing is an intentional approach that links such payments to provider performance and to population health needs.
<b>Governance</b> in terms of the institutional arrangements for financing the health service and use of different types of data for decision-making		

## Revenues for rehabilitation services

Revenues raised should be sufficient to meet the essential health needs of the population, including rehabilitation needs. A review of evidence and practices related to revenue raising to fund rehabilitation services yielded the following findings:

- Funding for rehabilitation is derived from a variety of sources – including public, private and external revenues, and OOP payments – but is generally insufficient, especially in LMICs. Ministries of health and other health entities are the most common revenue raisers for rehabilitation, but most countries also had at least one additional source that targeted specific population groups.
- Reliable and comparable estimates of OOP expenditure for rehabilitation at the global level are not available, but country-level situational assessments indicate that OOP expenditure is the dominant rehabilitation funding source in many countries <sup>(23, 24, 25, 26, 27)</sup>, and spread inequitably across populations <sup>(23-27)</sup>.
- Private expenditure on rehabilitation is driven partly by the costs of transportation, overnight accommodation and/or carer help needed by service users. Users in LMICs especially experience high costs because rehabilitation services are limited in regional towns, rural or remote areas. The cost of assistive products is often reported as high and contributing to OOP expenditure.
- In some LMICs, external revenue from development partners is a significant funding source for rehabilitation services; this occurred most in post-conflict countries and for assistive products.

## Rehabilitation in pooled health financing mechanisms for population coverage

Effective health financing mechanisms pool financial risk and redistribute resources to equitably serve key populations. This is particularly important for rehabilitation which commonly serves vulnerable populations such as older people and people with disabilities, who are at higher risk of financial hardship. A review of pooled health financing mechanisms that support rehabilitation services provided the following findings:

- Financing for rehabilitation is typically fragmented across various types of pools. Rehabilitation services are most often included in publicly funded health schemes, but the extent of covered services, populations and payment vary greatly among countries.
- Population coverage for rehabilitation services was frequently enhanced by targeted programmes for specific populations, e.g. disability insurance or workers' compensation schemes, motor accident funds, social security funds, vertical programmes targeted at people with disabilities, veterans and others.
- Some LMICs, e.g. Viet Nam and Thailand, feature predominantly public sector insurance mechanisms that include rehabilitation in pooled funds for health care, offer widespread population coverage, and specifically attempt to protect vulnerable populations.
- In a few settings with multiple financing mechanisms for rehabilitation services there were effective coordination processes to reduce inefficiency and duplication, maximize coverage and enhance equity. However, in many other settings this was not the case and a lack of clarity and duplication in service funding across agencies occurred.
- Additional mechanisms that enhanced rehabilitation service coverage for certain population groups – such as people with disabilities, older people and veterans – posed some concerns regarding uneven service coverage across population groups (e.g. some groups could access more comprehensive services than others). On the whole, however, these mechanisms help to address the pronounced equity concerns regarding these groups.





## Executive summary

### Strategic purchasing of rehabilitation services

Three aspects of strategic health purchasing in relation to rehabilitation are important to consider – namely, the specification of benefits, contracting practices, and use of fit-for-purpose provider payment mechanisms. The inclusion of rehabilitation in health benefits packages is an important step toward prioritizing and recognizing rehabilitation as an essential health service. The following findings emerged about evidence and practices regarding strategic purchasing for rehabilitation:

- In some countries where essential health services packages had been defined, rehabilitation was not included. However, it had been recently included in health benefits packages in Philippines, Georgia and Chile, among others. Challenges reported during the development of these packages included scarcity of necessary data, limited availability of rehabilitation services as well as a lack of service standards, and missing or unenforced regulatory frameworks for the workforce.
- Good practices reported during the development of health benefits packages in countries included: data collation on rehabilitation population need and demand; service costing and programme budgeting; engagement with diverse rehabilitation stakeholders including service users; evidence-based decision-making including the use of global evidence; and explicit definition of the rehabilitation benefits. The use of evidence from cost-effectiveness studies was considered in some cases, as was use of the formally established national health technology assessment processes.
- In some high-income countries and many LMICs, rehabilitation services are limited outside of major urban areas. This posed constraints to effective expansion of services and deployment of rehabilitation benefit packages. Decision-makers involved in defining benefits packages needed to consider not only which rehabilitation benefits to provide but also whether those benefits can realistically be provided to all those who need them regardless of locality.
- Health benefit packages for rehabilitation have been regularly expanded over time, e.g. in Chile. Some countries have good practices in place relating to routine revision of their benefit packages.

The use of well-designed contracts and provider payment mechanisms to deliver rehabilitation service entitlements helps to ensure accountability between purchasers and providers and aligns the providers' incentives with the goals of the purchasers (such as utilization, efficiency, equity and quality of care). In this context, a review of evidence and practices yielded the following findings:

- Explicit or formal contracts for providing rehabilitation services were largely non-existent in LMICs, although common in the high-income countries. In LMICs, most commonly the financing for rehabilitation services utilized a combination of global budgets, activity-based provider payment mechanisms and fee-for-service.
- Provider payment mechanisms are tailored to the different settings in which rehabilitation services are delivered. Within individual high-income countries, there were often different mechanisms used for the different types of rehabilitation services provided. The choice of provider payment mechanisms varied due to the types and characteristics of services, cost of services and user outcomes sought.
- When purchasing rehabilitation services, providers should be incentivized for quality and efficient care. Some of the service outcomes measures used for rehabilitation included measures of patient functioning, return to work, discharge location and quality of life; although in LMICs the measurement of outcomes of rehabilitation services is very limited.

### Effective governance for health financing for rehabilitation

Two aspects of governance emerged as particularly important to leverage and optimize health financing for rehabilitation: namely, the distribution of institutional mandates for financing rehabilitation and use of data for decision-making. A review of evidence and practices regarding the governance of health financing for rehabilitation provided the following findings:

- Governance arrangements for rehabilitation were limited, unclear or disconnected from similar modalities for the broader health sector. There was need to clarify national-level responsibilities for policy, planning, financing, implementation and monitoring of rehabilitation within the health sector.
- Governance of rehabilitation is complicated by its fragmentation across different government agencies and ministries (and other actors), with responsibilities for planning, financing and service delivery commonly split across entities. Overarching coordination for rehabilitation sat mostly with health ministries but mechanisms for such coordination didn't exist or operate regularly in some settings. Consequently, in some countries, coverage gaps and inefficiencies gave rise to clearer need for decision-makers to be better connected and coordinated.
- Data for decision-making on rehabilitation financing (from expenditure to provider payment) are generally quite limited. Such data include contextual details on the prevalence of disabilities and relevant health conditions, routine provider-level information and statistics to support analytics.
- Key infrastructure and capacity for data collection, such as reporting tools and practices or databases for aggregating and using information, are often lacking. Approaches to collecting important data, such as data on service quality and expenditure, are also often underdeveloped or lacking.



# Executive summary

## Conclusions and suggested approaches

This resource considers the unique features of rehabilitation services, reviews evidence, and discusses current practices, opportunities and ways forward to harness health financing opportunities for rehabilitation. While there is need for further research, the findings in this resource support the following conclusions across two broad approaches to improve health financing for rehabilitation:

### Create the enabling environment to enhance rehabilitation in health financing

#### 1. Document and understand the existing situation for financing rehabilitation

Informed decision-making requires an accurate understanding of the existing situation in countries, which includes insights into rehabilitation needs in the population, availability of services and identification of which agencies finance what, how, for whom and how much.

#### 2. Strengthen ministry of health leadership, capacity and planning for rehabilitation

Political commitment and leadership within the ministry of health are needed to develop the legislation, policies, plans and mechanisms to optimize health financing for rehabilitation. Adequate technical capacity within ministries of health is needed to lead, plan and prioritize the strengthening of rehabilitation in health systems and advance financing objectives.

#### 3. Conduct multi-agency coordination for improved financing of rehabilitation services

Coordination across ministries and agencies that finance services is crucial for efficient and effective service coverage. Countries should establish robust coordination mechanisms involving public and private entities and include consumer groups.

#### 4. Invest in health information systems and research

Improving financing practices for rehabilitation requires systems and capacity to collect, collate and report rehabilitation data. This requirement gives rise to an agenda to better integrate rehabilitation into health information systems and enhance the capacity to administer and utilize data for decision-making. Further, health policy and systems research is needed to create an evidence base for rehabilitation in health financing.

#### 5. Undertake evidence-based advocacy

Evidence-based and inclusive advocacy and awareness-raising activities enhance the profile of and commitment to rehabilitation within health systems, supporting the case for investment into rehabilitation in countries.

### Leverage health financing opportunities and practices for rehabilitation

#### 1. Ensure a high proportion of funding for rehabilitation derives from public health revenues

Considering that rehabilitation is an essential health service and the characteristics of people who need rehabilitation, the health sector should be the largest funder of rehabilitation services. Public health financing mechanisms are best placed to generate adequate revenues and effectively pool health care funds for different populations with varying types and severity of health needs.

#### 2. Ensure effective pooling of risk and financial resources across large population groups for adequate financing of rehabilitation services

Many who need rehabilitation experience low access to services and a disproportionately high burden of OOP costs. Countries should develop strategies to achieve greater coverage of rehabilitation care under health financing mechanisms that pool risk and financial resources across large population groups.

#### 3. Identify and prioritize evidence-based rehabilitation benefits within essential health service packages

Rehabilitation benefits should be clearly defined for health conditions or groups of conditions and include essential assistive products. The process of prioritization of rehabilitation in health benefits packages needs to be iterative, evidence-based and inclusive, with benefit entitlements corresponding to available funding resources and service delivery capacities.

#### 4. Harness opportunities to reduce OOP costs for rehabilitation, particularly for vulnerable populations

As noted, some rehabilitation users face a high burden of OOP costs, and while the inclusion of rehabilitation in public health financing and essential health service packages minimizes this, other important approaches are needed. For example, to address the OOP costs associated with transportation for rehabilitation services, it is important to integrate rehabilitation services in primary health care (PHC). Additionally, adequate financing of assistive products should be prioritized.

#### 5. Utilize additional revenue sources and corresponding mechanisms for rehabilitation service coverage for specific population groups

Most countries have additional financing mechanisms that source revenues and purchase services for targeted population groups – most frequently for people with disabilities, veterans and people injured in road or workplace accidents. These additional sources and mechanisms make an important contribution to the overall financing of rehabilitation services.

#### 6. Employ more strategic purchasing practices for rehabilitation, to incentivize service providers to deliver more efficient, higher quality and effective services within constrained resources

While strategic purchasing practices for rehabilitation were less developed in LMICs, experience from high-income countries and the overall recognition of their importance in resource-constrained settings create opportunities to design, test and scale up context-relevant innovative purchasing approaches. Strategic purchasing of rehabilitation services requires increasingly employing tailored contracting practices and selecting provider payment mechanisms to align purchasers' objectives and providers' incentives.

#### 7. Where development partners contribute to the funding of rehabilitation services in countries, efforts should be made to ensure the funding is transparent, complements public health financing and is channelled through sector-wide mechanisms so it can play a catalytic role

Donor and international nongovernmental organizations (NGOs) play an important role in financing rehabilitation services in LMICs. These funds should be transparently channelled through sector-wide mechanisms and, where appropriate, support the creation of budget lines to allocate public funds over time.



Universal health coverage means ensuring that all people can access the health care they need without suffering financial hardship <sup>(28)</sup>. Universal health coverage includes promotive, preventive, curative, rehabilitative and palliative care <sup>(29)</sup>. Health financing – using financial means to ensure that health systems meet the health needs of the population – is a key aspect of achieving UHC and ensuring access to quality care and financial protection for all <sup>(30)</sup>. It affects the performance of the entire health system, including the delivery and accessibility of health services. Carefully designed and implemented health financing policies ensure that people can afford the services they need – including rehabilitation services – without suffering financial hardship.

Rehabilitation is an essential health service that addresses the impact of a health condition on a person's life by enhancing their daily functioning and reducing disability. Rehabilitation benefits people with a wide range of health conditions, through all stages of life and during all phases of acute, subacute and long-term care. Rehabilitation needs arise from diseases, disorders and injury or trauma, as well as decline in functioning due to advancing age. The global need for rehabilitation services is growing, primarily due to ageing populations, a surge in noncommunicable diseases and conflict-related injuries. Recent Global Burden of Disease (GBD) data show that 2.4 billion people worldwide have health conditions that would benefit from rehabilitation <sup>(31)</sup>.

Despite the need for rehabilitation, financial coverage of these services is limited, which often leads to high OOP costs for patients, especially in LMICs <sup>(32)</sup>. Rehabilitation has often been overlooked by ministries of health and considered a low priority or luxury service <sup>(33)</sup>. Limited expenditure on rehabilitation within health financing programmes is common, as is the omission of rehabilitation from the planning and financing of essential health service packages <sup>(22)</sup>. However, the situation is changing as governments are increasingly recognizing the need to prioritize rehabilitation, address gaps in service availability and ensure that services are affordable.

Health financing strategies are crucial to ensuring equitable access to quality rehabilitation services and accelerating progress toward UHC. Such strategies should be based on an adequate understanding of rehabilitation services, as well as specific knowledge about health financing practices for rehabilitation, which is scarce and dispersed.

This document considers rehabilitation across key health financing functions and processes, explores evidence, current practices and offers policy and practical guidance. Its aim is to equip health financing and rehabilitation stakeholders with information and guidance that will help them engage in decision-making related to rehabilitation in health financing. It is part of a suite of resources developed by WHO to strengthen health systems and support provision of rehabilitation services, in line with Rehabilitation 2030 and its call for action (see Box 1). It represents the first time WHO has developed a resource on this topic.

## Box 1

### Rehabilitation 2030: A Call for Action

In 2017, in response to profound unmet needs globally, WHO, along with its Member States and a range of stakeholders, launched Rehabilitation 2030. Its call for action urges stakeholders to work together to strengthen health systems and integrate and provide rehabilitation services. Its message is clear: that rehabilitation needs in the population are large and growing and without greater commitment and action, even more people will miss out on the services they need.

The call for action, which includes 10 areas for attention and concerted action, can be found at: <https://www.who.int/publications/m/item/rehabilitation-2030-a-call-for-action>



# Introduction

## Target audience

This document is intended for use by health financing and rehabilitation stakeholders. It will be most useful for people working in ministries of health (including the national and subnational administrative agencies for health), particularly those responsible for health financing and rehabilitation. Some parts of the document are aimed at different stakeholders – for example Part I is designed to assist health financing stakeholders better understand rehabilitation – while the many text boxes throughout the document that explain key health financing concepts are designed specifically for rehabilitation stakeholders. Overall, this document is targeted at policy-makers, international technical and funding organizations, researchers, NGOs and civil society organizations, as well as health workers who support the rehabilitation sector.

## How this document was developed

This document was developed by WHO's Department of Noncommunicable Diseases and Department of Health Systems Governance and Financing and the USAID Health Systems Strengthening Accelerator (the Accelerator) project (see Box 2). It draws on an extensive desk review, key informant interviews (KIIs) and engagement with country decision-makers. The research team reviewed 138 documents, spoke to over 25 health financing and rehabilitation experts and conducted 12 webinars involving 150 participants from over 40 countries across all six WHO regions. It also reviewed national health financing arrangements for rehabilitation in 30 countries, primarily by analysing national rehabilitation situation assessments and conducting complementary desk analyses. Three case studies were selected to highlight common characteristics, challenges and ways forward for rehabilitation in health financing. Further details outlining the method of its development and the list of countries reviewed are included in the Annexes. The data and information gathered were analysed and used to inform the overviews of current practices, policy guidance and recommended actions that are presented in this document (see Annexes 1 and 2).

### Box 2

#### The Health Systems Strengthening Accelerator

The Accelerator is a global USAID Cooperative Agreement over 2018–2024 to strengthen institutions and processes and build local expertise to ensure that health systems can tackle future challenges and shocks with less reliance on external support.

The programme's approach supports local partners as they lead implementation and find their own pathways to meaningful and lasting health systems change. The Accelerator is led by R4D, with support from the Health Strategy and Delivery Foundation and ICF International.

## How this document is organized

This document explores rehabilitation in the context of three key health financing functions (revenue mobilization, pooling of funds, and health purchasing) and selected topics in health system governance. It has four main parts and seven corresponding chapters:

- **Part I. Understanding rehabilitation:** This part introduces rehabilitation and presents information relevant to making health financing policy choices.
- **Part II. Enhancing health care revenues and population coverage for rehabilitation:** This part focuses on two core functions of health financing: revenue collection and pooling of funds.
- **Part III. Strategic purchasing of rehabilitation:** This part focuses on how to define a rehabilitation benefits package and determine provider payment methods for rehabilitation.
- **Part IV. Health system governance for rehabilitation:** This part explores institutional arrangements for managing rehabilitation and the use of data to inform health financing.

Parts II, III and IV include summary overviews of each topic, policy guidance and recommended actions, and lists of additional resources. Each of these parts also includes a country case study that details rehabilitation-related reforms and their results as well as lessons learned.

# Part I.

## Understanding rehabilitation

Rehabilitation in health financing should aim to increase access to services and improve their effectiveness and efficiency, while considering the goals of UHC. This requires an understanding of the unique features of rehabilitation services, including what they are, who needs them, and how rehabilitation services are delivered and organized. Part I explores the aspects of rehabilitation services that are most relevant to financing; it is aimed at health financing stakeholders who are less familiar with rehabilitation.

Central to rehabilitation is the concept of human functioning, this is because rehabilitation services primarily aim to optimize an individual's day-to-day functioning. As many health conditions result in difficulties in functioning, the rehabilitation needs in populations are quite large. Analysing data on the prevalence of health conditions that benefit from rehabilitation in populations provides significant insights into rehabilitation needs. However, rehabilitation needs are also influenced by a person's environment, so it is necessary to also consider contextual factors. Chapter 1 provides an overview on the concept of functioning and its relevance to rehabilitation, and current data on rehabilitation needs in populations.

The configuration of rehabilitation services varies across and within countries. There are different types of rehabilitation services that aim to meet different types of rehabilitation need in populations. Rehabilitation services are named differently and can be funded and delivered through different ministries and agencies both within and across countries. Chapter 2 addresses the types of rehabilitation services, how they are organized and the agencies involved.

## Chapter 1.

### Who benefits from rehabilitation?

#### Rehabilitation and functioning

Rehabilitation aims to achieve and maintain optimal levels of functioning in people with health conditions. Thus, people who experience problems in functioning are the target population for rehabilitation services. To better understand rehabilitation, it is necessary to understand the concept of human functioning, which is described within the bio-psycho-social model of the WHO International Classification of Functioning, Disability and Health (ICF) <sup>(34)</sup>.

Functioning is defined as the results of the interaction between an individual with a health condition and their environment and refers to body functions and structures, activities and participation. Problems in functioning occur as impairments in body functions (e.g. pain, muscle weakness) and body structures (e.g. brain damage, bone injury), which are often caused by health conditions, limitations in activities (e.g. inability to perform self-care, shortened walking distance), and restrictions in participation (e.g. community life, work). The physical, social and attitudinal environment can act as a facilitator (e.g. social support, assistive products) or barrier (e.g. inaccessible public buildings) to functioning. In this way, the level of functioning reflects the result of the interaction of a health condition with the environment and its impact on a person's daily life, what they can do, what actions they perform, and what life goals they can achieve <sup>(35)</sup>. Box 3 lists the domains of functioning and the contextual factors relevant to functioning.

As the level of functioning is not only the consequence of a health condition but rather the results of the interaction between a health condition and environmental and personal factors, it can be different for people with the same health condition. This explains why assessment, goal setting and development of an individualized rehabilitation care plan are important parts of care process, as the rehabilitation provided is rarely identical for people with the same health conditions.

#### Box 3

##### Domains of functioning and contextual factors relevant to functioning

**Body functions** (physiological functions of body systems): Includes mental functions such as related to attention, memory, emotion and thought; seeing and hearing functions; the sensation of pain function; voice and speech functions; cardiovascular and respiratory functions; urinary and sexual functions; joint, muscle and movement functions.

**Body structures:** Anatomical parts of the body such as organs, limbs and their components.

**Activities** (execution of a task or action by an individual) **and participation** (involvement in a life situation): Learning and applying knowledge, communication, changing body position, walking, using transportation, self-care, household tasks, interpersonal interactions, education, employment, community and civic life.

##### Contextual factors:

**Environmental factors**, include the physical, social and attitudinal environment in which people live and conduct their lives.

**Personal factors**, include people's gender, age, coping styles, social background, education, profession, past and current experience, overall patterns of behaviour, character and other factors that influence how problems in functioning are experienced by the individual.

## Rehabilitation needs in the population

Health conditions contribute to the development of problems in human functioning. With growing and ageing populations and related increases in prevalence of health conditions, the global need for rehabilitation is extensive and growing. The current health trends of people living longer with chronic communicable and noncommunicable diseases <sup>(36,37)</sup>, increasing incidence of injuries due to motor vehicle crashes and conflict <sup>(38,39)</sup>, as well as ageing populations, drive this increase in needs <sup>(36)</sup>. Rehabilitation needs exist across an array of health conditions, including musculoskeletal, cardiovascular, pulmonary, neurological, mental, cancer, vision, hearing and conditions associated with reproductive health.

Global rehabilitation need estimates drawn from the 2019 GBD Study, found that there are 2.4 billion people with health conditions that could benefit from rehabilitation, close to 1 in 3 persons in the world <sup>(31)</sup>. Box 4 shows estimates of global rehabilitation needs. The figure draws on data from the 2019 GBD study and include the health conditions that are amenable to and benefit from rehabilitation. Figure 1 features the prevalence of health conditions through absolute “numbers”, taking into account population demographics, hence while the prevalence of health conditions and corresponding rehabilitation needs increase as people age, the absolute or actual need for rehabilitation is greatest in the adult population.

Musculoskeletal disorders are responsible for the biggest need for rehabilitation services worldwide, with lower back pain being the most prevalent condition and the highest burden in most countries, followed by fractures, osteoarthritis and amputation. Musculoskeletal conditions can be short-term conditions, or can become chronic, with corresponding rehabilitation needs. For example, after a fracture or sports injury full recovery occurs after rehabilitation. In contrast, an amputation requires periodic rehabilitation modifications that may include replacement of the prosthesis. Additionally, associated rehabilitation needs can vary depending on the availability and choice of medical and surgical management of conditions, for example, access to joint replacement or not.

Sensory impairments, including vision and hearing loss, are the second contributor to rehabilitation needs worldwide. These conditions occur more as people age, they are mostly chronic with intermittent rehabilitation needs. The provision of assistive products such as hearing aids, spectacles and magnifiers are key aspects of rehabilitation for this group.

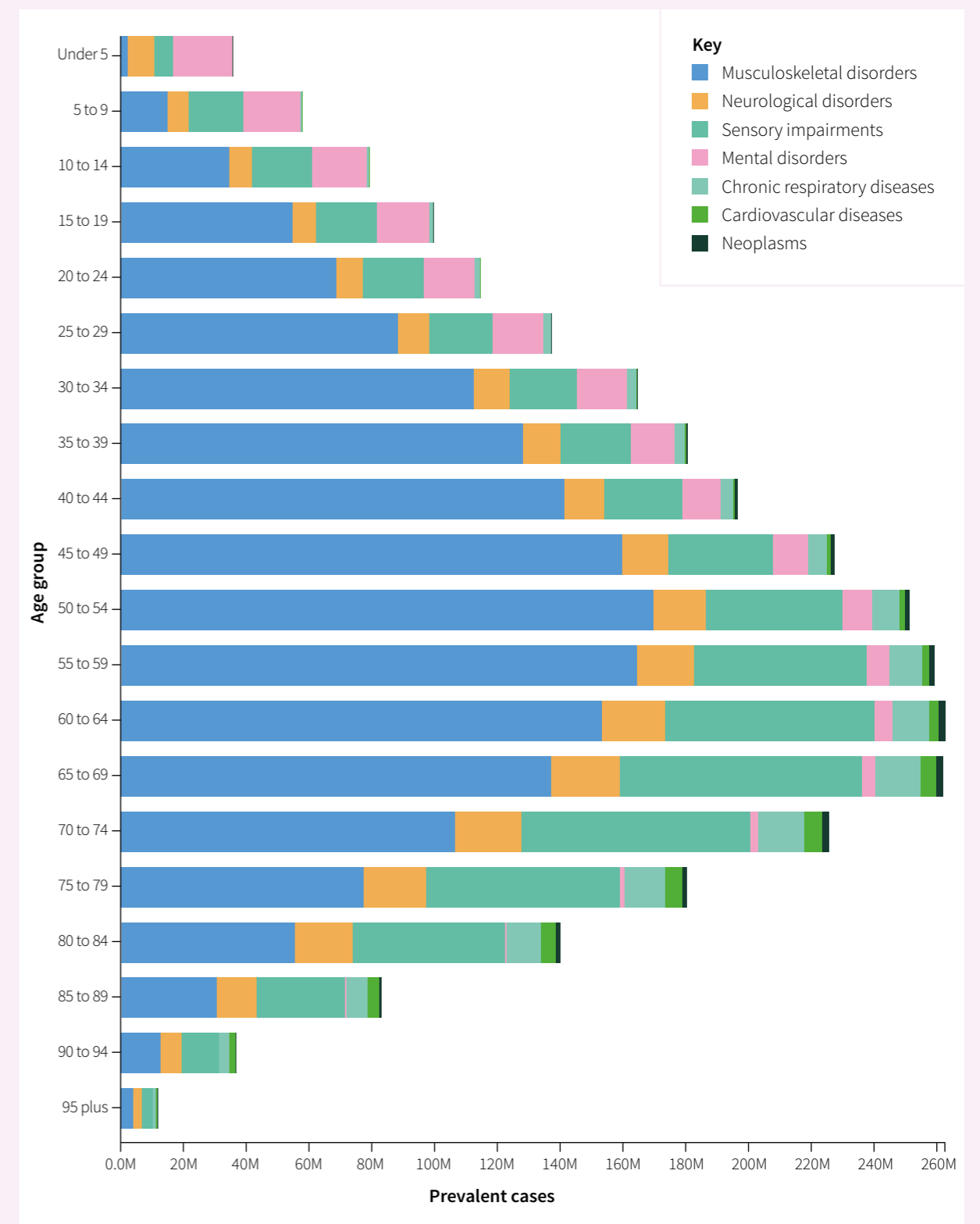
Neurological conditions are the third contributor to rehabilitation needs and are often the group of conditions that require more intense provision of rehabilitation services; examples include stroke, traumatic brain and spinal cord injury and dementia. These conditions occur more frequently in adults and can result in many difficulties in functioning and therefore have more complex needs requiring comprehensive multidisciplinary rehabilitation services. Cerebral palsy is also part of this group. This is a common neurological condition with 50 million people estimated to have it globally. For children with this condition, the timely provision of multidisciplinary rehabilitation services has a significant impact on their development <sup>(40)</sup>.

The fourth contributor to rehabilitation needs is people with cardiovascular and chronic respiratory conditions such as chronic obstructive pulmonary disease (COPD). Currently, COPD is responsible for the largest needs within this group and is expected to increase as people age.

### Box 4

#### Global rehabilitation needs, based on the Global Burden of Disease Study 2019

**Fig. 1.** Absolute number of people with rehabilitation needs across the lifespan, per health condition group



Source: WHO Rehabilitation Needs Estimator (<https://vizhub.healthdata.org/rehabilitation/>).

## Benefits of rehabilitation

Rehabilitation services have many benefits, some of which extend beyond the individual and the health sector. They include:

- **Better health and functioning outcomes:** Rehabilitation is designed to enable people to live with their health conditions with optimal functioning (e.g. independent self-care), improved health (e.g. fewer secondary conditions) and overall higher levels of well-being <sup>(28)</sup>. This supports people in being more active and independent and helps prevent future health problems. Rehabilitation also makes an essential contribution to the outcomes of medical and surgical interventions <sup>(41)</sup>.
- **Reduced health care costs:** Rehabilitation can lead to significant cost savings across the health sector by supporting timely discharge from inpatient care <sup>(42)</sup>, lower risk and severity of secondary complications, less use of expensive treatments <sup>(43)</sup> and additional health services <sup>(44)</sup>, and lower re-admission rates.
- **Better educational, employment, economic and social outcomes:** By improving health and quality of life, rehabilitation frequently enables people to continue working or return to work, undertake education and training, earn a livelihood and participate in home and community life. It also frequently increases a person's independence and decreases the burden of care (on family members or state-funded care) <sup>(45)</sup>. Rehabilitation is an investment in human capital that contributes not only to health but also the overall economic and social situation of a family, their community and ultimately the government.
- **Protection of human rights:** Access to rehabilitation services helps fulfil the right to a high standard of health, particularly for people with disabilities <sup>(46)</sup> and older people with long-term difficulties in functioning. It also contributes to the fulfilment of other rights, such as when a wheelchair or prosthesis enables a person to attend school or earn a livelihood.

## Features of some groups of rehabilitation consumers for consideration in financing decisions

There are common features associated with some groups of people that need and use rehabilitation services which have relevance for health financing decisions. These features tend to be associated with people with significant and/or long-term rehabilitation needs and may be associated with the experience of disability. Without insight into the experiences of these groups, the affordability of care and financial consequences of accessing care may be overlooked. To inform decision-making about the financing of rehabilitation, it is important to be aware of the following features of some people:

- **Underlying social and economic disadvantage related to disability status:** Many people with rehabilitation needs are people with disabilities who may experience higher rates of disadvantage. People with long-term disabilities are more likely to experience stigma and discrimination, poverty and added costs of living, exclusion from education and employment, and, in many countries, lack of social support and assistance to effectively access health services <sup>(47)</sup>. For example, people with significant mental health needs can experience disadvantages in the labour market that impact their economic and social situation necessitating services that include community outreach for their therapy and time spent on their behalf coordinating their care across providers. Additionally, because of their economic situation, this group may have less ability to pay OOP costs for services, aggravating their situation.
- **Potential for high direct and indirect costs when accessing rehabilitation:** People with extensive or long-term rehabilitation needs have potential for high OOP costs that, over time, could cause financial hardship and/or catastrophic health expenditure. For example, people injured after a motor vehicle crash have large direct medical costs to cover services, such as emergency, medical and surgical care, as well as rehabilitation. At the same time, they also have indirect costs which include income losses due to their inability to work, or the income loss of their relatives who act as caregivers and support the rehabilitation process. Additionally, in many LMICs, direct non-medical costs such as transport costs are commonly reported as a major barrier to accessing services, made worse by the limited availability of rehabilitation in regional towns and rural and remote areas.

## Chapter 2.

# What are rehabilitation interventions and services?

## Interventions for rehabilitation

Rehabilitation refers to sets of interventions that are designed to optimize functioning and reduce disability in individuals with health conditions in interaction with their environment <sup>(48)</sup>. Interventions for rehabilitation comprise those that target specific aspects of functioning (body functions, body structures, activities and participation) as well as environmental and personal factors <sup>(34)</sup>. All of these are referred to as “functioning interventions” and may include, for example, muscle-strengthening exercises, speech and language training, breathing exercises, training in activities of daily living, social skills training, provision and training in the use of assistive products, and environmental modifications. Different types of interventions are usually utilized in rehabilitation. Box 5 lists the six categories of interventions included in the WHO Package of Interventions for Rehabilitation (PIR) <sup>(49)</sup>.

Provision of assistive products is an important intervention for rehabilitation. WHO defines assistive products as any external product (including devices, equipment, instruments or software) that is especially produced or generally available, the primary purpose of which is to maintain or improve an individual’s functioning and independence, and thereby promote their well-being. Assistive products are also used to prevent impairments and secondary health conditions <sup>(50)</sup>. In this way, provision of an assistive product primarily targets functioning and is a component of most rehabilitation services whether they are services targeting hearing, vision, cognitive or physical functioning.

### Box 5

#### Categories of interventions from the WHO Package of Interventions for Rehabilitation

1. Therapeutic techniques and procedures, exercises and training (e.g. manual therapy, range of motion exercises, cognitive behavioural therapy and communication skill training)
2. Physical modalities (e.g. neuromuscular electrical stimulation)
3. Assistive products (e.g. provision and training in the use of wheelchair)
4. Environmental modifications (e.g. installation of ramps, bathroom modifications)
5. Self-management interventions (e.g. education and advice on self-directed training, family and career training)
6. Medicines (e.g. oral nonsteroidal anti-inflammatories).

## Rehabilitation services

As interventions for rehabilitation are defined through their targeting of human functioning, logically, rehabilitation services primarily focus on improving people’s functioning. Rehabilitation services can be characterized by the provision of interventions for rehabilitation delivered by the rehabilitation workforce. Rehabilitation applies a structured process to identify the rehabilitation needs and plans the provision of specific interventions. However, a rehabilitation service may also encompass delivery of other types of health interventions that may be promotive, preventive and curative in their target. Additionally, other types of health services often include delivery of interventions for rehabilitation, for example palliative care may include interventions for rehabilitation as part of a palliative care service.

While WHO calls them *rehabilitation services*, other terminology is used for services that also include interventions that target functioning but without referring to *rehabilitation* as the name of the service (see Box 6). Additionally, while these services often provide rehabilitation services, some may not. For example, allied health services can include radiology services. This lack of shared understanding and terminology contributes to reduced awareness about rehabilitation services and their contribution to health outcomes.

### Box 6

#### Common names of services that provide significant amounts of rehabilitation

- Allied health services
- Services known by the name of the profession that delivers them, such as physiotherapy, prosthetic or orthotic, occupational therapy, speech and language therapy, psychology or chiropractic services
- Assistive technology services
- Community mental health services
- Disability services
- Early childhood intervention services
- Low vision services
- Audiology services



## Rehabilitation process and episode

Rehabilitation involves a process that typically includes assessment of the patient or client, goal setting, provision of care, reassessment and monitoring, and completion of care; this process reflects a cycle of care<sup>(52)</sup>. There are also “episodes of care”, which typically are from commencement to completion of rehabilitation for the same health condition. However, for administrative purposes it is common for a rehabilitation episode to be linked to the health service or programme and its financing arrangements, hence, administratively there may be an episode of care after a stroke in an inpatient rehabilitation facility, then another episode when services commence through a community-delivered rehabilitation programme.

Rehabilitation uses time-bound and measurable goals and should be delivered in sufficient quantity (i.e. dose - frequency, intensity) to achieve the desired outcomes. Rehabilitation usually entails repeated sessions where the frequency and selection of interventions are modified as the patient progresses. Some individuals may require rehabilitation intermittently throughout their lives, in which case the rehabilitation episode recommences with new goals and ceases once these are achieved. Rehabilitation frequently includes multidisciplinary care necessitating coordination between multiple rehabilitation professionals<sup>(52)</sup>; this is especially important for people with complex needs<sup>(53)</sup>. Coordination across the multidisciplinary team members as well as across other service providers is essential for effective and efficient care and takes time that should be considered in decision-making regarding the financing of services.

## Rehabilitation workforce

Rehabilitation services are typically delivered by different professions specialized in rehabilitation and referred to as the rehabilitation workforce. The competencies required are generally represented within the professions of audiology, chiropractic care, clinical psychology and social work, occupational therapy, prosthetics and orthotics, physiotherapy, podiatry, and speech and language therapy, as well as care from doctors and nurses with a specialty in physical and rehabilitation medicine. The rehabilitation workforce is usually university or tertiary qualified and practise autonomously (by international standards). It may encompass rehabilitation assistants, technicians and community-based rehabilitation workers, characterised as mid-level workers, they are often trained, supervised and supported by the university-trained rehabilitation workforce. Depending on a patient’s rehabilitation needs, they may be met within one discipline or require multiprofessional collaboration.

## Organization of rehabilitation services

The organization and configuration of rehabilitation services varies significantly across countries, but commonalities exist. WHO’s *Rehabilitation in health systems: guide for action* included the Rehabilitation in Health Framework, which highlights the most common types of rehabilitation services in a country (see Fig. 2). It uses an adapted version of the commonly applied pyramidal structure of primary to tertiary care. Based on its use in recent years, there are small updates to the text describing services, and acknowledgment of telerehabilitation is included, recognizing recent expansion of its use.

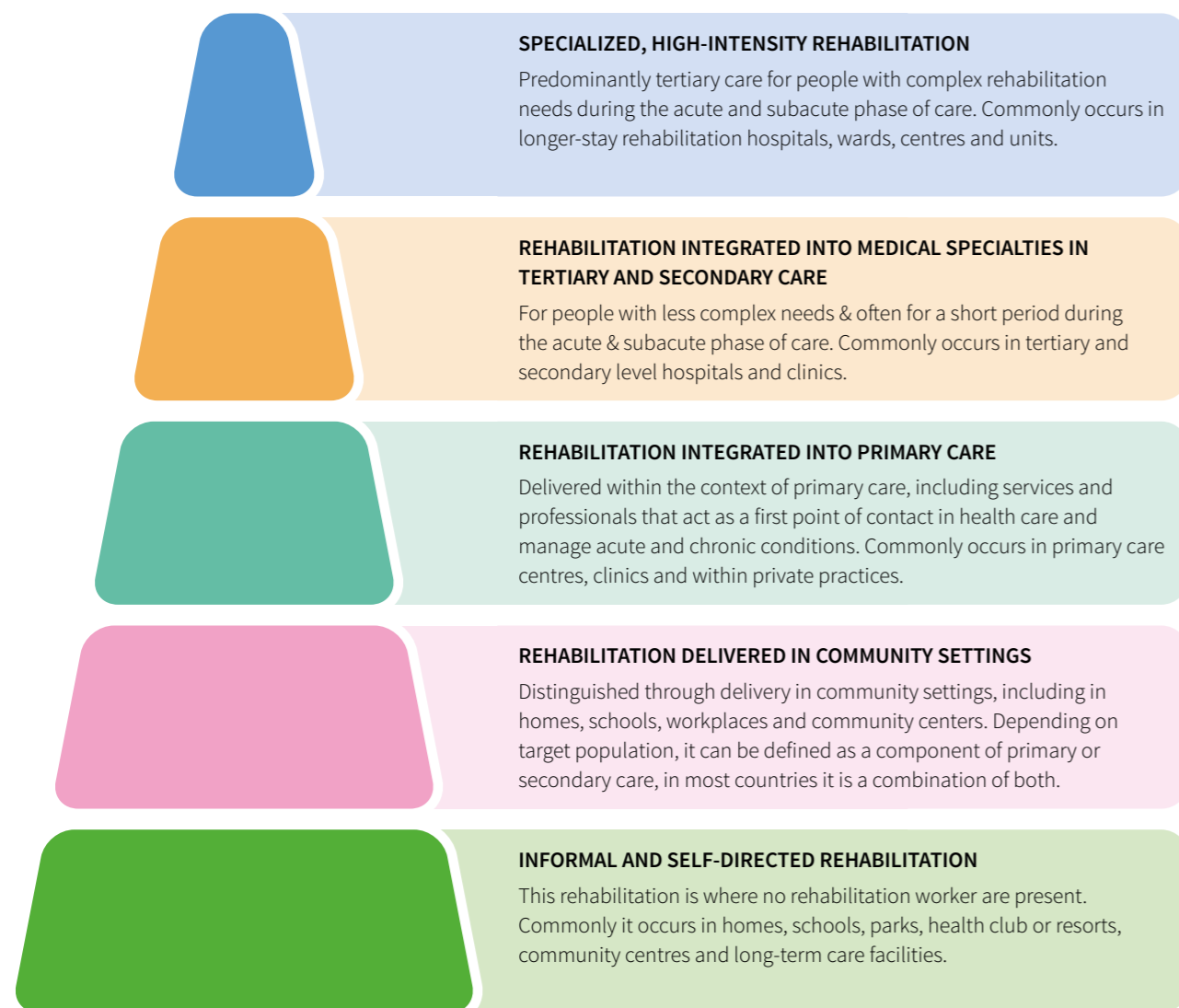
Below are descriptions of these common types of rehabilitation services:

- **Rehabilitation delivered through specialized rehabilitation wards, centres and programmes:** These services are comprehensive and multidisciplinary, and especially for people with complex and significant rehabilitation needs during the subacute phase of care. They commonly occur within inpatient facilities that enable high-intensity care; they may also include outpatient and day programmes. The rehabilitation personnel are typically physiotherapists, occupational therapists, speech and language therapists, prosthetists and orthotists and they often work in multidisciplinary teams with a medical doctor who specializes in rehabilitation medicine (a physical and rehabilitation medicine doctor). In some countries, it is only these types of services that are commonly called *rehabilitation services*.
- **Rehabilitation integrated into a range of health specialties within secondary and tertiary facilities:** These services are highly integrated into condition-specific care and are commonly provided during the acute and subacute phases of care. They are mostly delivered in the inpatient and outpatient settings of hospitals and large clinics and medical centres. They are commonly delivered by rehabilitation personnel such as physiotherapists and occupational therapists working with medical specialists such as surgeons, neurologists, cardiologists, oncologists and rehabilitation medicine doctors, mostly in multidisciplinary teams. It is common for these services to be known by the professions that deliver them, such as physiotherapy or speech and language therapy services. Sometimes they are collectively called *allied health services*; however, allied health services also include other professions which don’t deliver rehabilitation.
- **Rehabilitation as part of primary care:** These services are delivered within the context of primary care, which serves as a first point of contact as well as providing care to people with chronic health conditions. This can include patients referred down from higher levels of care. Services may be delivered during the acute, subacute and long-term phases of care, mostly by rehabilitation personnel such as physiotherapists, occupational therapists, and speech and language therapists, working with other primary care providers such as family medicine and general practitioner doctors and primary care nurses. They can be delivered in community health centres, primary care clinics, private practices and in community settings also overlapping with community-delivered rehabilitation (below). Single-discipline care is common at this level although multidisciplinary also occurs regularly. The services at this level are often known by the professions which deliver them; examples include chiropractic or psychology services.
- **Community-delivered rehabilitation:** This rehabilitation is distinguished through its delivery in community settings, including homes, schools, workplaces and community centres. Depending on who is receiving the service, and how it is organized and funded, it can be defined differently. In some places this is considered a component of primary care services; in other places a form of secondary care with more specialized rehabilitation services, but in most countries there is a combination of both. Care in community settings is mostly delivered during the subacute and long-term phases of care, commonly it is of moderate- to low-intensity over a short period, or intermittently over a long-term period.

This rehabilitation is delivered through a range of mechanisms. Examples include outreach by rehabilitation workers going to a home, school or workplace; regular mobile clinics in a community centre; and community-based rehabilitation programmes working within local settings. It can be integrated into other health, social and education programmes, such as: in-home nursing care; early childhood intervention programmes; disability-focused community services and specialist education services. In this type of rehabilitation, care is delivered by rehabilitation personnel but can also be delivered by other health personnel with rehabilitation competencies. In LMICs, a mid-level rehabilitation worker, typically a community-based rehabilitation (CBR) worker is frequently used. Community delivered rehabilitation is known by many different names, including early childhood intervention services, disability services and home-based care services.

- Informal and self-directed rehabilitation:** This rehabilitation is not necessarily a rehabilitation service but part of informal and self-directed care, it can occur where there is no rehabilitation worker present. It occurs during a rehabilitation episode or as part of an individual rehabilitation plan. Examples of this include carers supporting rehabilitation in long-term care settings, education workers supporting rehabilitation with children with disabilities in schools, people with lower back pain undertaking yoga, tai chi or pilates classes, peer support group activities, and coaches/athletic trainers incorporating rehabilitation into sports training programmes.

Fig. 2. Framework for rehabilitation in health care service delivery



Source: *Rehabilitation in health systems: guide for action*, WHO, 2019 <sup>(29)</sup>.

**Telerehabilitation:** While utilization of telerehabilitation was established for a few years, it rapidly expanded during the COVID-19 pandemic, with providers quickly adopting a range of telerehabilitation mediums for service delivery. Telerehabilitation can be used by most types of rehabilitation services, and provides an additional platform (or mechanism) for service delivery. Telerehabilitation can include two-way real time and/or asynchronous patient visits with audio and/or video, virtual check-ins, and use of remote evaluations of recorded videos or images and follow-ups <sup>(54)</sup>. Evidence for its effectiveness for patient groups <sup>(55, 56)</sup> has developed and studies suggest that it can reduce health care costs, improve adherence and functioning and quality of life outcomes, and is acceptable to patients <sup>(57)</sup>. Its potential should be considered during financing decision-making, ensuring financing arrangements support its use where appropriate.

## Common rehabilitation service providers

There are often multiple rehabilitation service providers across countries, below are the most common.

- Ministry of health and public health services:** These include all the health services under the mandate of the ministry of health that are involved in the planning and delivery of rehabilitation, including provision of assistive products. The rehabilitation services within public health services are typically designed to be universally available to all citizens of the country. This differs from the other types of rehabilitation providers listed below, who often have defined criteria and eligibility processes for accessing the rehabilitation services they fund. In some countries it is subnational-level entities that plan and provide services, mostly linked with the ministry of health, but occasionally can sit under local government agencies as well.
- Ministry of social affairs and/or agencies supporting people with disabilities or older people:** These entities may fund some rehabilitation, including assistive products for people with disabilities. In some countries, they both fund and provide services; in other countries, they only fund the care, which is provided by health services under the mandate of the ministry of health.
- Ministry of defence and/or agencies for veteran's affairs:** These ministries may fund rehabilitation services for people who are serving or have served in the armed forces. In some countries, they both fund and provide services; in other countries, they only fund the care, which is provided by health services under the mandate of the ministry of health.
- Ministry of education and/or agencies for early childhood:** These ministries may fund rehabilitation services to address developmental and education needs of children with developmental delays and disabilities. For example, the ministry of education may employ rehabilitation professionals (e.g. physiotherapists, occupational, and speech and language therapists) or contract to private or NGO providers to deliver rehabilitation services in schools. In some cases, the ministry of health may be the agency that funds and provide rehabilitation in school settings for this population group.
- NGOs:** NGOs often provide rehabilitation services for specific population groups, particularly disadvantaged groups such as people with disabilities or people with chronic health conditions. In many LMICs, NGOs have been early establishers of rehabilitation services, often funded by international development partners as well as local organizations. In middle- and high-income countries, governments commonly contract and fund NGOs to deliver services to specific population groups on their behalf, this often occurs for services that address the needs of people with complex conditions and long-term rehabilitation needs. This can also be an approach used to expand services in rural and remote areas.
- Private-sector providers:** These providers are frequently involved in rehabilitation, mostly in private hospitals and private clinics and practices. In many LMICs, the private sector is a key provider of rehabilitation services, in part because these services are limited in public health facilities. In addition, rehabilitation professionals, like other health care professionals, often work in public health facilities and run their own practices and attend to clients privately.

## The case for investing in rehabilitation

Rehabilitation has demonstrated its cost-effectiveness, typically for specific health conditions, interventions and contexts <sup>(58, 59)</sup>. The diversity of health conditions treated, interventions provided, contexts within which it is provided, and inadequate data can make a wider investment case for rehabilitation challenging. However, in the highly competitive context of health resource allocation, a strong case for investing in rehabilitation can be helpful and often requested by those who advocate for further government investment in rehabilitation services. Fundamentally, making this case will necessarily involve comparing the costs of unaddressed rehabilitation needs with the costs of addressing rehabilitation needs, with governments often wanting this tailored to their national context.

An economic case for overall investment in rehabilitation is likely to be compelling even in the face of competing priorities and scarce resources, but whatever the economic case, the benefits of rehabilitation will always be broad and extend beyond the financial realm.

## Summary of key considerations in financing rehabilitation

Rehabilitation services have many similarities to other health services; however, there are some unique features that should inform effective health financing policies – these are summarized below.

- There are large and growing rehabilitation needs in populations. The extent of the needs is primarily informed by the prevalence of health conditions and demographic trends. In many countries, rehabilitation needs have been overlooked in decision-making for health financing.
- Rehabilitation needs can vary between individuals with the same health condition due to features of the health condition, the environment and personal factors. This necessitates a degree of flexibility in the provision of care and its financing arrangements, including the ability to reset time-bound goals during an episode and the commencement of another episode.
- Some groups of people have significant and long-term rehabilitation needs, this includes many people with disabilities who may accumulate significant health (including rehabilitation) care costs over time. The potential for high costs should be considered in financing arrangements to avoid lack of access to care, and financial hardship or even catastrophic expenditure.
- Rehabilitation services are defined through their focus on improving functioning. However, across and within countries different terms are used. Financing arrangements for rehabilitation, including assessment of existing expenditure on rehabilitation services should take this into account.
- Different types of rehabilitation services exist at all levels of health care to meet the different types of need in populations. The breadth of rehabilitation services in countries and their contextualization within larger financing arrangements will likely result in multiple revenue sources and provider payment mechanisms.
- For many patients, rehabilitation is highly integrated and closely linked to the accompanying medical or surgical care. This high level of integration makes it difficult to “disentangle” rehabilitation from other care.
- Delivery of rehabilitation in primary care and community settings is essential. Financing decisions need to support delivery of services in primary care and community settings, and account for provider or consumer travel costs. Support for telerehabilitation should be considered.
- Rehabilitation services frequently use multidisciplinary care requiring coordination across people and services. Financing decisions may need to consider the costs of care coordination for some types of care.
- Rehabilitation services commonly include the provision of assistive products. Hence, financing decisions, particularly when defining health benefit packages, need to include the costs of assistive products to ensure people receive all the rehabilitation they need.

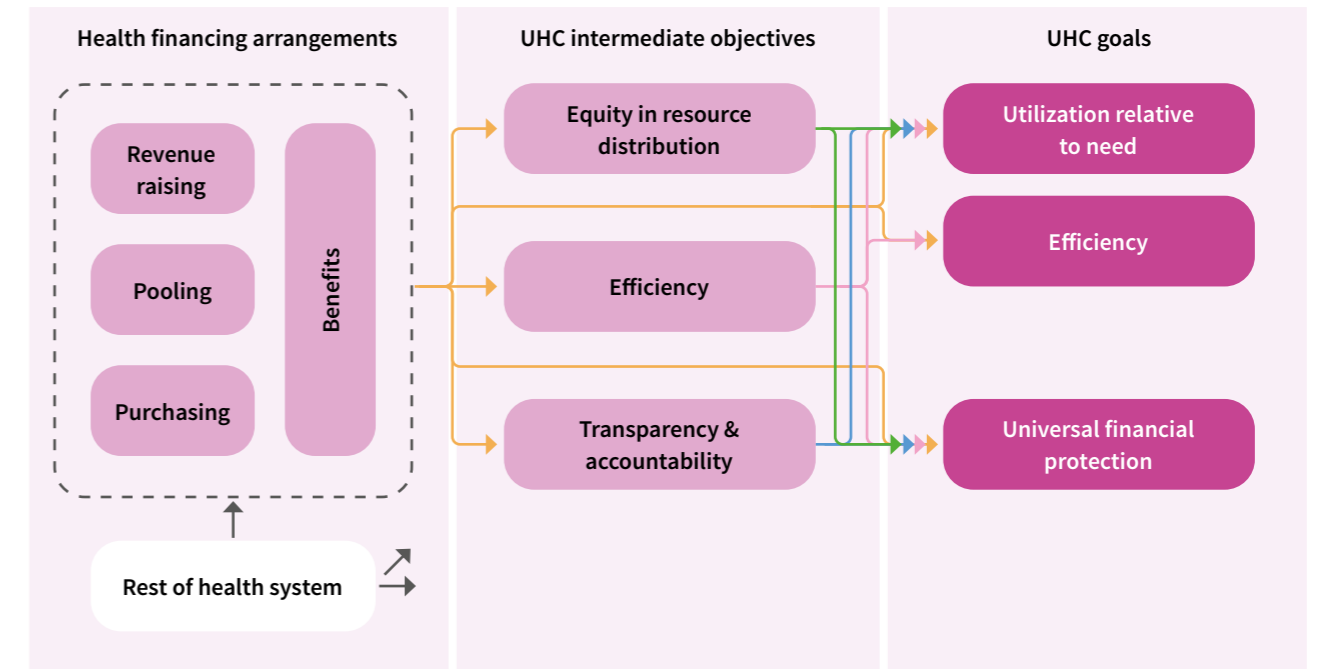
## Part II.

# Enhancing health care revenues and population coverage for rehabilitation

Health financing is a core pillar of health systems and encompasses policies and practices related to how revenues for health are collected, pooled and paid out to providers of health care services. These three interrelated functions of revenue raising, pooling and purchasing together advance a country toward key UHC goals of enhancing utilization of health care services relative to need, the quality of those services, and financial protection against catastrophic health expenditure and household impoverishment due to health needs <sup>(21)</sup> (see Fig. 3.).

This resource differentiates the concept of *health care financing* from *health care funding*. Health care funding is synonymous with revenues raised for health care (from taxes, premium contributions, external donors and other sources). *Health care financing*, on the other hand, refers to the broader continuum of health system functions that includes, as mentioned earlier, not just the raising of revenues, but also the practices used for pooling and purchasing, and the structures and processes governing these functions.

**Fig. 3.** Health financing and UHC goals



Source: Kutzin et al., 2017 <sup>(21)</sup>.

Government policies on how revenues are raised and pooled for the health system affect how adequately the health system is funded, how these funds are distributed, how well users are protected from excessive OOP costs when they use health services, and how equitably the financial burden of accessing rehabilitation services is distributed across the population. An integrated health financing system funds rehabilitation as part of a broader health service package rather than through a vertical, siloed programme within the health sector <sup>(28)</sup>. Integration of rehabilitation in health financing cannot happen in a vacuum: for health financing to achieve its strategic objectives, rehabilitation needs to be integrated more generally into health system policies, health sector planning practices and health service delivery. The health sector also needs to collaborate with other ministries or agencies that contribute to the governing and financing of rehabilitation services.

Part II discusses the first two functions of health financing – Chapter 3 addresses revenue mobilization and Chapter 4 addresses pooling – and outlines how funding for rehabilitation can increasingly derive from health system funding sources and how rehabilitation can be part of health financing mechanisms for equitable population coverage.

## Chapter 3.

# Revenues for rehabilitation services

**Box 7**

### What is the revenue-raising function in health care financing?

Revenue raising refers to the process through which countries raise funds to support the organization and delivery of health services <sup>(60)</sup>. These revenues are commonly classified as public, private and external. Public revenues for health are typically derived from compulsory contributions from the population, such as through government taxes and mandatory contributions to social health insurance. Private revenues are raised through private insurance premiums and user fees covered by OOP expenditure. External revenues are primarily grants or loans from donors but can also come from foreign investments or remittances.

In countries that are pursuing UHC, it is important for rehabilitation services to be included in the existing health financing mechanisms and to be funded sufficiently to meet the essential needs of the population. It is also important for the revenues to be raised predominantly from domestic and public sources that are stable and ensure equitable access to services <sup>(21)</sup> (see Box 7)

### Rehabilitation in health financing practices at a glance

- In all countries, rehabilitation has a variety of funding sources: public revenues, private revenues, OOP payments and external revenues.
- Funding for rehabilitation services also frequently comes from additional sources that are linked to specific programmes for specific populations or health conditions or disabilities, and this occurs through agencies outside of the ministry of health.
- In countries where multiple funders of rehabilitation are not coordinated, coverage gaps and inefficiencies may be greater.
- Funding for rehabilitation is generally insufficient, especially in LMICs, resulting in high OOP costs spread inequitably across populations.
- To improve efficiency and equity of financing rehabilitation, it is important to prioritize rehabilitation in public health financing mechanisms and coordinate with other revenues that cover rehabilitation to move toward universal coverage for rehabilitation services for the population in need.

## Overview of current practices

### Public revenues

Table 1 summarizes the types of financing mechanisms and revenues used to fund rehabilitation services through health systems. In most of the countries reviewed for this document, rehabilitation services are included in publicly funded health schemes. The revenues for such schemes are typically raised on a compulsory basis, meaning the government requires some or all people to make payments <sup>(21)</sup>. Public revenues that are used to cover health services can be raised through general taxes, taxes earmarked for health, and social insurance contributions. The United Kingdom's National Health Service (NHS) is a classic example of a tax-funded scheme that covers rehabilitation care <sup>(61)</sup>. Examples from LMICs include Sri Lanka's general tax-based health service <sup>(62)</sup> and Thailand's Universal Coverage Scheme <sup>(62)</sup>. While publicly funded health financing mechanisms cover rehabilitation in many of the countries reviewed, the extent of services covered, population coverage and financial coverage they offer vary greatly.

**Table 1.** Health financing mechanisms used for rehabilitation

Health financing mechanism	Country examples	Revenue sources
<b>Budget-funded health services</b>	Botswana, Cambodia, Georgia, Guyana, Jordan, Lao People's Democratic Republic, Mongolia, Mozambique, Myanmar, Nepal, New Zealand, Solomon Islands, South Africa, Sri Lanka, Tajikistan, Thailand, United Kingdom, United Republic of Tanzania, Viet Nam, Zambia	General taxes at national and subnational levels
<b>Social health insurance</b>	Australia, Chile, Germany, Philippines, Republic of Korea, Viet Nam	Income tax earmarked for health
<b>Private health insurance</b>	Switzerland, United States of America	Premium contributions from employers and employees
<b>Voluntary private health insurance</b>	Australia, Botswana, Jordan, Mozambique, South Africa, Tajikistan	Employer and employee premiums
<b>External aid, grants, loans and investments<sup>a</sup></b>	Benin, Haiti, Nepal	Multilateral and bilateral donors and development partners

<sup>a</sup> Includes countries where significant proportion of funding for rehabilitation is from external sources.

As a health service, a unique feature of rehabilitation is the frequent additional financing that is from outside the main health financing mechanisms, including from various vertical programmes. In many countries, the social, education and defence ministries and their associated statutory agencies and insurance schemes also finance rehabilitation services for specific population groups. Revenues for these schemes include general or earmarked taxes collected for vertical programmes for people with disabilities, payroll taxes or employer premiums for workers' compensation schemes and pension insurance, earmarked fuel taxes and car licensing levies for road traffic accident insurance, or some combination of these. The extent of population or service coverage provided by these schemes is usually limited to specific population groups, such as people with disabilities, veterans or pensioners, or people with specific causes of conditions and disabilities that require rehabilitation, such as road traffic accidents or workplace injuries. Table 2 provides country examples of these additional financing mechanisms for rehabilitation. While none of these mechanisms are the primary source of financing for rehabilitation in their respective countries, they provide additional funds that help fill coverage gaps for specific population groups.

**Table 2.** Health financing mechanisms used for rehabilitation

Health financing mechanism	Country examples	Revenue sources
<b>Vertical programmes in the social sector</b>	Sri Lanka's Ministry of Primary Industries and Social Empowerment funds disability-targeted social welfare schemes that provide stipends to low-income individuals for assistive products and travel to rehabilitation providers <sup>(26)</sup> .	General taxes
	Georgia's Ministry of Internally Displaced Persons from the Occupied Territories, Labour, Health and Social Affairs purchases assistive devices for people with disabilities and has a voucher-based system that funds rehabilitation services for children with disabilities <sup>(23)</sup> .	General taxes
	Benin's National Social Security Fund finances rehabilitation services for formal-sector employees <sup>(63)</sup> .	Employer and employee premiums
	Viet Nam's Social Security funds rehabilitation services for the elderly, people with disabilities and people on maternity leave.	Employer and employee premiums, government subsidies
<b>Accident and disability insurance</b>	New Zealand's Accident Compensation Corporation is a compulsory insurance mechanism that finances care for individuals injured in New Zealand and can include compensation for lost earnings <sup>(64)</sup> .	Employer and employee premiums, car licensing levies
	In Canada, province-based workers' compensation schemes play a significant role in financing rehabilitation care for people injured at work <sup>(65)</sup> .	Employer premiums

	Botswana's Motor Vehicle Accident Fund provides financing for rehabilitation services after car accidents.	Fuel levies, foreign vehicle levies, investment income
	Australia's National Disability Insurance Scheme finances rehabilitation for eligible citizens with permanent and significant disabilities <sup>(66)</sup> .	General taxes
<b>Pension schemes</b>	In the United States of America, honourably discharged veterans can access rehabilitation services financed through the Veterans Health Administration <sup>(67)</sup> , which also finances a pension programme that provides monthly payments to veterans who meet certain age or disability requirements.	General taxes
	Germany's government-run retirement insurance system finances the cost of rehabilitation for individuals in Germany whose earning capacity is jeopardized or already diminished by their health condition <sup>(68)</sup> .	Employer and employee premiums

### Private revenues: health insurance schemes

Private health insurance schemes fund rehabilitation services in many countries reviewed for this document, but mainly for beneficiaries from wealthier and economically active populations. Private insurance revenue is usually generated through premiums paid by individuals, their employers or a combination of the two. It can play an important role in supplementing or complementing public coverage but may not necessarily promote equity in access to rehabilitation or other health services, especially when the schemes are voluntary <sup>(69)</sup>. For example, private insurers in Mozambique and Tajikistan offer rehabilitation services, but these schemes are voluntary and mostly accessible only to wealthier population groups <sup>(27)</sup>. Among the countries reviewed for this document, compulsory private insurance schemes – which require individuals to enrol by law – that cover rehabilitation are dominant only in the United States and Switzerland. These two high-income countries are also among the top three highest spenders on health globally <sup>(70)</sup>. While private revenues play a role in all health systems, evidence shows that when countries rely predominantly on these revenues, more households are likely to forgo needed care or face financial hardship for accessing services <sup>(60)</sup>.

### Private revenues: out-of-pocket expenditure

A large portion of rehabilitation services in LMICs is funded by OOP payments. When revenues mobilized for health do not guarantee full coverage for rehabilitation, individuals pay out of pocket at the time of service <sup>(71)</sup>. Such a lack of pooled funding is particularly detrimental in LMICs, where over 50% of people with disabilities do not have access to rehabilitation <sup>(72)</sup>. Even well-funded public health systems are challenged to provide adequate coverage for the full duration of treatment prescribed by rehabilitation providers <sup>(73)</sup>. Ultimately, this increases reliance on OOP payments, contributes to financial hardship for those accessing services or decreases service use <sup>(74)</sup>. High OOP expenses are among the most commonly reported barriers to accessing rehabilitation services globally, and they can compromise the quality and effectiveness of care and health equity <sup>(75-77)</sup>.

Reliable and comparable estimates of OOP expenditure for rehabilitation at the global level are not available, but country-level situational assessments conducted by WHO indicate that OOP expenditure is the dominant rehabilitation funding source in many countries, including Georgia,<sup>1</sup> Guyana, Mongolia, Nepal, Sri Lanka and Tajikistan <sup>(23-27)</sup>. Out-of-pocket payments can be an issue in all income settings to some extent. In the United States, certain Medicare plans cover only up to 80% of rehabilitation costs, leaving the remaining 20% to be paid out of pocket <sup>(78)</sup>.

Private expenditure on rehabilitation is driven partly by the costs of transportation, overnight accommodation and/or carer help needed by service users. These costs are highest in settings with limited services or where service availability is mismatched with population need. In Viet Nam, for example, the six provinces with the highest populations of people with disabilities do not have a rehabilitation hospital or centre, which means the vast majority of service users must travel long distances and incur additional opportunity costs <sup>(75)</sup>. These costs disproportionately affect people living in rural areas, especially in places where rehabilitation services are not available at the primary care level and the closest available services require travel to regional, provincial or central-level hospitals. In many countries reviewed, OOP expenditure for assistive products was also regularly reported to be significant.

### External revenues

External revenues fund and provide a significant proportion of rehabilitation services in many LMICs. These come from development partners, such as bilateral or multilateral agencies in the form of aid, grants or loans to governments <sup>(79)</sup>. In Zambia, for instance, domestic public revenues cover limited personnel, facilities and medical equipment expenses, leaving financing for rehabilitation reliant on external resources <sup>(80)</sup>. About half of the annual budget for rehabilitation at the Solomon Islands' Ministry of Health & Medical Services comes from the Australian Government <sup>(81)</sup>, while rehabilitation in Haiti is almost exclusively financed by external and private donors <sup>(82)</sup>. Similarly, in many countries reviewed, assistive technologies are predominantly funded through external revenues.

External funds can fluctuate in amount and consistency based on donor priorities, which creates challenges to equity of access, long-term provision and sustainability of rehabilitation services <sup>(10)</sup>. Zambia is experiencing a transition from donor aid after being reclassified as a middle-income country by the World Bank, and it has thus lost some donor financing for rehabilitation, which decreased service availability in some regions of the country <sup>(80)</sup>. External revenues also run the risk of creating parallel financing and service provision systems that may not be integrated with or accountable to the health sector. On the other hand, when well-planned and transparently integrated into sector-wide mechanisms, external revenues also have the potential to be catalytic and lead to future public health financing.

<sup>1</sup> In 2023, Georgia began financing a package of priority rehabilitation services in its national UHC programme. This is an important step toward ensuring greater financial protection (and lower OOP payments) for rehabilitation service users.

## Considerations and suggested approaches

### 1. Greater reliance on public health financing is necessary to meet the extensive and growing need for rehabilitation services.

To help advance UHC goals, rehabilitation should be included in public health financing policies, or other predominant health financing mechanisms in the country. Rehabilitation should be explicitly addressed in health services planning processes and receive a steady stream of funding for integrated service delivery within the health sector. Effective coordination with additional revenue sources from outside the health sector is important to ensure efficiency and universal coverage where fragmentation exist (see Chapter 4).

#### Suggested approaches:

- Regular resource mapping for rehabilitation, within the framework of existing health resource mapping exercises that use System of Health Accounts (SHA) 2011 methodology, are necessary for a comprehensive understanding of current and needed health expenditure on rehabilitation in countries.
- Regular household budget and health expenditure surveys should also capture rehabilitation expenditure, to better understand the financial burden of rehabilitation service on households and the extent of foregone care due to financial barriers.
- In addition to prioritization of rehabilitation services in public health financing mechanisms, ministries of health should consider targeted user-fee exemption policies for priority groups with extensive rehabilitation needs.
- To minimize reliance on OOP expenditure, policy-makers should consider implementing policies that incentivize stronger coverage for costs such as transportation, assistance and accommodation. For example, governments may legally mandate or incentivize private insurers to offer coverage of ambulance and other health transport expenses.
- The health sector should also invest in rehabilitation infrastructure and human resource capacity to, over time, minimize the reliance on OOP expenditure caused by geographic access issues.
- Rehabilitation should be an indivisible part of broader health sector advocacy efforts for increased funding for health services.
- Rehabilitation should always be considered in national health sector strategic planning and budgeting exercises.
- Rehabilitation advocates should use evidence-based advocacy to raise awareness among policy-makers and health care workers of the large and growing need for rehabilitation and the essential role it plays in health care, ensuring to collaborate with rehabilitation service user groups wherever possible. Publicly available tools like the strategic communication practical guide by the Joint Learning Network for Universal Health Coverage,<sup>2</sup> can be used to formulate audience-specific advocacy campaigns. Rehabilitation investment cases should form a part of future advocacy.

<sup>2</sup> <https://www.jointlearningnetwork.org/resources/strategic-communication-for-universal-health-coverage-practical-guide/>

## 2. Ministries of health should strategically leverage external funding resources to supplement domestic revenue and collaborate closely with development partners.

Ministries of health should clearly articulate their national rehabilitation priorities and ensure that development partners align with these priorities. When deployed strategically, external funds can help fill gaps in domestic funding and balance the sustainability considerations of reliance on such funds.

### Suggested approaches:

- Ministries of health can leverage sector-wide meetings, development partner forums and technical working groups to coordinate and engage with development partners on the financing of rehabilitation services.
- Ministries of health should track external revenue sources during routine national resource mapping exercises, and integrate into sector-wide mechanisms, and ensure the rehabilitation expenditure is accounted for using the SHA 2011 methodology within national health accounts.
- Ministries of health and their partners can align with external funders to supplement coverage of services or populations that are excluded from domestic financing mechanisms, or to pay for patient transportation, lodging or caregivers' costs.
- Development partners, including humanitarian partners, should collaborate closely with governments and channel funding through ministries of health and sector-wide mechanisms; this can play a catalytic role and encourage counterpart funding for countries. Lessons can be drawn from the extensive experience of the Global Fund to Fight AIDS, Tuberculosis and Malaria in deploying these types of domestic financing mechanisms<sup>(83)</sup>. Development partners funding rehabilitation and assistive products help create “budget lines” for these services that may not have already existed.

### Further reading and resources

Tax reform and resource mobilization for health

<https://r4d.org/resources/tax-reform-resource-mobilization-health/>

Sustainable financing: how to support country change agents in getting the resources they need

<https://r4d.org/blog/sustainable-financing-support-country-change-agents-get-resources-need/>

Integrating rehabilitation into health systems: financing

<https://www.who.int/activities/integrating-rehabilitation-into-health-systems/financing>

## Chapter 4.

# Rehabilitation as part of pooled health financing mechanisms for population coverage

The delivery of rehabilitation presents particularly salient equity concerns. Certain populations, such as older people, are at higher risk of noncommunicable diseases, fall-related injuries and health impairments that reduce their capacity, such as vision and hearing impairments. Similarly, many adults with disabilities face higher health care costs than those without disabilities, due to their need for rehabilitation services and assistive products on top of general household health care costs<sup>(75)</sup>. They and their families are also more likely to experience poverty<sup>(84)</sup>. Yet financial coverage for rehabilitation is low or highly variable, especially in LMICs, where an overwhelming majority of people, as much as 50%, report unmet rehabilitation needs<sup>(85)</sup>. This gives rise to a clear need to include rehabilitation in health care financing mechanisms that pool financial risk and redistribute resources across populations (see Box 8).

### Rehabilitation as part of pooled health financing at a glance

- Providing rehabilitation involves catering to vulnerable populations, such as older people and people with disabilities, who are at higher risk of financial hardship. Health financing mechanisms should pool financial risk and redistribute resources to key populations.
- Enhancing equity of access to rehabilitation requires using mass-level pools of health funding while preserving, if needed, additional mechanisms that offer coverage to groups who are at most risk of not accessing the needed care and experiencing financial hardship.
- Financing for rehabilitation in LMICs is especially fragmented and needs effective coordination to achieve national goals. Health care funds for rehabilitation are often fragmented across various types of pools.
- Countries should work to unify financing for rehabilitation so they can better use health financing as an instrument to achieve national objectives. As a start, in settings with more fragmented financing for rehabilitation, strong coordination mechanisms are needed to achieve coverage and equity goals.



## Box 8

**What is pooling?**

*Pooling*, in reference to health financing, refers to the “accumulation of prepaid health care revenues on behalf of a population”<sup>(86)</sup>. The pooled funds are used to pay health care providers to cover the cost of services provided to beneficiaries. Since people are risk averse, they appreciate the security offered by health financing arrangements covering the costs incurred if they have the bad luck to experience an injury or an ill-health condition requiring treatment or rehabilitation. But risk *pooling* arrangements can also be organized in such a way that they cover individuals with different levels of health risk (both healthier and sicker people), so besides reducing the burden of OOP payments for people experiencing a health shock, pooling can be an important policy instrument to redistribute resources from lower need to higher need users<sup>(86)</sup>. Hence, to meet the UHC objectives of financial risk protection and equity, health care fund pools should:

- offer broad coverage to include individuals with a range of risk profiles, without regard to their ability to contribute revenues; and
- redistribute resources to pay for the use of health services by sicker (and, by implication, often older and/or poorer) beneficiaries.

Countries typically pool health care revenues using one or more of the following mechanisms: budgets held by national or subnational governments, prepaid revenues raised by health or other insurance schemes (both public and private), and private funds held by NGOs or donors. Unified pooling of health care funds to pay providers of rehabilitation and other types of care (or coordination of different pooling mechanisms to harmonize practices) can also promote efficiency by helping purchasers use their market power and scale to lower costs and by minimizing duplicative administrative overheads.

**Overview of current practices**

Successful financial risk pooling for people who need rehabilitation requires pools that cover all – or a large majority – of a country’s population, adequately integrate rehabilitation into health benefits packages, and are unified rather than fragmented into many different mechanisms. Pooling is a more efficient way to manage revenues and direct resources to individuals with the greatest rehabilitation needs. Countries with more unified health financing arrangements that include rehabilitation are better positioned to use health financing as an instrument to achieve more equitable access to health care and other national objectives. (See Box 9 for an example from Colombia of income redistribution to support equitable access.) In the absence of a unified national pool, countries can work to coordinate different health care fundholders so they align and standardize population and service coverage and more evenly redistribute resources and manage financial risk across pools<sup>(86)</sup>.

A number of LMICs have predominantly public-sector insurance mechanisms for pooling funds for health care, including rehabilitation, and offer widespread population coverage. They include Viet Nam, where Viet Nam Social Security includes rehabilitation and covers 87% of the population; the Philippines, where the Philippine Health Insurance Corporation (PhilHealth) covers 92% of the population; and Thailand, with three well-coordinated health insurance schemes that together cover the entire population<sup>(87)</sup>. Income pooling for rehabilitation is stronger in Thailand and the Philippines, where insurance coverage is mandatory and population coverage is high. In the Philippines, coverage is especially targeted toward poorer and older beneficiaries and other priority populations such as children with disabilities, who can access more comprehensive rehabilitation for a mobility impairment as part of the Z Benefits package<sup>(89)</sup>.

In many LMICs, funds for rehabilitation are included within routine public-sector budgets at the national level, which are known as *national public budgetary pools*. This reflects the common practice of pooling public health funds in government budgets and using them to support the delivery of rehabilitation, predominantly in government facilities that the general population can access. Box 10 provides examples of national budget pools that cover rehabilitation services for the general population. In some LMICs, including Georgia and Nepal, such national-level health budget pools may coexist with similar government budget pools at the subnational level<sup>(23,25)</sup>. Other examples of mechanisms that pool health funds (including for rehabilitation) and operate in parallel with pooled public funds are insurance schemes that offer limited population coverage or target particular groups (such as injury insurance in Benin and Cambodia) and private health insurers (as in South Africa).

## Box 9

**Income redistribution in Colombia’s ADRES system for UHC**

In Colombia, population health coverage, including for rehabilitation, is offered through the Administradora de los Recursos del Sistema General de Seguridad Social en Salud [Administrator of the Health Care Social Security Resources] (ADRES), which pools funds on behalf of the population and transfers them to individual insurers that enroll beneficiaries and pay providers. ADRES is funded through a mix of tax transfers and a 12.5% payroll tax on formal sector workers, of which 1.5% is transferred as a solidarity payment to insurers that enroll poorer beneficiaries. Under ADRES, insurers offer a standardized package of care, including certain rehabilitation benefits such as physiotherapy and speech and language therapy. ADRES also dedicates funds in the pool to offer road accident insurance. Importantly, because Colombia’s constitution ensures a right to health for all citizens, individuals are also able to petition the court system to obtain additional tax-funded rehabilitation benefits, such as wheelchairs and transportation, to mitigate mobility challenges.

## Box 10

### Using national budgets to pool health funds for rehabilitation in Mozambique, Guyana and the Solomon Islands

In Mozambique, health budget funds under the National Programme for Physical Medicine and Rehabilitation are channelled to physical medicine and rehabilitation departments (which exist in all tertiary hospitals) and to physiotherapy units (which exist in almost 90% of secondary hospitals). The Solomon Islands and Guyana also have health budget based financing systems for rehabilitation services. In both countries, current health expenditure overwhelmingly consists of public-sector (budgetary) spending – 62% in Guyana and 94% in Solomon Islands. Rehabilitation-related resources derive from public revenues and are held as public budgets, although the exact magnitude of these resources may not be transparent until budgets for rehabilitation are separated out at the health facility or hospital department level.

Programmes that pool finances and operate in parallel with public health funding schemes can create trade-offs in terms of access and equity. As noted earlier, resources for rehabilitation are pooled by multiple actors. This fragmentation of financing can create equity risks. For instance, New Zealand's Accident Compensation Corporation (ACC) raises concerns about whether access to treatment and compensation differs for individuals whose health conditions are due to illness as opposed to accidents, with concerns in New Zealand that those caused by accident were able to access more comprehensive services, for example, more technologically advanced assistive products<sup>(89)</sup>. But the ACC has also injected additional funding into public and private rehabilitation services (which potentially contributed to sector strengthening that also, over time, benefited people needing rehabilitation due to illness). While further research is needed to understand trade-offs, countries without high-coverage health care financing mechanisms may seek to retain such targeted programmes to support equity of access for vulnerable groups, even as mechanisms for financing UHC are being designed and implemented. This will help to ensure key at-risk populations such as people with disabilities who face “physical, communication, attitudinal and financial barriers”<sup>(75)</sup> retain access to all the rehabilitation they need without financial hardship.

Finally, in countries where health financing pools for rehabilitation are highly fragmented, strong coordination mechanisms are essential to align holders of health funds for rehabilitation with strategic goals and targets and ensure more universal population access, service coverage and greater efficiencies. Coordination may take the form of policies to standardize entitlements, provider payment and quality across pooled health financing mechanisms. In Australia, for example, a public policy document differentiates what the National Disability Insurance Scheme (NDIS) covers compared with other financing schemes (such as Medicare and state-run accident insurance schemes). However, alignment of coverage for different cases can still be difficult and discretionary. Generally, coordination for rehabilitation is less mature in LMICs, which impacts on the coordination of rehabilitation financing as well. For example, financing for rehabilitation in Myanmar is highly fragmented across public and donor sources, without any central coordination to serve the national rehabilitation strategic goal of improving service coverage, hence Myanmar's national rehabilitation strategic plan calls for the creation of a platform for stronger leadership and coordination as a recommended action<sup>(90)</sup>. Many countries have developed such bodies under the ministry of health or informally to oversee rehabilitation services and improve coordination – for instance, national rehabilitation coordination groups are found in Nepal, the Lao People's Democratic Republic and the United Republic of Tanzania, among others. Mechanisms for coordination and collaboration are discussed further in Chapter 7 on effective governance of health financing for rehabilitation.

## Considerations and suggested approaches

### 1. Ministries of health should promote transparent financing of rehabilitation and lead efforts to achieve greater consolidation and/or coordination among health financing mechanisms for rehabilitation.

Rehabilitation services are often funded by different agencies within and outside the health sector. Ministry of health-led mechanisms for coordinating rehabilitation services and funding are often lacking, and those that do exist can be disconnected from broader arrangements for coordinating health system financing and/or be outside the purview of the ministry of health. Consolidating or coordinating rehabilitation service coverage can increase efficiency and coverage gains from pooling arrangements.

#### Suggested approaches:

- Resource mapping exercises and situation analyses of rehabilitation funders, providers, services and beneficiaries in the health system are important approaches to developing a comprehensive understanding of available resources and financing mechanisms for rehabilitation services, as well as existing gaps in population coverage. Ministries of health and their partners can use resources such as the SHA 2011 methodology and WHO's *Rehabilitation in health systems: guide for action* tool for such analyses.
- Where appropriate, ministries can develop country-specific roadmaps for merging or aligning health financing mechanisms that cater for rehabilitation and priority populations. For example, South Africa has developed policy scenarios to evaluate the feasibility and appropriateness of different approaches to merging HIV financing into PHC and UHC financing mechanisms<sup>(91)</sup>.
- Rehabilitation focal points within the ministry of health should support coordination and integration of rehabilitation within existing coordination mechanisms for health sector financing and ensure engagement with rehabilitation stakeholders.

### 2. Development partners can support income and financial risk pooling for rehabilitation by building the capacity of rehabilitation and health financing stakeholders.

Given the prevalence of inadequate and fragmented financing and service delivery arrangements, rehabilitation stakeholders would benefit from technical support to better consolidate or coordinate health financing for rehabilitation and enhance risk pooling and/or efficiency. Global partners can provide policy-makers with technical guidance, practical resources and platforms or such reforms.

#### Suggested approaches:

- Development partners can help countries conduct key analytics to map health system inefficiencies and misalignments for priority health programme such as rehabilitation, and identify opportunities to integrate the financing and other characteristics of such programmes within broader health system functions where appropriate. For example, the WHO's **Cross Programmatic Efficiency Analysis** framework provides a readily usable approach to systematically diagnose and address inefficiencies in the programming of often siloed programmes like rehabilitation. It provides a step-by-step guide to identify entry points and mitigate inefficiencies by making specific changes to key programme functions, including health financing.
- Development partners are well positioned to facilitate cross-country learning on integrating rehabilitation in UHC financing strategies by convening countries and facilitating learning exchange through global events or curated study tours.

## Further reading and resources

Pooling arrangements in health financing systems: a proposed classification

<https://equityhealthj.biomedcentral.com/track/pdf/10.1186/s12939-019-1088-x.pdf>

A descriptive framework for country-level analysis of health care financing arrangements

<https://www.sciencedirect.com/science/article/abs/pii/S016885100001494?via%3Dihub>

Pooling financial resources for universal health coverage: options for reform

<https://www.who.int/publications/i/item/pooling-financial-resources-for-universal-health-coverage-options-for-reform>

Governing multisectoral action for health in low-income and middle-income countries: unpacking the problem and rising to the challenge

[https://gh.bmj.com/content/3/Suppl\\_4/e000880](https://gh.bmj.com/content/3/Suppl_4/e000880)

Rehabilitation in health systems: guide for action

<https://www.who.int/publications/i/item/9789241515986>

Ministry of health patient, public and stakeholder engagement framework

<https://www2.gov.bc.ca/assets/gov/health/about-bc-s-health-care-system/health-care-partners/patients-as-partners/engagement-planning-infographic.pdf>

## Case study: Blended revenues for rehabilitation in Botswana

### Background

Botswana's Motor Vehicle Accident (MVA) Fund is an example of additional funding for rehabilitation services from outside the ministry of health. The rising prevalence of noncommunicable diseases, an ageing population, conditions associated with HIV and long-term antiretroviral treatment, and motor vehicle accidents have created a growing demand for rehabilitation services in Botswana<sup>(92)</sup>. But amid already constrained health budgets, rehabilitation has not been a high priority within the country's health care system. Rehabilitation interventions are not included in the country's Essential Health Service Package<sup>(93)</sup>, and government hospitals provide limited rehabilitation services and only one designated rehabilitation ward for people with complex rehabilitation needs that is focused on spinal cord injuries.

Funds for health are pooled by both the public and private sectors in Botswana<sup>(92)</sup>. The country has both public and private health insurance schemes, all of which are voluntary. Pooling by the private sector via private insurance agencies covers around 17% of the population<sup>(94)</sup>. Table 3 describes the main health financing mechanisms in Botswana, the population groups they cover and their restrictions or gaps in coverage.

**Table 3.** Main health financing mechanisms in Botswana

Financing mechanism	Revenue source	Population covered	Service delivery settings	Service restrictions and gaps
<b>Botswana Public Officers' Medical Aid Scheme</b>	Public funds from general taxes	Public service employees	Private hospitals and clinics, mostly in major urban areas	Restricted to private health providers
<b>Ministry of Health public health financing</b>	Public funds from general taxes, mineral resources and private donor contributions	General population	Government hospitals and clinics that offer rehabilitation services (all tertiary hospitals but only 33% of district hospitals)	Offers limited types of rehabilitation services (e.g. little speech and language therapy) and low volume of services due to low ratio of rehabilitation workers to patients. Rural areas have many gaps due to a lack of most types of rehabilitation services in most district hospitals and PHC
<b>NGOs and development partners</b>	External funds, and some public funds from the Ministry of Health through contracting mechanism	Adults and children with disabilities in the general population	Places where NGOs deliver services (an estimated 10 of the 27 districts in the country)	Available only where NGOs deliver services
<b>Private health insurance schemes</b>	Private funds from insurance premiums and OOP expenditure	Voluntary participants among the general population (17% of the population)	Private hospitals and clinics	Unaffordable for lower income groups
<b>MVA Fund</b>	Public funds from fuel levies, third-party coverage and investment income	Road traffic accident victims	Private hospitals and clinics	Restricted to private health providers

### Rehabilitation service financing through the MVA Fund

The MVA Fund, a government agency established in 1987, has several objectives: 1) to provide compensation in the form of benefits for accident victims; 2) to provide third-party insurance coverage to drivers and owners of motor vehicles; and 3) to promote road safety and accident prevention<sup>(95)</sup>. The MVA Fund is funded by fuel levies, third-party coverage (via a levy imposed on every person who drives a foreign-registered vehicle into the country) and investment income<sup>(95)</sup>. According to the agency's most recent annual report, investment income in 2020 represented 61% of total MVA Fund revenues; the net fuel levy accounted for 27%, and third-party insurance accounted for just 2%. These revenues allow the MVA Fund to ensure that accident victims receive compensation as prescribed by Act 15 of 2007<sup>(96)</sup> (see Box 11).

### Key lessons for other countries

The experience from Botswana's MVA Fund indicates definite advantages to such financing mechanisms. For example:

- **Additional financing mechanisms are an important source of coverage for rehabilitation services:** In Botswana, the MVA Fund has expanded access to rehabilitation by funding more services than are available through the government health care system. Anyone who sustains an injury in a motor vehicle accident is ensured financial coverage for major health expenses, thereby lowering their OOP costs and preventing catastrophic health expenditure.
- **These mechanisms can alleviate budgetary pressure on the health sector and cover more comprehensive services than public health financing mechanisms typically can:** Some experts argue that accident compensation schemes like the MVA Fund have bigger budgets for the services they fund than government health care schemes. Such schemes have narrower and explicit mandates, and may have certain administrative advantages within the country's health financing system because they ensure clear expectations about who pays, for what and how. Accident compensation schemes may also be able to provide more comprehensive and advanced rehabilitation than would otherwise be available in lower income contexts. Road traffic injuries incur a heavy economic burden on victims and national economies, costing countries 3% of their annual gross domestic product<sup>(97)</sup>.

#### Box 11

#### MVA Fund benefits

- Payment of income lost as a result of inability to work due to injuries sustained in a motor vehicle accident.
- Payment of financial support lost by dependents as a result of the death of a person caused by an accident.
- Assistance to enhance the post-accident quality of life of a claimant, as determined by a health practitioner.
- Payment of the cost of treatment rendered by any health practitioner, including consultation, treatment and hospitalization costs.
- Medical treatment or management by any health practitioner, including consultation and hospitalization.
- Rehabilitation by any health practitioner, including consultation, treatment and hospitalization.
- Payment of funeral expenses.
- Payment of incidental expenses, including accommodation, transportation and subsistence costs incurred during treatment or rehabilitation.

The rehabilitation needs of road traffic accident victims are usually complex and long term, and they are often beyond the scope of what governments can routinely offer. The MVA Fund and similar additional financing mechanisms can therefore help mobilize revenues to address significant population needs that would otherwise go unmet.

- **Additional financing mechanisms for rehabilitation services bring extra investment to the sector, they can generate additional jobs and opportunities for rehabilitation professionals and stimulate expansion of rehabilitation services:** Many rehabilitation workers in LMICs consider the field unattractive; recruitment of new graduates into the field is a commonly reported challenge<sup>(98)</sup>. Motivation of rehabilitation health workers in the sector can be low, often due to low wages and limited opportunity for additional private income streams<sup>(98)</sup>. Additional revenue sources, even those that pose some equity challenges, may lead to a positive net gain for the sector by increasing its appeal as an area of work<sup>(98)</sup>.

Botswana's experience reveals certain risks associated with financing mechanisms like the MVA Fund that operate outside the health system. Policy-makers should be aware of these risks and plan their policies to manage such risks.

- **Multiple funding sources fragment financing of health services, including rehabilitation:** The MVA Fund, as a major rehabilitation funding source that operates in parallel with the health sector, may affect prospects for integrating rehabilitation into the government's health financing system. While the fund helps increase demand for and provision of rehabilitation services, fragmentation of financing can create administrative inefficiencies in a health system, as each financing mechanism operating in parallel requires its own management system, and creates the need for additional harmonization and coordination among funders, purchasers and service providers. Countries like Botswana with a fragmented health financing system must seek maximal harmonization across pools (in terms of rehabilitation benefits, payment methods and price rates offered) to ensure that the system functions optimally for service users<sup>(99)</sup>.
- **Multiple funding sources can work for or against equity goals:** MVA Fund beneficiaries are restricted to using private facilities and providers, thus skewing rehabilitation service provision toward the private sector. This can create equity concerns for MVA Fund users who live in areas where private facilities are not available, or users who do not get rehabilitation services financed by the MVA Fund but would prefer or benefit from using private-sector services. Managing this risk would require regulatory mechanisms to ensure equitable access and quality of care at both public and private facilities.

Revenue collection for the MVA Fund may also not be equitable. The fund's revenues come from indirect taxes in the form of an added tax on goods consumed by households or companies. Although this indirect tax is imposed on vehicles, which are typically owned by the better off, these tax rates do not typically differentiate among wealthier and poorer consumers, ultimately placing a disproportionate burden on poorer populations<sup>(60, 100)</sup>, or poorer owners of vehicles, in this case.

The MVA Fund demonstrates how countries can effectively mobilize revenues for rehabilitation from additional sources to better meet population service needs. Further research is needed to understand how these schemes can best interact with broader health financing systems and the extent to which they can offer improved and equitable financial protection for rehabilitation services.



## Part III.

# Strategic purchasing of rehabilitation services

Like some other health services, rehabilitation has unique characteristics that may create distinctive health financing issues and require tailored strategic purchasing approaches.

In health care financing, *purchasing* refers to the transfer of funds from a purchaser of health services to health providers to pay for services delivered to the population covered <sup>(101)</sup>. *Strategic purchasing* is an intentional approach that links such payments to provider performance and ultimately to population health needs. In contrast, so-called *passive purchasing* refers to transferring funds to providers without considering provider performance, monitoring of service delivery and quality data, or explicit alignment with population needs.

Strategic purchasing requires the purchaser to continuously make decisions about:

- what to buy (which services will best address population health needs and can be provided with available resources);
- from whom to buy (which providers can most effectively deliver those services); and
- how to buy (how and how much to pay those providers and how to regulate them).

Chapter 5 discusses processes for defining and integrating rehabilitation services in health benefits packages. Key tools for determining who to purchase these services from and how – contracting and provider payment mechanisms – are discussed in Chapter 6.

## Chapter 5.

# Rehabilitation in health benefits packages

### Box 12

#### What are health benefits packages?

A *health benefits package* is a set of services and commodities financed on behalf of the beneficiary population and provided for free or with a copayment <sup>(101)</sup>. Ideally, benefits packages spell out what services are being purchased and what services are not <sup>(102)</sup>. For rehabilitation, packages may list the interventions to be delivered and service types to be provided (such as physiotherapy, occupational therapy and speech and language therapy), the volume of services to be provided (number of sessions and sometimes the length of the treatment period), the service locations by level of care (primary, secondary, tertiary, specialized or community settings) and, in some cases, the rehabilitation professionals and resources needed to deliver the services. Clearly defined benefits packages are easier to cost and enable better financial planning; they can also help to ensure more consistent quality of care across providers.

Health benefits packages should be informed by empirical evidence on population needs and demand and the supply of services, and they should reflect budgetary realities and supply-side readiness, especially in rural and urban areas.

Health resources are always finite with high opportunity costs, especially for historically underprioritized services like rehabilitation. In the context of constrained revenues, policy-makers must make difficult decisions about which services will be financed for the population and which will not. A *health benefits package* (in some countries referred to as an *essential package of health services*), is the policy tool that outlines prioritized interventions that will be financed for the population covered (see Box 12). Benefits package design takes a different form in each country, but one recommended approach has seven core elements: defining the methodology, creating and using evidence, understanding costs of the package and its budget implications, discussions with and recommendations from multiple interested parties, resource allocation, implementation, and learning and revising, as depicted in Fig. 4. Each step of this process requires policy-makers to prioritize and ration health services – giving rise to difficult and at times controversial decisions about which services or programmes are excluded from the package. For this reason, benefits packages should be designed based on robust evidence and through an inclusive and transparent process. See Box 13 for eight principles of health benefits package design <sup>(103)</sup>.

Including rehabilitation in health benefits packages is an important step toward prioritizing and recognizing rehabilitation as an essential health service and a core component of UHC. Rehabilitation services compete with other health priorities for inclusion in these packages; however, and a good understanding of the burden that rehabilitation needs create and the importance of rehabilitation in the spectrum of national health priorities is necessary.

Box 13

**The eight principles of health benefits package design**

Essential health benefits package design should be:

- impartial, aiming for universality;
- democratic and inclusive with public involvement, also from disadvantaged populations;
- based on national values and clearly defined criteria;
- data driven and evidence based, including revisions in light of new evidence;
- respectful of the difference between data, dialogue and decision;
- linked to robust financing mechanisms;
- include effective service delivery mechanisms that can promote quality care; and
- open and transparent in all steps of the process and decisions, including trade-offs, which should be clearly communicated.

Fig. 4. The health benefits package design process



Source: Adapted from Glassman, Giedion and Smith, 2017 (104).

**Overview of current practices**

Rehabilitation has often been overlooked and underprioritized in the health systems of LMICs. It remains under-represented in many health benefits packages in LMICs (105) (see Box 14). This is gradually changing as countries recognize rehabilitation as an essential health service and understand the contribution it makes to the health and well-being of individuals and the population as a whole (31). There is notable progress in the inclusion of rehabilitation in health benefits packages with recent expansion in Georgia, the Philippines and Chile, among other countries (23, 88, 106).

**Rehabilitation in health benefits packages at a glance**

- A benefits package is a set of services and commodities that the purchaser covers partially or fully on behalf of the beneficiary population.
- The process of defining rehabilitation benefits should be integrated into general health benefits package development and include diverse rehabilitation stakeholders, including service user organizations.
- To maximize population health outcomes using limited resources, rehabilitation benefits should be explicitly defined and based on evidence.
- Decision-makers involved in defining benefits packages should consider not only which rehabilitation benefits to provide but also which can be realistically provided to all those who need them regardless of locality, demographic characteristics or health condition.

Box 14

**Rehabilitation in Health Benefits Packages – WHO Global Survey Results**

In 2020–2021, WHO surveyed all Member States on the development and design of health benefits packages. This survey included a sample of 15 rehabilitation interventions that addressed physical rehabilitation, hearing care, care for older people, care for depression in adults and provision of assistive technology. The results from 89 responding countries with schemes achieving over 50% population coverage showed that:

- Eleven countries included all 15 rehabilitation interventions.
- Five countries did not include any rehabilitation interventions in their benefits packages.
- The average number (the maximum being 15) of rehabilitation interventions included in health benefits packages across all 89 countries was eight.
- Higher income countries are more likely to include both “high cost-high technology” and “low cost-low technology” rehabilitation interventions.
- LMICs were less likely to include high cost-high technology rehabilitation interventions, instead offering lower cost interventions.

In places where health benefits packages include rehabilitation services, those packages often do not specify the type, mix and volume of services available to users with different rehabilitation needs.<sup>3</sup> This is one indication that passive purchasing approaches are still prevalent for rehabilitation services. Transparent and precise definition and listing of services in these packages will enable strategic purchasers to develop more accurate cost and budget impact estimates and also enable better monitoring of quality and completeness of care. Still, many countries include only broad definitions of rehabilitation, which can leave too much room for interpretation by users and providers and can create a disconnect between what is included and what is actually available and delivered <sup>(101)</sup>.

The document review found that the types and volume of services covered were well defined in social and private insurance schemes, notably Viet Nam Social Health Insurance (WHO Regional Office for South-East Asia, unpublished data, 2019), the Philippines' PhilHealth and the Republic of Korea's National Health Insurance Service <sup>(88, 107)</sup>. In some cases, the degree of specificity necessary for strategic purchasing is supported through availability of national service standards and guidelines. These are often developed to improve rehabilitation service planning and quality of care, and they can accompany processes that define health benefits packages. One such example is the commissioning guidance by the United Kingdom's NHS, as it specifies rehabilitation models of care, including the type, volume and expected outcomes of care and the settings in which care can be delivered to patients with different rehabilitation needs <sup>(108)</sup>.

Estimating rehabilitation needs is an important step when defining rehabilitation in health benefits packages and helps ensure that the prioritized services align with population needs. Countries use different types of data to do this. For example, Georgia recently performed a rigorous prioritization exercise for selecting rehabilitation interventions to finance through its Universal Health Care Programme <sup>(109)</sup>. The process involved reviewing the country's burden of disease data, drawing heavily on the 2019 results of the GBD Study and considering health conditions amenable to rehabilitation <sup>(109, 110)</sup>. Health conditions with the highest disability burden were identified and matched with cost-effective interventions drawn from WHO's draft Package of Interventions for Rehabilitation (PIR) (see Box 15). The list was further refined based on the services available in the country, expert reviews and stakeholder validation. Some countries rely on disability prevalence data to understand rehabilitation needs. But relying solely on disability data to determine rehabilitation needs will likely lead to underestimating the true need because many people with health conditions that benefit from rehabilitation may not have a disability status.

Box 15

**WHO Package of Interventions for Rehabilitation**



The WHO PIR, launched in July 2023, contains evidence-based interventions for rehabilitation for 20 health conditions. For each condition, it includes interventions that are effective, and the cost-benefit ratio favours the benefit. Specific consideration for the selection of interventions to be included in the PIR was given to the low- and medium-resource context. All interventions included in the PIR contain information on the requirements for materials (assistive products, equipment, consumables) and human resources (workforce, time), and recommendations on the availability at service delivery platforms.

The PIR is designed to support ministries of health in planning, budgeting and integrating rehabilitation interventions into health benefit packages across service delivery platforms and along the continuum of care, according to national needs and available resources.

<sup>3</sup> Rehabilitation needs can vary according to the degree of disability or impaired functioning within the person's environment. Rehabilitation needs are also informed by individual treatment goals.

A key consideration when designing a health benefits package that includes rehabilitation is the existing availability of rehabilitation services in a country, especially when limited, for example in regional towns and rural and remote areas <sup>(111)</sup>. In many LMICs, the rehabilitation worker capacity is a constraint on the expansion of rehabilitation services, and the associated financing or purchasing efforts. Some countries still lack training of some rehabilitation professions, as well as professional licensing regulations. Mapping and understanding of both rehabilitation workers and rehabilitation service availability is crucial to the development of benefits packages. For example, many LMICs have very few speech and language therapists, thus the services and interventions they typically provide supporting communication skills and swallowing abilities are difficult to purchase and provide. Also common in LMICs, is that rehabilitation services are concentrated in secondary, tertiary or specialized facilities at the regional or central levels, and people living in rural or remote areas face barriers to accessing services that should be available to them through inclusion of rehabilitation services in the health benefits packages. Countries are using different approaches to address rural-urban service disparities and access issues. For example, Azerbaijan and Finland have included telerehabilitation in their benefits packages to ensure continued access, especially during the COVID-19 pandemic <sup>(112, 113)</sup>, and Botswana's MVA Fund covers transportation to rehabilitation services to minimize additional costs to users and access barriers <sup>(96)</sup>.

## Considerations and suggested approaches

### 1. A defined list of rehabilitation interventions and services should be integrated into health benefits packages to ensure access to services according to population need.

The process that governs the prioritization of rehabilitation services should align with existing health benefits package development processes (where such exist) and be inclusive of diverse stakeholders, especially rehabilitation service providers, service user groups and organizations for people with disabilities, who can provide valuable inputs on user needs and help advocate for service prioritization.

#### Suggested approaches:

- Ministries of health and other purchasers should collate or create data on rehabilitation needs by focusing on health conditions that benefit from rehabilitation, then prioritize conditions for which rehabilitation services will be financed. Publicly available databases such as the Rehabilitation Need Estimator or national, regional or worldwide GBD data can be the evidence to guide this process (see Box 16).
- Decision-makers should rely on health technology assessments and consider the cost-effectiveness of interventions when selecting priority rehabilitation interventions. WHO's PIR <sup>(49)</sup>, includes evidence-based and globally agreed essential rehabilitation interventions for 20 priority health conditions. This resource, launched by WHO in 2023, also includes information about resource requirements for use in costing rehabilitation benefits packages.
- While defining rehabilitation benefits is necessary, the specification should allow for a degree of provider autonomy to create individualized rehabilitation treatment plans and vary the services based on the individual's rehabilitation needs and functioning goals.
- Where health benefits package development processes are not formalized or standardized, ministries of health and other purchasers can create multistakeholder processes based on evidence and experience from other countries. Open access publications like *What's in, what's out? Designing benefits for universal health coverage* <sup>(104)</sup> provide information on best practices, lessons learned and key considerations for benefits package design in different countries that can be adapted for interim use (see the list of resources below).
- As good practice, benefits package development should be revisited every few years to ensure alignment with changing population needs, the evolving service delivery landscape and standards, and emergence of new interventions and technologies. Box 17 illustrates an example of a multistakeholder benefits package revision process in the United Republic of Tanzania.

### 2. The defining of rehabilitation in health benefits packages should reflect available budgets and the realities of rehabilitation service availability and readiness.

Health revenues are never enough to fully meet population needs, especially with continuously rising health care needs and costs. Strategic purchasers should understand budgetary realities, develop service packages that fit within these budgets <sup>(115)</sup>, and plan for gradual expansion of funding and funded services over time. The availability of rehabilitation facilities, workers and their competencies to deliver services included in the benefits packages are also important considerations to avoid a mismatch between promised care and actual available care.

#### Suggested approaches:

- Health service purchasers should routinely cost benefits packages and compare them with available budgets each year. Countries can use existing health system costing and planning tools such as the OneHealth tool <sup>(116)</sup> to understand the resource requirements of rehabilitation services, impact on health budgets and plan for service expansion over time (see the resources list below).
- Ministries of health should create rehabilitation modules in health service availability and readiness studies and routinely identify the availability of rehabilitation services or, if needed, conduct a rapid service mapping exercise.
- Ministries of health and other sectors responsible for rehabilitation service provision should continuously invest in building rehabilitation service infrastructure at different levels of service provision and address geographic gaps in available services.
- Ministries of health should invest in the capacity of rehabilitation workers to effectively deliver high-quality rehabilitation services included in health benefits packages, such as through pre-service or in-service trainings, standardized practice guidelines and routine professional development opportunities.
- Ministries of health should partner with the ministry of education and continuously collaborate with local educational institutions to build rehabilitation worker capacities and develop a rehabilitation workforce that can meet population needs.

#### Box 16

### The Rehabilitation Needs Estimator



The Rehabilitation Needs Estimator was launched in 2021. This web-based tool provides global-, regional- and country-level data visualizations of the estimated need for rehabilitation globally. The tool utilizes data from the GBD Study and draws on the data for health conditions that benefit from rehabilitation. The tool can be found online and will be updated from time to time with new GBD data.



## Box 17

**Revising rehabilitation benefits in the United Republic of Tanzania**

In the United Republic of Tanzania, the Rehabilitation Technical Working Group was engaged in revising the National Package of Essential Health Interventions to include various rehabilitation services and assistive products at all levels of care. The revision process expanded the list of rehabilitation interventions and assistive products. The Technical Working Group included a variety of stakeholders, including practitioners, professional associations, academics, consumers, local and international NGOs and the Ministry of Health, Community Development, Gender, Elderly and Children. This multistakeholder engagement promoted a final package that reflected user needs and provider capacities. The revised benefits package in the United Republic of Tanzania now includes physiotherapy, occupational therapy, speech and language therapy, vision services and assistive products at all levels of care <sup>(114)</sup>.

**Further reading and resources**

WHO Package of Interventions for Rehabilitation

<https://www.who.int/activities/integrating-rehabilitation-into-health-systems/service-delivery/package-of-interventions-for-rehabilitation>

WHO Rehabilitation Need Estimator

<https://vizhub.healthdata.org/rehabilitation/>

Global Burden of Disease Study

<https://ghdx.healthdata.org/gbd-2019>

What's in, what's out? Designing benefits for universal health coverage

<https://www.cgdev.org/publication/whats-in-whats-out-designing-benefits-universal-health-coverage>

OneHealth tool

<https://www.who.int/tools/onehealth>

WHO Service Availability and Readiness Assessment

[https://www.who.int/data/data-collection-tools/service-availability-and-readiness-assessment-\(sara\)](https://www.who.int/data/data-collection-tools/service-availability-and-readiness-assessment-(sara))

## Chapter 6.

# Contracting and provider payment for rehabilitation services

## Box 18

**What are contracts and provider payment mechanisms?**

Strategic purchasers have several tools available to incentivize quality and efficiency of health service delivery. *Contracts* are negotiated agreements between purchasers and providers that specify the mix and volume of services to be purchased, how the services will be purchased, market entry requirements for providers (such as minimum standards for accreditation), and regulatory mechanisms to monitor provider performance <sup>(117)</sup>.

Purchasers and providers can negotiate contracts for rehabilitation services in different ways. Contracts should be specific enough to control costs and promote quality of care but flexible enough to allow person-centred responsiveness to patient needs based on the complexity and progression of their condition <sup>(65)</sup> and their individual goals.

*Provider payment mechanisms* are a core component of contracting; they determine how and how much providers will be paid for covered services. They play an important role in creating efficiency and quality incentives. Different types of provider payment mechanisms are used in health care settings, and they are broadly classified as either *prospective* (wherein payment occurs before services are provided and are not tied to the volume of services provided) or *retrospective* (wherein payment occurs after services are provided) <sup>(118)</sup>. Each provider payment mechanism is unique in the incentives it creates for providers, the level of administration and management it requires, and the context in which it can promote efficiency and quality of care.

Contracts and provider payment mechanisms are useful and important tools to promote accountability among rehabilitation service purchasers and providers. They create incentives to improve efficiency, quality and equity of services in the context of limited resources. Well-designed and fit-for-purpose contracts and provider payment mechanisms can accommodate the nature of rehabilitation services and make the most of the limited financing to improve the service experience and service outcomes for users (see Box 18).

## Overview of current practices

### Contracting

Contracting practices for rehabilitation services typically depend on the legislative environment and the extent to which contracts are used in financing health care in the country. For example, contracts are usually used in health systems where purchasers, such as health insurance agencies, are organizationally separate from service providers, such as public health facilities. In some centralized service financing models, where both purchasers and providers are under the same organizational unit (typically the ministry of health), the national legislature may not allow transactional documents like contracts to be officially negotiated and deployed. In these cases, transparent management of the purchasing of services is achieved using alternative mechanisms like national service guidelines or facility accreditation procedures. In either of these models, a relevant policy and legislative environment, as well as an enabling health care market, will affect the extent to which the contracting arrangements are operationalized effectively.

Financing mechanisms that use contracts for rehabilitation services typically define the components of service delivery to enable accountability. The following components are commonly used:

- The volume of care to be provided (such as the number of speech and language therapy sessions in one treatment cycle).
- The duration of care to be provided (such as the length of stay for inpatient rehabilitation for subacute conditions).
- The mix of services to be provided (such as a combined service package of limb prosthesis and physiotherapy services).
- Location of services (such as added incentives to provide care to rural or underserved areas).
- Referral and gatekeeping mechanisms (such as practitioner referral to occupational therapists).
- Costs of care and tariffs (such as a negotiated amount for a physiotherapy session or one episode of care).
- Standards for contracting with the purchaser and receiving funds or, standards for accreditation as a rehabilitation service provider in the country.
- Accountability procedures for purchasers and providers and mechanisms for enforcing compliance (see Box 19 for an example from Switzerland).

### Contracting and provider payment mechanisms at a glance

- Contracts and provider payment mechanisms are important tools for strategic purchasing to promote efficient, good quality rehabilitation services.
- Contractual arrangements for rehabilitation are largely non-existent in LMICs, and more common in many high-income countries.
- Provider payment mechanisms for rehabilitation should be tailored to account for variations in services, costs and outcomes.
- Purchasing of rehabilitation services should prioritize quality over quantity and be based on measures of patient functioning, autonomy, return to work, discharge to the community, mental well-being and quality of life over time.

In LMICs, contracts for rehabilitation services are either not used or underdeveloped and lack the detail necessary for effective accountability. This reflects the relative dominance of passive purchasing approaches in many LMICs, not only for rehabilitation but also many other types of health care. Contracting with private providers of rehabilitation services, including NGOs, through publicly funded health financing mechanisms is especially uncommon. A few LMICs have developed contracting mechanisms with NGOs for delivery of rehabilitation services aimed at specific population groups. One example is Botswana's Ministry of Health and Wellness, which has contracted some established NGOs using central budgets and has purchased services for children with disabilities<sup>(92)</sup>. This approach of contracting with NGOs to deliver rehabilitation services to patient groups with medium- to long-term rehabilitation needs is also seen in high-income countries. This aligns with approaches commonly seen in the social care sector, where NGOs deliver support for personal care, education and livelihood programmes for people with disabilities.

### Box 19

#### Contracting for rehabilitation in Switzerland

Swiss compulsory private health insurance schemes use various measures to monitor the use of rehabilitation services, such as contract stipulations for the use of outpatient physiotherapy services.

Swiss private health insurance schemes use a gatekeeping system, which helps ensure that service use is based on need. Thus, rehabilitation treatment is prescribed by the patient's general practitioner. The scheme caps the number of services that can be provided in each treatment cycle, but the number of treatment cycles is not limited. The user fee is higher for the first service in the cycle, and each new cycle requires a new referral from the general practitioner to disincentivize unnecessary referrals. An observational study found that these caps were effective in achieving efficiency and quality of patient-centred care<sup>(119)</sup>.

Rehabilitation professionals have some autonomy in deciding the type of therapy to provide, which allows them to tailor treatment plans to account for variations in patient needs. However, they must abide by national care guidelines.

This model is a good example of how purchasers can influence the volume and quality of care given by service providers and how contracts can document and prescribe these arrangements.

## Provider payment mechanisms

When contracting with providers, purchasers must select payment mechanisms and determine how and how much to pay providers for services. Evidence suggests that different types of provider payment mechanisms are used for rehabilitation services both within and across countries, and their selection can be informed by many factors, such as the level and type of care, specific services delivered, the types of providers involved, how these providers will be paid, and the incentives purchasers want to create in terms of service use, efficiency and coordination of care.

The way rehabilitation services are organized and delivered can affect the choice of provider payment mechanism. For example, rehabilitation services can be provided at any level of care, from community- or home-based settings all the way to tertiary or specialized centres. They can be provided in outpatient or inpatient settings and as a part of acute, subacute or chronic care. The provider payment mechanisms work differently in all these settings and should vary accordingly. The duration of rehabilitation can differ depending on the patient's level of impairment at the onset of care<sup>(120)</sup> and the individual's goals within their environment. Thus, the provider payment mechanism must consider the financial risk associated with such variation in treatment needs. Rehabilitation services may be provided by a multidisciplinary team that includes different types of rehabilitation professionals (such as physiotherapists, occupational therapists and speech and language therapists) and/or medical doctors, nurses and community health workers. Careful selection of provider payment mechanisms is important for ensuring effective coordination of care by these professionals. Purchasers must consider all these variables when negotiating contracts and carefully select a mix of provider payment mechanisms that will incentivize efficient, effective, good-quality care throughout the treatment cycle.

**Table 4.** Common provider payment mechanisms for rehabilitation

Provider payment method	Definition	Examples	Types of care
Fee-for-service	Providers are paid a fixed amount retrospectively for each individual service provided.	Nepal's National Healthcare	Inpatient, outpatient
		Australia's Social Health Insurance (Medicare)	Outpatient
Activity-based (case-based) payments or diagnosis-related groups	Providers are paid a fixed amount upon patient admission or discharge, depending on the diagnosis. Cost adjustments depend on case severity, patient characteristics, treatment pathways, etc. Activity-based payments are usually retrospective.	United States' Medicare system <sup>(120)</sup>	Inpatient, outpatient
		Germany's Social Health Insurance	Inpatient
		Chile's National Health Fund	Outpatient
		Georgia's Universal Health Coverage Programme	Inpatient, outpatient
Global budgets	Providers prospectively receive a bulk amount of funds for a specific period to cover a set of services.  Global budgets can be flexible or tied to line item costs (e.g. staff salaries).	Myanmar's tax-funded Township Health System	Inpatient, outpatient
		Jordan's tax-funded Civil Insurance Programme	Inpatient, outpatient
Voucher	Eligible individuals are issued vouchers for use at the point of care. Providers then receive a prospectively determined payment based on the volume of services delivered.	Georgia's Children's Rehabilitation-Habilitation Programme	Outpatient
Per diem	Hospitals are retrospectively paid a fixed amount per day for each admitted patient.	Cambodia's National Social Security Fund	Inpatient, outpatient

The provider payment mechanisms commonly used include fee-for-service, global budgets and activity-based funding. Countries often use multiple provider payment methods for rehabilitation, varied across the financing mechanism used, type of services provided, provider types and service provision levels. Fee-for-service, which pays for services after they are delivered, is often used for outpatient rehabilitation services. Activity-based, or case-based, models and global budgets are commonly used for inpatient rehabilitation services, with activity-based models considered to be a more strategic approach to purchasing inpatient care<sup>(4)</sup> (see Table 4). Voucher and per diem provider payment mechanisms are also used for rehabilitation services in LMICs, although less frequently than the others listed above.

Evidence on how different provider payment mechanisms affect the delivery of rehabilitation services is limited. Some evidence shows that fee-for-service may lead to overuse of services and disincentivize coordination of care among multidisciplinary teams<sup>(121)</sup>. Some countries, such as Switzerland, use gatekeeping through primary care physicians to reduce inefficient rehabilitation services and overuse of services. In the Netherlands (Kingdom of the), activity-based payments have been shown to improve efficiency of care by increasing the intensity of treatment (hours per week) and decreasing the length of stay for geriatric rehabilitation for most of the conditions studied<sup>(122)</sup>. But little is known about the quality of care and functioning outcomes. A qualitative study of activity-based payment in Canada for physiotherapy has suggested that overly rigid policies on the quantity or type of services can prevent providers from being responsive to the individual needs of patients, especially those with complex issues<sup>(65)</sup>.

## Rehabilitation outcomes for strategic purchasing

Strategic purchasing arrangements often seek to:

- use available tools such as benefits packages, contracts and provider payment mechanisms to incentivize high-quality patient care outcomes; and
- tie payments to those outcomes.

For rehabilitation, those outcomes mostly measure improvements in a patient's functioning within their environment, which is administratively different from typical clinical outcome measurements, which focus on improvement in the health condition itself. Examples of desirable rehabilitation service outcomes include improvements in functioning, increased independence, discharge to community settings, return to the workforce, better quality of life, and improved patient-reported outcome measures such as perceived functioning and well-being<sup>(123)</sup>. Outcome monitoring for rehabilitation payments is rarely used in LMICs and is often limited to high-income settings (such as Medicare in the United States) or financing schemes outside the health sector (such as workers' compensation schemes in Canada). Information on how rehabilitation outcomes are tied to service payments and how this can affect overall quality of care and efficiency using available revenues is limited.

Many LMICs continue to rely on more passive purchasing methods for rehabilitation services. While there is much to learn about how high-income countries use strategic purchasing for rehabilitation services, these countries have vastly different health system contexts, and the lessons may not all apply to LMICs. Decision-makers need more opportunities to learn from existing practices, adapt them to the country context and use tools to make the most of the scarce resources available for rehabilitation services.

## Considerations and suggested approaches

### 1. Selection of appropriate providers, contracting approaches and provider payment mechanisms will depend on the context in which these are implemented and incentives that need to be created.

Provider payment mechanisms for rehabilitation should strike a delicate balance between allowing standardization of service outputs and outcomes and giving providers some flexibility to respond to individual patient needs. The mechanisms should also incentivize the provision of the necessary volume of services and include monitoring of treatment effectiveness over time and enforce efficiency and quality of care.

#### Suggested approaches:

- In selecting the provider payment mechanism for rehabilitation services, purchasers must carefully assess the existing health financing system, develop service outcome goals and understand the types of incentives that would help achieve these goals. See further reading and resources on practical guides on provider payment mechanisms.
- Purchasers should also understand the institutional conditions needed to successfully implement the selected provider payment mechanism and ensure that such conditions exist.
- Purchasers should apply a mix of provider payment mechanisms to achieve the strategic purchasing objectives, based on the type of services, health service level and setting in which services are delivered. For example, capitation and fee-for-service are frequently used for outpatient health services, whereas case-based payment and global budgets prevail for inpatient ones.
- The purchasers should carefully consider the beneficial and unintended or harmful incentives that different provider payment mechanisms can create ( ) and prepare to mitigate and manage the consequences of the latter. For example, overuse of care under fee-for-service can be controlled by instituting gatekeeping functions, or, in some cases, salaried personnel can be given additional fee-for-service payments for rendering recurring and long-term rehabilitation services.
- Depending on the legislative context of the country, contracts, national service guidelines, facility standards or accreditation processes can be deployed to promote accountability among purchasers and providers of rehabilitation.
- Public purchasers should increasingly contract for-profit private providers and NGOs to promote access to rehabilitation services, especially in places where public services are scarce, insufficient or face challenges.
- When engaging in public-private partnerships, purchasers must account for differences in service costs and processes between public and private providers, institute data-sharing arrangements with private providers and NGOs and set clear service quality standards and guidelines that apply to all providers.

### 2. The assessment of functioning should be routinely done within health care to institutionalize monitoring of the outcomes of rehabilitation services and tie these outcomes to payments.

The assessment of functioning may be new to the health sector in many countries and its implementation may represent a significant development in how health service quality is assessed. However, this change is an essential step towards building a user-oriented health system, that focuses on increasing the quality, not just the quantity, of the lives it saves.

#### Suggested approaches:

- Service purchasers and providers should establish data-sharing mechanisms to capture rehabilitation service inputs, processes, outputs and outcomes based on international standards and/or nationally defined indicators.<sup>4</sup> This will require integrating rehabilitation modules into routine health information systems (RHIS) as well as financial reporting systems.
- Ministries of health should implement rehabilitation and functioning classification systems for routine reporting. The ICF <sup>(125)</sup> offers standardized language and practical tools for recording information on the functioning and disability of an individual.
- Measurement tools such as the Functional Independence Measure (FIM) can be applied to track and measure rehabilitation outcomes over the course of rehabilitation treatment (see Box 20). FIM has also been used to classify cases for activity-based payment for rehabilitation services <sup>(120)</sup>.

#### Box 20

#### Selected resources on rehabilitation outcomes

Several publicly available web databases and resources can help inform the development and adaptation of FIM and other outcome-measure systems for rehabilitation.

The United Kingdom FIM+FAM (Functional Assessment Measure) manual provides a detailed, step-by-step approach to using the scoring system at the service delivery level:

<http://www.gicu.sgul.ac.uk/resources-for-current-staff/rehabilitation-during-and-after-a-critical-illness/FIMFAM-manual-v2.2-Sept-2012.pdf/view>

The Australasian Rehabilitation Outcomes Centre offers tools and resources for improving the quality of rehabilitation care: <https://www.uow.edu.au/ahsri/aroc/tools-resources/>

The National Quality Forum in the United States endorses and publicizes quality measures that are based on evaluations by expert committees comprising various stakeholders, including patients, providers and payers: <https://www.qualityforum.org/Home.aspx>

<sup>4</sup> Key informant interview, 6 August 2021.

### 3. The capacity of service providers is foundational to the successful rollout of strategic health purchasing approaches for rehabilitation.

Service providers and facility managers are the face of the health financing and delivery system, and their capacity to implement proposed purchasing arrangements will determine their success or failure. If rehabilitation workers, including administrative staff, are not supported with knowledge, skills, basic working conditions and the necessary infrastructure, strategic health purchasing efforts will likely fall short of achieving their intended impact.

#### Suggested approaches:

- Ministry of health and health service purchasers should continuously invest in building the professional skills of rehabilitation personnel and support facility staff in understanding and implementing the necessary standards of care and financing, accounting and reporting systems.
- The provider payment methods selected should not only incentivize quality and efficient care, but also yield competitive salaries and remuneration for staff retention and attraction.
- Service providers should be actively engaged in the development standards and guidelines that determine the quality of care.

#### Further reading and resources

Assessing health provider payment systems: a practical guide for countries moving toward universal health coverage

<https://jointlearningnetwork.org/resources/assessing-health-provider-payment-systems-a-practical-guide-for-countries-w/>

How to become a strategic purchaser of rehabilitation services

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9589378/>

Strategic contracting practices to improve procurement of health commodities

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9589378/>

## Case study: Expansion of rehabilitation benefits in Chile's health financing mechanisms

In 2019, the Government of Chile expanded rehabilitation benefits in its social health insurance scheme using benefits specification approaches described in this resource. This case study examines the factors that enabled this reform and laid the foundation for future improvements in rehabilitation benefits in Chile. First, the background section will outline the existing health financing context and rehabilitation need in Chile; the next section will discuss the reform that took place. The last section draws key lessons for other countries.

### Background

Chile's social health insurance system has a large public insurer, the Fondo Nacional de Salud [National Health Fund] (FONASA) that covers approximately 78% of the population, including most low-income citizens. The country also has multiple private for-profit health plans (Instituciones de Salud Previsional) (ISAPRES) that cover the remaining population, generally wealthier Chileans <sup>(126,127)</sup>. By law, private insurance schemes cannot offer less coverage than FONASA; thus, any change to FONASA benefits automatically applies to ISAPRES as well <sup>(128)</sup>.

According to the 2016–2017 National Health Survey, 16.7% of the Chilean population had impaired functioning, and 42% of this group had severely or moderately reduced functioning that could benefit from rehabilitation <sup>(129)</sup>. However, most rehabilitation benefits in Chile came in limited packages linked to specific health conditions or were reserved for people registered in the National Disability Registry, which includes only 5.5% of Chileans with impaired functioning <sup>(129)</sup>.

Health benefits under FONASA, including rehabilitation benefits, can be added or amended through multiple policy mechanisms, namely the Garantía Explícitas en Salud [Explicit Health Guarantees Law] (GES) and the Ricarte Soto Law. The GES dictates the minimum level of health benefits that FONASA and ISAPRES are required to cover <sup>(126)</sup>. At the 2005 inception of the GES, rehabilitation was included as a health benefit linked to some of the initial 25 health conditions covered in the GES <sup>(130)</sup>. Since 2005, the GES list has expanded to include 85 health conditions, with rehabilitation services and assistive products covered for many chronic diseases, strokes, some traumatic injuries and conditions experienced by adults over the age of 65 years <sup>(131)</sup>. In addition, the Ricarte Soto Law created the Financial Protection System for High-Cost Diagnostics and Treatments, which allows groups or individual citizens to propose coverage for new high-cost medical services or technologies <sup>(132)</sup>. A number of specialized rehabilitation services and more advanced assistive products, which can be more expensive, have been added using this mechanism.

#### Box 21

### Expanded rehabilitation benefits in Chile

Before the 2019 reform, physical therapy services were capped at 90 visits per year. Annual limits on speech and language therapy depended on the type of service and varied from 15 to 30 sessions per year. Occupational therapy was not covered at all, and patients had to pay out of pocket for every session.

The reform added new occupational therapy benefits, including assessment and provision of interventions. Other new benefits include technical aids such as prosthetics, orthotics, canes, wheelchairs and software to facilitate communication. At-home care, such as home visits, was added to help beneficiaries adapt their home environment. Individuals can choose their provider for these services from a list of FONASA's approved providers.

## The expansion of rehabilitation benefits in Chile

In 2019, Chile introduced an improved set of FONASA benefits for speech and language therapy, physical therapy and occupational therapy for individuals registered in the National Disability Registry. The impetus behind this expansion was the financial disadvantages experienced by people with rehabilitation needs. The reform removes limits on the amount of speech and language therapy and physical therapy covered by FONASA and adds new occupational therapy services to the benefits package (see Box 21 <sup>(133,134)</sup>). Beneficiaries are still subject to the same cost-sharing requirements as before and are still required to purchase vouchers from FONASA for these expanded services, which may pose ongoing barriers for those requiring higher amounts intensity of care <sup>(128)</sup>. However, these additional benefits are expected to decrease the financial burden on the estimated 92% of individuals in the National Disability Registry (360 000 people) who previously accessed rehabilitation services outside their FONASA coverage <sup>(133)</sup>.

During the decision-making process, policy-makers drew on inputs from user groups and providers, international and national cost-effectiveness data, and disease burden data. Key to this policy change was multisectoral and multistakeholder collaboration to achieve the common goal – increased financial protection for those who need rehabilitation.

The reform was initiated largely as a result of persistent advocacy from civil society organizations and people with disabilities and their families, which led the Servicio Nacional de la Discapacidad [National Disability Service] (SENADIS) under the Ministry of Social Development and Family and the Ministry of Health to take action <sup>(135)</sup>.<sup>5</sup> Complementing this advocacy was political will from key figures at SENADIS and the Ministry of Health, who worked with rehabilitation professional associations and FONASA to formulate the benefits packages.<sup>7</sup> Policy-makers were also responding to the rising numbers of children diagnosed with attention deficit hyperactivity disorder and autism spectrum disorders, as well as adults with chronic diseases such as diabetes, stroke and cancer – all conditions that can benefit from rehabilitation services <sup>(136)</sup>.

Coordination between the health and social sectors (FONASA and SENADIS) was a key enabler of the expansion of rehabilitation benefits <sup>(133)</sup>. While no formal mechanism exists to coordinate FONASA and SENADIS, the two entities have a history of coordination dating back to at least 2007, when they worked together to expand rehabilitation services within PHC. Chile's signing of the United Nations Convention on the Rights of Persons with Disabilities, also in 2007, helped further prioritize disability issues and rehabilitation in Chilean policy-making.<sup>7</sup> This record of collaboration between the two sectors laid the foundation for the 2019 expansion of rehabilitation benefits and demonstrates the importance of coordination across sectors and ministries in defining rehabilitation benefits.

<sup>5</sup> Key informant interview, 17 November 2022.

## Key lessons for other countries

There are many valuable lessons emerging from the Government of Chile's experience in expanding rehabilitation services in Chile's health benefits policies. These lessons can help other countries chart the way to promote financial coverage for needed rehabilitation for their populations.

- **Benefits packages for rehabilitation typically expand slowly over time, but larger reforms are sometimes possible:** Chile has gradually expanded rehabilitation benefits within FONASA since 2005. The 2019 reform led to a one-off rapid and significant expansion of benefits for children and adults with disabilities demonstrating that “big bang” reforms are possible given the right window of opportunity and strong political support.
- **Advocacy from civil society organizations can play a major role in change:** The 2019 reform was a win for advocates, who used their collective voice to expand the country's benefits policy for people with disabilities. This highlights the importance of community-level and civil society engagement in expanding coverage and, by default, accelerating progress toward UHC.
- **Collaboration between ministries can accelerate progress toward increased coverage for rehabilitation:** In Chile, coordination between the health and social ministries, particularly between FONASA and SENADIS, shows what can be achieved through effective multisectoral coordination and government agencies fulfilling their responsibilities. While ministries of social affairs often lead policy-making and financing on national disability matters, ministries of health have a broader complementary mandate to provide needed health services, including rehabilitation, to the population. The two sectors can coordinate and harmonize approaches to effectively meet the social and health needs of their population, as exemplified in Chile.
- **Expanding rehabilitation benefits through existing rehabilitation services within the health system can be more efficient and effective than creating parallel service structures:** It is important to meet the rehabilitation and assistive product needs of people with disabilities and to support the expansion of this type of care within existing health services.
- **Policy-makers should consider multiple factors that contribute to access to services:** Despite the expansion of rehabilitation benefits in FONASA and ISAPRES, strict eligibility criteria and geographic barriers continue to hinder access to services. The expanded benefits apply only to people in the National Disability Registry, which means people who are not registered cannot access these benefits. Efforts to address this challenge should include reducing administrative barriers, increasing registration of eligible people and effectively communicating eligibility policies.<sup>6</sup> Furthermore, service availability in rural areas continues to be an issue, as rehabilitation services in Chile are concentrated in urban areas, particularly in the capital city of Santiago.<sup>8</sup> Efforts to overcome service availability issues include coverage of at-home visits for qualifying conditions and the initiation of telerehabilitation services during the COVID-19 pandemic <sup>(137)</sup>.

Chile was able to carry out significant reforms to expand coverage of rehabilitation services through the predominant health financing mechanisms. While other countries can learn from its example, Chile has more work to do to increase access to care and learn from the experience at a national level. Health systems research is needed on the implementation and effectiveness of the 2019 expansion of rehabilitation benefits and the impact on beneficiaries and health system outcomes.

<sup>6</sup> Key informant interview, 17 November 2022.



## Part IV.

# Effective governance of health financing for rehabilitation services

A well-governed health system financing model has policies, regulations and actors that promote accountability, transparency and responsiveness in the system. Key issues of governance have emerged in previous chapters – including strategic planning, institutional arrangements, laws and policies, stakeholder engagement, citizen voice and social participation – as foundational to key reforms. *Governance* is a broad term that covers many aspects of interactions among policy-makers, funders, purchasers, service providers and users, but two key aspects have emerged as being particularly relevant for the financing of rehabilitation services: institutional arrangements and data for decision-making.

## Chapter 7.

# Effective governance of health financing for rehabilitation

### Box 22

#### What is governance of health financing for rehabilitation?

Effective health system governance seeks to ensure that:

- decisions and processes for policy and implementation are evidence-informed, transparent and inclusive; and
- the behaviour of a wide range of actors, from those financing health care to those providing it, is subject to oversight and monitoring to ensure accountability and enable course correction.

Two key elements of effective governance of health financing for rehabilitation emerged as especially important during analysis of country contexts and stakeholder consultation:

- Institutional arrangements for rehabilitation-related policy-making and programming.
- Systematic collection and analysis of information to support decision-making about health financing for rehabilitation.

Together, these elements of governance help ensure that health financing policy choices for achieving national rehabilitation objectives are strategic, transparent and promote accountability.

This chapter focuses on two elements of health system governance that are critical for making strategic health financing policy choices for rehabilitation:

- Institutional arrangements for policy-making and programming for rehabilitation services, and how they intersect with health financing mechanisms.
- Mechanisms for systematic collection and analysis of data to support evidence-informed decision-making and enable oversight and accountability.

On both counts, among the countries that were reviewed, governance arrangements for rehabilitation tended to be unclear, inadequate or disconnected from similar modalities for the broader health sector. This suggests reforms may be needed to clarify national-level responsibilities for policy-making, improve implementation and monitoring of rehabilitation within the health sector and to manage resources in ways that contribute to the achievement of agreed policy goals (see Box 22).

### Governance of health financing for rehabilitation at a glance

- Responsibilities for rehabilitation policy-making and service delivery are often shared among different government agencies and ministries (and other actors) and are marked by disparate allocations of resources and disjointed services. This fragmentation complicates unified governance of rehabilitation.
- Within ministries of health, rehabilitation policy-makers and financing decision-makers should be better connected as well as better equipped and supported to bridge gaps in strategy and budgeting.
- Data to inform rehabilitation financing (from critical investments to provider payment) include contextual details on the prevalence of disabilities and relevant health conditions, provider-level information and statistics to support analytics.
- Data for decision-making on rehabilitation financing are generally quite limited.
- Key infrastructure and capacity for data collection (such as reporting tools and practices or databases for aggregating and using information) are often lacking. Approaches to collecting important data, such as data on service quality and expenditure, are also often underdeveloped or lacking.

## Overview of current practices

### Institutional arrangements for governance and financing of rehabilitation

Institutional arrangements for stewarding and financing rehabilitation services are complex and multisectoral, reflecting the range of ministries and agencies that finance and provide services. While countries are increasingly creating platforms for coordination across stakeholder groups, few have formal structures that make clear the roles and responsibilities of the different agencies. As described earlier, most rehabilitation services around the world reside within health services and are funded by the ministry of health and/or a country's main health financing mechanisms, such as the national health insurance agency, and other insurance schemes such as a workplace injury insurance scheme. However, some rehabilitation services are funded (and, in some cases, also delivered) under other ministries, including the ministry of social affairs as part of its mandate to serve people with disabilities and older people, the ministry of education and/or ministry of early childhood as part of responsibilities to students and children with disabilities, and the ministry of defence which often serves active military personnel and veterans. The organization and management of responsibilities across multiple actors – with each implementing discrete initiatives, setting policy objectives and commanding and channelling parallel financing streams (potentially through a chain of subcontractors) – presents a substantial governance challenge for ensuring effective and efficient rehabilitation services. See Box 23 for an example from Mongolia.

This makes mechanisms for coordination, collaborative planning, accountability and monitoring especially important for strong governance of rehabilitation. A review of 30 countries and their rehabilitation governance mechanisms showed that 20 were clearly led and governed by the ministry of health, seven had the governance role shared across the ministry of health and one or more other ministries, and three had a different ministry in the leadership role. A well-governed rehabilitation sector would involve clear and consistent policy leadership by the ministry of health, frameworks that make clear the roles and responsibilities for different actors with regard to financing and service delivery, and platforms for routine coordination and engagement to ensure continued alignment. For example, in Thailand, financing for

rehabilitation is coordinated and unified under strong central stewardship and integrated into national health financing coordination mechanisms. The country has multiple funding sources for health services. Its National Health Security Office (NHSO) is an autonomous state agency under the authority of the National Health Security Board (NHSB), chaired by the minister of public health. The NHSO is authorized to prescribe the “types and limits of Health service for beneficiaries,” including rehabilitation services. It is responsible for registering beneficiaries and service providers, administering the fund and paying claims according to regulations set out by the NHSB. The NHSB engages 30 representatives from various sectors and disciplines to help with coordination, promote inclusiveness and ensure checks and balances in the governance of the Universal Coverage Scheme, the country's largest public-sector insurance scheme (WHO Regional Office for South-East Asia, unpublished data, n.d.). Overall, while coordination mechanisms can take different forms, they should seek to promote and maintain inclusive access to rehabilitation services.<sup>7</sup>

### Data-informed decision-making for rehabilitation financing

Country reviews and stakeholder consultations suggest that the use of data for decision-making on financing of rehabilitation services is quite limited. Various factors contribute to this (see Box 24). First, data for rehabilitation expenditure are not comprehensively captured within the national health accounts of most countries.

Second, rehabilitation service utilization data may be collected within and across facilities but are not often collated and readily available to inform decision-making. In many LMICs, the reporting forms that enable collection and collation of facility data have not integrated rehabilitation service provision. For example, government hospitals in Myanmar collect data on utilization of rehabilitation services but the Ministry of Health does not routinely collate and track those data, nor are the data included in annual Ministry of Health statistical reports or used for service planning<sup>(24)</sup>. A similar situation exists in Mongolia, where data are collected and collated intermittently but not reported or published by the Center for Health Development in its annual *Health indicators publication*.

Third, where rehabilitation facility data exist and are reported, the quality of the data may be low and not well standardized, making them less reliable for comparisons and decision-making. Varying definitions of rehabilitation services between and within countries make comparisons difficult and data-driven decision-making more challenging.

### Box 23

#### Institutional arrangements for rehabilitation in Mongolia

Mongolia is an instructive example of distributed responsibilities for rehabilitation. The Ministry of Health is responsible for rehabilitation and services as a legislated area of medical care, health insurance, and health policy and planning. The Ministry of Labour and Social Protection has responsibility for people with disabilities and runs rehabilitation and training centres to serve children and adults with disabilities. It is also responsible for registering people with disabilities and providing them with social security benefits and assistive products. The Ministry of Education, Culture, Science and Sports is responsible for schooling children with disabilities, providing vocational and university education for young people and adults with disabilities, and including rehabilitation in these educational services. Training of human resources for health is carried out by the Mongolian National University of Medical Sciences, which operates under the shared supervision of the Ministry of Education, Culture, Science and Sports and the Ministry of Health.



Fourth, little attention and investment have been given to collecting rehabilitation data globally, especially in LMICs. Few RHIS have integrated rehabilitation indicators and generate routine data. Until recently, global guidance to promote such integration and data collection was also lacking. However, WHO has now produced guidance on the analysis and use of RHIS for rehabilitation<sup>(138)</sup> (see Box 25). Some types of rehabilitation data have been particularly slow to be collated and reported on, especially those that measure functioning outcomes and the quality of rehabilitation services. For example, although Switzerland introduced a quality measurement system for many health services over two decades ago, it did so for rehabilitation hospitals only in 2013<sup>(139)</sup>. And while measurement tools for functioning outcomes exist, there is limited use of these tools in many rehabilitation services, particularly in LMICs where the time that rehabilitation workers spend with patients is limited and outcome measurement is not a priority (see Boxes 26 and 27).

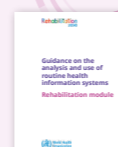
**Box 24**
**Examples of data collection on rehabilitation service delivery**

- In Mozambique, rehabilitation indicators are not included in District Health Information Systems 2 (DHIS2) health information system or health facility surveys. Data on use of rehabilitation services by health condition are collected monthly and reported quarterly by rehabilitation workers in a parallel system.
- In Mongolia, data collection is intermittent. Data on use of rehabilitation services are collected by facilities and sent to, but not published by, the Center for Health Development in its annual *Health indicators publication*.
- In Myanmar, information on rehabilitation service delivery in secondary and tertiary facilities (hospital physiotherapy units and departments of physical medicine and rehabilitation) is not included in Ministry of Health and Sports statistical reports.

**Box 25**
**WHO Guidance on analysis and use of routine health information systems: rehabilitation module**

The WHO RHIS rehabilitation toolkit is composed of the *Guidance on the analysis and use of routine health information systems: rehabilitation module*, a digital package containing a standard set of rehabilitation indicators that countries can use in their RHIS, a digital package and training resources.

The digital package has been developed with the DHIS2, an open-source software platform which is currently used by over 70 countries, many of which are LMICs. Countries that don't use the DHIS2 can also adapt their electronic platform based on the standard indicators.

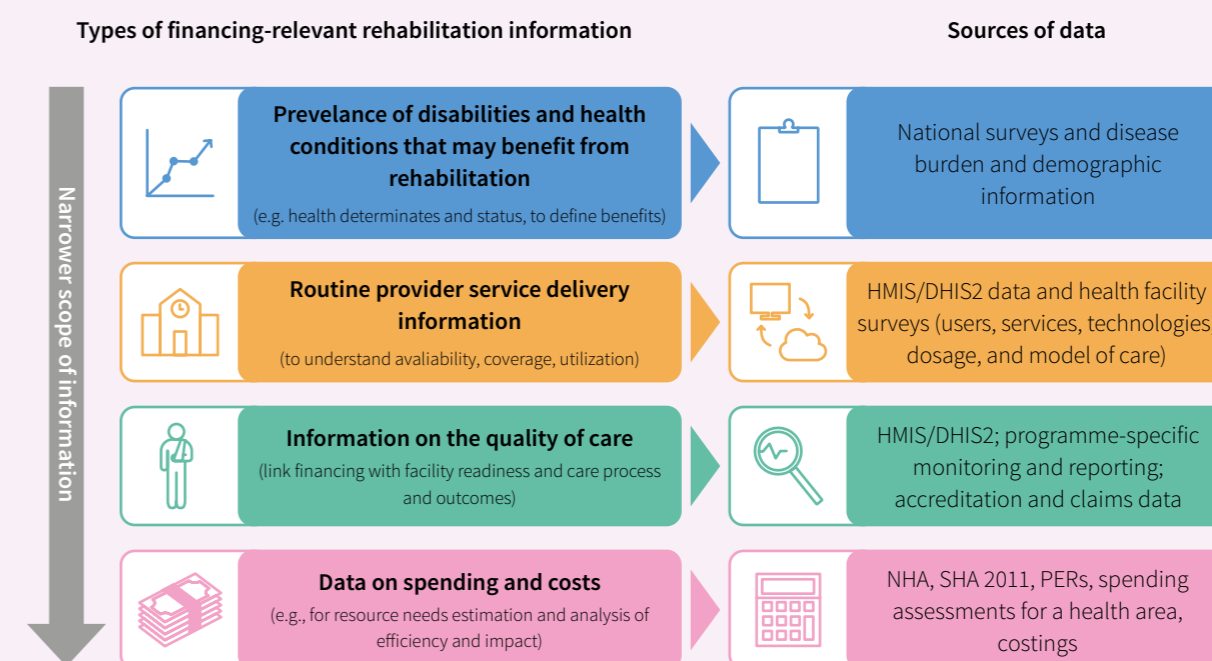


<sup>7</sup> In many LMICs, a separation may also exist between fundholding entities for rehabilitation services and those for assistive technologies. This provides further rationale for better coordination. The split may be due to domestic versus donor sources of funds, with the former covering services and the latter covering assistive technologies, as in Guyana and Myanmar. Or it may be due to public funds being directed to rehabilitation as a service while social welfare or disability programme funds are directed to providing assistive technologies, as in Mongolia and Georgia. Higher income countries tend to pool resources for rehabilitation services and assistive technologies together, even if the pools for health and rehabilitation are otherwise separate.

**Box 26**
**Types and sources of data for informed decision-making**

Systematic collection and processing of data can provide vital evidence to inform the design and review of rehabilitation stewardship, financing and service delivery. Although health outcomes such as functioning are vital indicators of the success of rehabilitation services within health systems, they are not the only data that need to be collected by national health information systems for rehabilitation decision-making. Fig. 5 shows the types, sources and uses of rehabilitation-related data highlighted by stakeholders and country experts.

**Fig. 5.** Types and sources of data relevant to health financing for rehabilitation<sup>8</sup>



As shown in the figure, a range of data is needed for clinical, managerial, research and policy decisions. Broadly, the four types of data may cover:

- **Information related to the prevalence of disabilities and relevant health conditions:** These might include socioeconomic, demographic, genetic and behavioural determinants of decline in functioning. This information helps understand the rehabilitation needs and trends at the population level more fully<sup>(140)</sup>.
- **Provider-level information:** This might include the range and details of relevant rehabilitation services (including access to rehabilitation services for specific health conditions such as spinal cord or traumatic brain injury), the volume and distribution of rehabilitation professionals, utilization of rehabilitation services, availability of essential assistive products, and quality of care.
- **Data on expenditure and consumption of rehabilitation services:** These might include total current expenditure on rehabilitation, OOP payments incurred, and the costs of services and technologies.

For the purposes of financing rehabilitation, such data can help determine appropriate investments in the service delivery system, identify the target outputs and outcomes of strategic purchasing, monitor changes in funding sources and coverage numbers to mitigate OOP expenditure and raise adequate revenues, and track major drivers of costs.

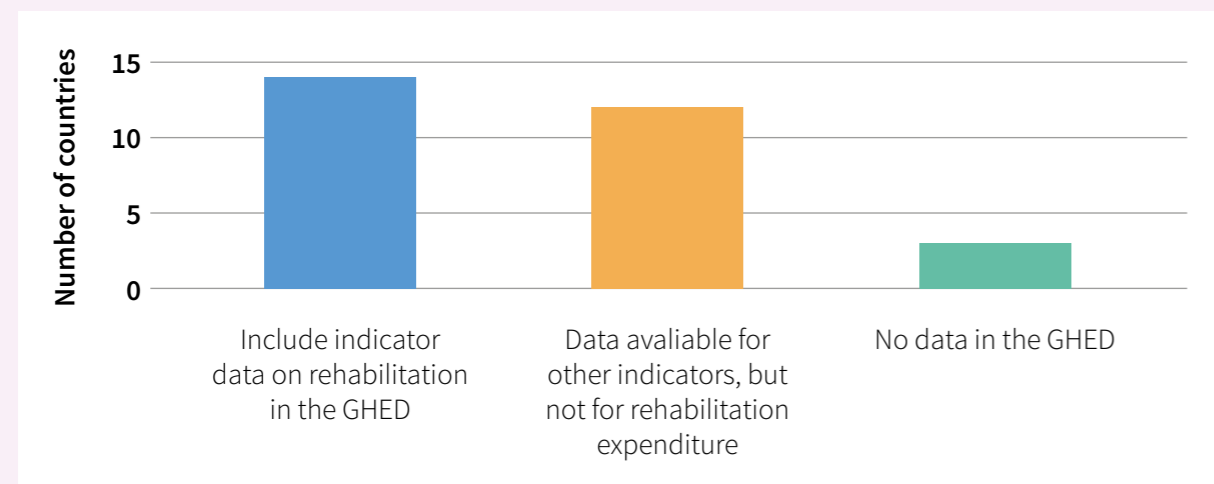
## Box 27

**Rehabilitation expenditure tracking practices**

The WHO System for Health Accounts (SHA) 2011 – a resource to help countries with health accounting practices – has two indicators for classifying health care functions: rehabilitative care (indicator HC.2) and medical goods (indicator HC.5). These data are represented in WHO Global Health Expenditure Database (GHED). Reporting of these data is limited for LMICs. There is more reporting for high-income countries, however, it is often incomplete across reporting periods and inconsistent (not necessarily comparable) across the 88 countries in the GHED using the data from the 2019 reporting period.

Fig. 6 summarizes the state of HC.2 data reporting for the initial sample of 30 countries considered for this document.

**Fig. 6.** Rehabilitation data in the GHED



An analysis of expenditure tracking practices was carried out for this report of a subset of these countries that undertook a national situation assessment using the WHO Systematic Assessment of Rehabilitation Situation (STARS). It showed that variations in the definition of rehabilitation services and limited integration of rehabilitation into sources of data for health expenditure – along with the lack of disaggregation of rehabilitation data – complicate cross-country comparison and analysis. Further, the diversity of rehabilitation services, and of the agencies engaged in their funding and provision, make the capture of comprehensive and accurate rehabilitation expenditure data difficult. Finally, the historical neglect of rehabilitation within health and health accounts has contributed to information regarding rehabilitation expenditures being generally limited. These findings suggest that while countries should utilize available guidance from SHA 2011, the definition and organization of rehabilitation services used in countries commonly result in under-accounting of rehabilitation expenditure. Further information, research and guidance for developing health accounts for rehabilitation are needed to support country-level assessment of spending and enable comparisons across countries.

**Considerations and suggested approaches****1. Ministries of health should lead the development of policies, strategies and mechanisms to clarify and coordinate rehabilitation and its financing.**

As noted, rehabilitation financing involves the ministry of health, and may also involve, social welfare actors supporting people with disabilities, transport and labour ministries managing accident insurance and workplace injury funds, and, in many LMICs, external funders supporting provision of rehabilitation services including assistive products. The involvement of multiple agencies can lead to fragmentation in planning, financing and implementation, as well as gaps in oversight for rehabilitation, which undermines unified, system-level governance.

**Suggested approaches:**

- Ministries of health should adopt a leadership role and coordinate across agencies to create the policies, plans, guiding documents and legal frameworks that define system-level objectives for rehabilitation. Resources such as the *Rehabilitation in health systems: guide for action* can be helpful for the development of national rehabilitation strategic plans that set forth necessary actions to strengthen leadership and coordination for the sector. Health policy-makers can follow up by integrating rehabilitation into health strategies, clarifying and coordinating roles and responsibilities across actors (health and non-health as well as domestic and external), and incorporating rehabilitation into routine health sector planning and budgeting cycles.
- Civil society organizations, consumer groups including organizations of people with disabilities, and health care workers and other relevant rehabilitation stakeholders should undertake inclusive advocacy efforts targeted at political and other high-level decision-makers.

**2. Ministries of health should align rehabilitation budgeting decisions with rehabilitation strategies.**

Health service strategy and budgeting processes need to align with and inform each other, necessitating engagement between rehabilitation programme managers and financing decision-makers. It is important to mitigate this “strategy-budget disconnect” and explicitly tie resource allocation decisions to service plans, outputs and outcomes. For this, rehabilitation departments – whose mandate is typically services and facilities, not financing – should improve their engagement with financing decision-makers in the ministry of health.

**Suggested approaches:**

- Connect rehabilitation service managers more strategically with financing leadership. This can take the form of a departmental planning and budgeting committee to ensure coherence between health – including rehabilitation – planning and budgeting decisions.<sup>9</sup> Alternatively, the ministry of health can formally combine planning and budgeting roles within one department.<sup>10</sup>
- Promote the use of more strategic budgeting practices for rehabilitation services, such as activity- and programme-based budgets that explicitly tie together service planning and resource deployment decisions.

<sup>9</sup> This is the case in Nigeria, where the Federal Ministry of Health has, among other steps, launched a Planning and Budget Committee to bridge the strategy-budget disconnect (see <https://r4d.org/blog/forming-a-collaborative-mechanism-for-budget-reforms-in-nigeria-part-1-of-2/>).

<sup>10</sup> This has happened in Malawi, where the Policy and Planning Development Department of the Ministry of Health explicitly manages both strategy and budget roles.

### 3. Ministries of health should invest in the infrastructure and capacity to collect, collate, analyse and report rehabilitation data for use in making strategic health financing policy choices.

Many countries lack the infrastructure and capacity to collect and analyse data needed for financing rehabilitation. This is particularly the case in LMICs. Countries additionally face the critical choice of deciding what to measure. For instance, to track care quality, should policy-makers and planners gather detailed data about processes and care outcomes (such as functional outcomes, hospitalization episodes and relapses to acute care) or more overarching data about results (such as successful community discharge and re-admission rates)? This decision has considerable implications for resource use as well as data reliability and integrity. Countries in the early stages of data collection efforts can consider the following suggested approaches:

#### Suggested approaches:

- Engagement and trust building on data collection and sharing are crucial for more routine sharing of data across sectors and levels of care. Ministries of health can implement mechanisms to generate and share standardized data among key stakeholders brought together using coordination platforms. For example, countries can consolidate and standardize data templates across fragmented financing sources and service delivery sectors, especially to source information on availability, coverage, utilization and costs of services and technologies. Data managers may require education about rehabilitation and rehabilitation stakeholders on data management.
- Develop and pilot data modules that contain routine rehabilitation indicators for health management information systems. Relevant resources include the WHO RHIS rehabilitation toolkit, which includes a guidance document, a digital package developed with the DHIS2 health information system and training tools for data analysis and data entry (see Box 25).
- Where advanced strategic purchasing mechanisms are in place, refine data collection and management to monitor for intended objectives but also monitor and check for perverse incentives. For example, collecting granular data as patients go through the high-intensity rehabilitation services can be inefficient and create perverse incentives to misreport (if, for example, payments are linked to such information). In advanced strategic purchasing systems, collecting overarching data that relate to successful outcomes and link them to billing is seen as a better way to reimburse for quality.

### 4. Development partners have an important role to play in supporting evidence generation, research, technical capacity building and cross-country exchange.

Development partners should support efforts to generate information, promote research and foster learning. They should identify funding opportunities that spark investment in health information systems, research, development of technical tools and learning.

#### Suggested approaches:

- Development partners can provide technical and financial assistance to assist countries in generating and using data on rehabilitation needs, services, expenditure and outcomes. They can develop tools and guidance for this and support the implementation of these in countries.
- Development partners can help create evidence through health policy and systems research on how to address common challenges related to rehabilitation in health financing. For example, there is a lack of evidence regarding strategic purchasing for rehabilitation services, this creates an opportunity for development partners to support piloting and evaluation of approaches in countries.
- Development partners have an important role in promoting effective approaches worldwide and supporting cross-country knowledge exchange and learning. For example that can bring together rehabilitation managers and policy-makers from different countries to facilitate knowledge exchange, learning and co-creation of solutions that promote quality and efficient rehabilitation through strategic health purchasing approaches.
- Development partners can support the creation of a global approach for developing return-on-investment cases for rehabilitation and facilitate its use in countries, as has been done in many other health care areas.

#### Further reading and resources

Governance for strategic purchasing: An analytical framework to guide a country assessment (World Health Organization; December 2019)

<https://www.who.int/publications/i/item/9789240000025>

Health information systems and rehabilitation (2017; Background Paper). Rehabilitation 2030: A Call for Action. World Health Organization.

[https://cdn.who.int/media/docs/default-source/documents/health-topics/rehabilitation/call-for-action/healthinformationsystemsandrehaboctober17.pdf?sfvrsn=a0461dd9\\_5](https://cdn.who.int/media/docs/default-source/documents/health-topics/rehabilitation/call-for-action/healthinformationsystemsandrehaboctober17.pdf?sfvrsn=a0461dd9_5)

WHO Toolkit for Routine Health Information Systems Data. Modules designed and digitalized into DHIS2 configuration packages.

<https://www.who.int/data/data-collection-tools/health-service-data/toolkit-for-routine-health-information-system-data/modules>

## Case study: Governance of rehabilitation in Brazil's decentralized health system

In recent years, Brazil has enhanced access to rehabilitation within the country's overarching UHC arrangements by aligning ownership and coordination of rehabilitation services across national and subnational actors, better defining rehabilitation as an essential health service, and planning for rehabilitation in terms of health care service delivery and enhanced civil society involvement in policy-making. This has elevated the political priority of rehabilitation, strategic resource allocation, and investment in rehabilitation, starting at the PHC level.

### Background

Brazil has a highly decentralized and multilayered health system, with several national and subnational entities sharing responsibilities for financing, service provision and oversight. The Unified and Decentralized Health Systems Act, passed in 1988, established the Sistema Único de Saúde [Unified Health System] (SUS) and empowers state and municipal health entities to carry out financing and policy-making functions that were previously centralized, to allow subnational governments to be more responsive to local health needs<sup>(141)</sup>. Subsequent laws established cost-sharing mechanisms across federal, state and municipal governments to take joint responsibility for financing the SUS. Today, health funding pools are maintained at all three levels of government, with the Ministry of Health, state health secretariats and municipal health secretariats acting as purchasers of health care. These federal, state and municipal health entities own and operate health facilities and also contract with private providers to deliver health services.

Against this backdrop, political imperatives and activism in Brazil in the first decade of the 21st century focused on providing services to marginalized segments of society, including people with disabilities. Although estimates based on the 2010 census indicate that 6.7% of Brazil's population "has visual, auditory, intellectual or motor disabilities and needs rehabilitation"<sup>(142)</sup>, the government, in 2011, launched an expansive plan to enhance education and health care services, social inclusion and accessibility for the 23.9% of the population "living with some kind of disability"<sup>(143)</sup>. Called *Living without limits: a national plan for the rights of persons with disabilities*, the plan rode the momentum of support for people with disabilities to enhance rehabilitation throughout the health system (see Box 28). Simultaneously, Ordinance No. 4.279/2010 sought to reduce fragmentation and improve the functioning of Brazil's health system, providing guidelines to establish health care networks that promote "systemic integration of health actions and services, ensuring the provision of continuous, comprehensive, responsible, humanized and quality care"<sup>(144)</sup>.

Together, these twin mandates to enhance care for people with (broadly defined) disabilities and centrally align and coordinate service provision under the SUS set the stage for the Ministry of Health to transform the governance and provision of rehabilitation.

### Box 28

#### Enhancements to rehabilitation in the Living Without Limits plan<sup>(145)</sup>

- Expanded and upgraded early identification and interventions for disabilities.
- Established PHC-level clinical protocols in the SUS for various disabilities, including strokes and injuries.
- Created 45 new specialized rehabilitation centres to cater to "hearing, visual, intellectual and physical disabilities".
- Supplied vehicles to transport low-income patients with disabilities and/or reduced mobility.
- Called for 19 new workshops for prostheses, orthoses and mobility aids and training of technical and higher level professionals
- Enhanced dental care to meet the needs of people with disabilities.

### Governance reforms

Three interventions by the Ministry of Health, which is responsible for policy development, planning and a significant share of financing, have helped boost rehabilitation care: alignment among national and subnational actors and different levels of providers, health sector capacity building for rehabilitation service provision, and greater civil society participation in policy-making and implementation.

#### • Alignment among national and subnational actors and different levels of providers

Since 2012, the policy to serve people with disabilities in Brazil has rested on the creation of the Rede de Cuidados à Pessoa com Deficiência, [Integrated Health Service Network for People with Disabilities] (RCPD), in which PHC has a central role in care coordination<sup>(142)</sup>. The RCPD organizes rehabilitation services, "considering primary health care, specialized care, hospital care, and urgent and emergency care," articulating points of care to establish referral processes and care continuity "necessary for the effectiveness of comprehensive, universal, and equitable care for this population"<sup>(143)</sup>.

This care model has helped to streamline rehabilitation across national and subnational governments and both lower and higher level providers. For example, in the case of an acute event, such as a stroke, a patient receives treatment and is released from the hospital when medically stable to a rehabilitation service. The patient may then receive treatment in community outpatient clinic or home-based care, in line with regulations for continual treatment.<sup>11</sup> Specific costing and payment for each stage are mapped to the corresponding level of government; for example, for community or home care, financial support is provided by the municipality, which manages community health workers who monitor and track patients locally and alert more specialized health care workers if needed or refer patients to facilities for more specialized care.

<sup>11</sup> Key informant interview, 17 November 2021.

- **Health sector capacity building for rehabilitation service provision**

In line with policy under the Living Without Limits plan, the government created specialized rehabilitation centres (CERs). CERs have “assumed a central role in the organization of the RCPD” because they help coordinate care for clients across the network and can provide care for “two, three, or four types of rehabilitation needs (physical, hearing, visual, and intellectual),”<sup>(146)</sup>. This has been especially helpful for people with disabilities with chronic conditions or diseases, because further specialist care (e.g. in hospitals) is easily facilitated because the CERs are closely linked to the health care.

The government has further strengthened family health support centres, which predated the RCPD and have been recognized for “improving user access to a multidisciplinary team, which also carries out rehabilitation actions”<sup>(142)</sup>. The programme was created to expand rehabilitation by incorporating several categories of rehabilitation professionals into primary care, including physiotherapists, speech and language therapists, psychologists and occupational therapists<sup>(147)</sup>. From 2008 to 2016, the federal government provided robust support, including funding, to build up the numbers of these professionals, resulting in an increase in the rehabilitation workforce at the PHC level in Brazil<sup>(142)</sup>.

- **Civil society participation in policy-making and implementation**

Civil society organizations in Brazil have a voice in health policy and implementation via health councils at national, state and municipal levels, where they can discuss population health needs with health professionals and government officials. These forums serve as monitoring and feedback mechanisms that help ensure compliance with rehabilitation entitlements. But the councils must navigate complex bureaucratic processes that can lead to delays in developing new policies and implementing new programmes, as well as contend with a lack of legal authority to hold officials accountable ( ).

### Key lessons for other countries

In Brazil, the impetus for reforming system-level management of rehabilitation service delivery grew out of the creation of rights-based entitlement to such care. The Ministry of Health, as the health system steward, has led efforts to continually enhance the political priority accorded to rehabilitation, make resource allocation more strategic, improve the capacity and coordination of service delivery, and foster civil society participation in policy-making and implementation. As a result, the density of health care workers for rehabilitation at the PHC level in Brazil increased between 2007 and 2020<sup>(142)</sup>, reflecting the significant contributions of these public health policies to rehabilitation.

Key lessons from Brazil’s experience include:

- In highly decentralized contexts, strong central governance is crucial for ensuring that the organization and provision of downstream service delivery are better aligned, integrated and coordinated. This requires creating models of care, specifying the financing and service delivery responsibilities of different levels of government, and making national-level investments in building a trained workforce and new service delivery sites.
- High political priority for rehabilitation is a key enabler of systemic reforms. In Brazil’s case, it resulted in national policies to expand and organize rehabilitation care. Building such political support depends on advocacy and activism by civil society organizations and key affected populations as well as on leveraging the focus on disability for rejuvenating the wider health system rehabilitation response. This political support and subsequent reforms have also enabled greater resource allocation and better definition and coordinated provision of rehabilitation within Brazil’s SUS.

## Conclusions and suggestions



This is the first WHO resource dedicated to the financing of rehabilitation services. It presents an overview of financing practices for rehabilitation services around the world, with a focus on LMICs, and highlights key gaps and opportunities for policy-makers to consider in their country contexts to optimize financing practices. The resource highlights several unique features of rehabilitation services, noting that like other health services, these characteristics should inform decision-making for their financing. There is need for further research and detailed review of different financing practices – from charting the course for greater integration of rehabilitation into health systems to considering individual payment mechanisms. Overall, the findings in this resource support the following conclusions and suggested approaches:

### Create the enabling environment to enhance rehabilitation in health financing

#### 1. Document and understand the existing situation for financing rehabilitation

Informed decision-making requires accurate understanding of the existing situation in countries. This includes insights into rehabilitation needs in the population and the availability of services as well as identification of which agencies finance what, how, for whom and how much. Documenting the existing situation is an important starting point to prioritize actions. It should include:

- Synthesis of evidence on the rehabilitation needs in the population, including prevalence of health conditions that benefit from rehabilitation. This task can be supported by the WHO Rehabilitation Needs Estimator tool.
- Mapping of which agencies finance what rehabilitation services, how, for whom and how much. A resource tracking exercise for rehabilitation services that sets out expenditure, including estimation of spending by various actors and the nature and extent of OOP funding.
- Comprehensively assessing the overall situation for rehabilitation services, considering rehabilitation services and coverage gaps and identifying vulnerable populations and equity concerns that need to be prioritised. This effort can be supported by the WHO *Rehabilitation in health systems: guide for action* resource, which includes a Systematic Assessment of Rehabilitation Situation tool.

#### 2. Strengthen ministry of health leadership, capacity and planning for rehabilitation

Political commitment and leadership within the ministry of health is needed to develop the policies, plans and mechanisms to optimize health financing for rehabilitation. Development of national rehabilitation strategic plans can facilitate this. The ministry of health also requires adequate human and technical capacity to lead, plan and prioritize the strengthening of rehabilitation in health systems and advance its financing.

#### 3. Conduct multi-agency coordination for improved financing of rehabilitation services

Coordination of activities and approaches across ministries and the agencies that finance rehabilitation services is crucial for efficient and effective service coverage. While many countries have developed national rehabilitation coordination mechanisms, their use during health financing decision-making is limited. Countries should establish robust coordination mechanisms involving public and private entities as well as beneficiaries and, if needed, guidance documents should be developed to clarify which agency funds what and for whom.

#### 4. Invest in health information systems and research

Improving financing practices for rehabilitation requires systems, processes and administrative capacity to collect, collate and report rehabilitation data. The use of data to inform strategic decisions for financing is essential, and especially important when defining benefits, mechanisms for provider payment and rehabilitation service inputs, processes, outputs and outcomes. This requirement for data gives rise to an agenda to better integrate rehabilitation into health information systems. Significant infrastructural and capacity building investments are needed to collect more routine rehabilitation data. This can be supported by the WHO *Guidance on analysis and use of routine health information systems: rehabilitation module*. Enhancement of the capacity to use data for decision-making, and the integration of rehabilitation into relevant periodic surveys, such as for household spending, is important. Additionally, efforts are needed to better reflect rehabilitation in administrative data, particularly expenditure on rehabilitation within the national health accounts.

Health policy and systems research for rehabilitation is needed to create an evidence base for strategic decisions on the financing of rehabilitation services. This is supported by investing in the capacities of country-level stakeholders – ministries, academia and civil society – to produce, analyse and utilize policy-relevant research for rehabilitation financing. Development partners can play an important role in investing in research, including building capacity and promoting knowledge exchange among countries.

#### 5. Undertake evidence-based advocacy

Advocacy and awareness-raising activities can enhance the profile of and commitment to rehabilitation within health systems and among health financing decision-makers. Advocacy and awareness-raising activities should be conducted by a broad range of stakeholders utilizing accurate and evidence-based information. Making an investment case for rehabilitation may also be helpful in some settings.

## Leverage health financing opportunities and practices for rehabilitation

### 1. Ensure a high proportion of funding for rehabilitation derives from public health revenues

Considering that rehabilitation is an essential health service and the characteristics of people who need rehabilitation, the health sector should be the largest funder of rehabilitation services. Public health financing mechanisms are best placed to generate adequate revenues and effectively pool health care funds for different populations with varying types and severity of health needs (including rehabilitation). Using public funds as the key source of revenues helps make rehabilitation more accessible to all who need it. Such financing typically does not limit coverage based on ability to pay or eligibility criteria (such as disability status), thus supporting the availability of rehabilitation services for the whole population. Improving public funding for rehabilitation is possible when rehabilitation is incorporated into broader health system policies and priorities, made part of health planning and budgeting processes, and is well integrated into health services.

### 2. Ensure effective pooling of risk and financial resources across large population groups for adequate financing of rehabilitation services

Many who need rehabilitation experience low access to services and a disproportionately high burden of OOP costs, and those who have financial coverage are often covered under disparate and fragmented mechanisms. Countries should develop plans to achieve greater coverage of rehabilitation under health financing mechanisms that pool risk and financial resources across large population groups.

### 3. Identify and prioritize evidence-based rehabilitation benefits within essential health service packages

Rehabilitation benefits should be clearly defined for health conditions or groups of conditions and include essential assistive products. Where multiple public and private financing mechanisms (such as private insurance) predominate, countries should ensure a minimum level of benefits is established and complied with. When starting at a low level of existing rehabilitation services in resource-constrained settings, the expansion of rehabilitation entitlement over time should be carefully and explicitly planned. The process of prioritization of rehabilitation in health benefits packages needs to be iterative, evidence based and inclusive, with benefits corresponding to available funding resources and service delivery capacities in the country. The WHO Package of Interventions for Rehabilitation is a helpful tool to use during the process of defining a health benefit package.

### 4. Harness opportunities to reduce OOP costs for rehabilitation, particularly for vulnerable populations

As noted, some rehabilitation users can face a high burden of OOP costs, and the inclusion of rehabilitation in public health financing and essential health service packages minimizes this. Other important approaches address the OOP costs associated with travel to rehabilitation services, including prioritizing the integration of rehabilitation services in primary care to reduce travel to hospitals that are often in the major urban areas. Importantly, adequate public health financing of assistive products is necessary to reduce OOP.

## 5. Utilize additional revenue sources and corresponding mechanisms for rehabilitation service coverage for specific population groups

Most countries have multiple additional financing mechanisms that source revenues and purchase services for targeted population groups – most frequently people with disabilities, veterans and people injured in road or workplace accidents. These additional sources and mechanisms make an important contribution to the overall financing of rehabilitation services. The rehabilitation needs of some user groups can be significant (e.g. after motor vehicle crashes), and these additional financing sources, while creating some trade-offs regarding fragmentation, efficiency and equity, do substantially add to public funds and increase access to more services for specific population groups with some of the highest needs.

## 6. Employ more strategic purchasing practices for rehabilitation, to incentivize service providers to deliver more efficient, quality and effective services within constrained resources

The unique characteristics of rehabilitation services create the need for tailored strategic health purchasing approaches. Strategic purchasing practices for rehabilitation are less developed and refined than those for other health services. But experience from high-income countries and the overall recognition of the importance of strategic purchasing approaches in resource-constrained settings create opportunities to design, test and scale up context-relevant innovative purchasing approaches. More strategic purchasing of rehabilitation services requires increasingly employing contracting practices or similar accountability frameworks and selecting provider payment mechanisms to align purchasers' objectives and providers' incentives. The selection of appropriate provider payment mechanisms will depend on the rehabilitation service delivery context, such as the level and type of care and the desired incentives for providers. Greater contracting of private providers, including nongovernmental and charitable organizations by public financing schemes can improve service accessibility, especially in rural and remote areas. As strategic purchasing arrangements for rehabilitation are developed in different settings, there should be accompanying implementation research (e.g. via piloting) to test and scale up use of fit-for-purpose contracting and provider payment mechanisms.

## 7. Where development partners contribute to the funding of rehabilitation services in countries, efforts should be made to ensure the funding is transparent, complements public health financing and is channelled through sector-wide mechanisms so it can play a catalytic role

Donor and international NGOs play an important role in financing rehabilitation services in LMICs, often establishing services that would otherwise not exist. Funds should be transparently channelled through rehabilitation or health sector-wide mechanisms and, where appropriate, support the creation of budget lines for greater allocation of public funds over time.

# Annex 1: Methodology for desk review



## Literature review

The purpose of the desk review was to understand the structure and types of studies on the financing of rehabilitation.

The desk review included different types of peer-reviewed and grey literature, including primary research studies, systematic reviews, meta-analyses, letters, guidelines, websites, presentations, reports and blogs. A modified version of the review, modelled by **Bragge et al. (2011)** and **Peters et al. (2020)**, with a small number of adaptations described below was utilized. The following five-step process was used during the review:

**Step 1 - Evidence search:** Available literature to be analysed as part of this review were identified through entering identified search terms in Google Scholar, MEDLINE and Cochrane Library. Reports and power-point presentations from relevant global meetings and convenings, such as the 2019 Global Rehabilitation 2030 meeting, were sourced. The initial set of search terms are included in Table A1.2. A keywords search was added relating to revenue mobilization, pooling, purchasing, governance, prioritization and integration of rehabilitation services per the chosen unit of analysis. Only literature relating to the stated definition of rehabilitation was included in the review. Literature from years 2010 – 2022 and English language literature were included for analysis.

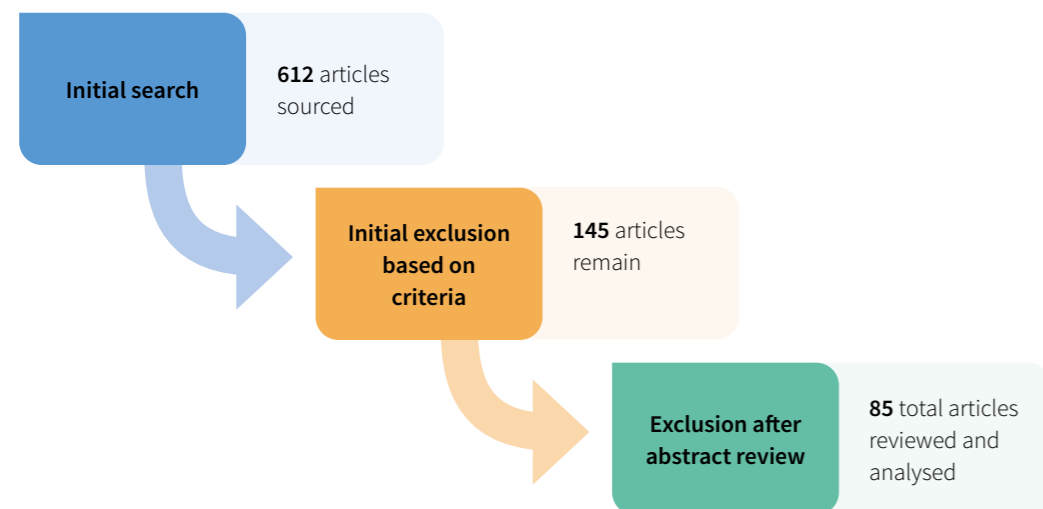
**Step 2 - Database development and initial screening:** Articles selected during Step 1 were saved on an Excel analysis template created for this project. This template included basic identification criteria as well as tagging codes along the functions of rehabilitation financing. These codes are included in Table A1.3. The template was then populated with articles from Step 1.

**Step 3 - Intercoder calibration:** A sample of five articles was randomly selected and coded by all members of the research team. The purpose of this exercise was to confirm a shared understanding of codes, definitions and approaches to coding. The set of codes was also reviewed to ensure similar coding and where discrepancies were found, further training was conducted to ensure uniform coding.

**Step 4 - Final exclusion and data extraction:** The full sample of articles were randomly assigned to research team members. Articles were further excluded depending on relevance to the unit of analysis after review of the full article. The final number of articles remaining after each stage of exclusion is shown in Fig. A1.1. Each of the remaining articles were coded according to Table A1.3.

**Step 5 - Analysis:** Analysis of coded articles was split between the research team members by financing function (revenues mobilization, pooling, purchasing, governance and integration). This analysis was done through vertically analysing coding along these financing functions. Each relevant article was then reviewed and analysed in full for relevant information. The analysis exercise described the evidence on or variation in health financing practices for rehabilitation across the cases presented in the articles. Team members qualitatively assessed the resulting landscape in terms of adherence to good (or recommended) health financing practices and produced hypotheses regarding strengths and weaknesses in each area of health financing for rehabilitation.

Fig. A1.1. Exclusion of articles



## Country review

The purpose of the country review was to understand the landscape of rehabilitation financing in a sample of countries. The review sought to produce a situational analysis and landscape of rehabilitation financing approaches, reforms and recommendations from countries. In this review, a similar five-step process was followed.

**Step 1 - Country selection:** The first step was sourcing the set of countries to be included as part of the country review. A key consideration for this was to identify countries representing a variety of income levels, geographies and financing systems. A set of 30 countries for inclusion was identified by the technical team from the Accelerator and WHO. The final list of focus countries is included in Fig. A1.2, and additional information on the focus countries is provided in Annex 2.

Fig. A1.2. Countries included in country review.

Australia	Benin	Botswana	Cambodia	Chile	Ethiopia	Georgia	Germany	Guyana	Haiti
Jordan	Lao People's Democratic Republic	Mongolia	Mozambique	Myanmar	Nepal	New Zealand	Philippines	Republic of Korea	Solomon Islands
South Africa	Sri Lanka	Switzerland	Tajikistan	Thailand	United States	United Kingdom	United Republic of Tanzania	Viet Nam	Zambia

**Step 2 - Country data gathering:** Literature on health financing for rehabilitation for each of the 30 countries was selected. For 16 countries, a final or draft STARS report was also utilized. STARS assessments were the key sources of information for those countries, with additional literature identified, including to fill gaps in assessment. For the 14 countries without a STARS assessment, a snowballing approach was used to source information about the financing of rehabilitation services. Table A1.1 presents total number of articles sourced and analysed.

Table A1.1 Total articles reviewed for country review

Country review	Number of sources reviewed
<b>Countries where STARS was conducted (16)</b>	
STARS assessments	16
Additional literature	14
<b>Countries where STARS was not available (13)</b>	
Peer-reviewed and grey literature, government resources and reports	23
<b>Total sources reviewed</b>	<b>53</b>

**Step 3 - Database development:** An Excel template was developed to include basic identification criteria as well as tagging codes along the functions of rehabilitation financing for each of these countries. These codes are included in Table A1.3.

**Step 4 - Data extraction:** Countries among the sample were randomly assigned to research team members. Each of the remaining articles were coded according to Table A1.3.

**Step 5 - Analysis:** Analysis of coded articles was split between the research team members by financing function (resource mobilization, pooling, purchasing, governance and integration). This analysis was done through vertically analysing coding along these financing functions. Each country data source was also reviewed and analysed in full for relevant information. The analysis exercise described the variation in health financing practices for rehabilitation across countries. Team members qualitatively assessed the resulting landscape in terms of adherence to good (or recommended) health financing practices and produced hypotheses regarding strengths and weaknesses in each area of health financing for rehabilitation.



**Table A1.2** Keyword search

Situation analysis and landscaping	Search terms
1. Understand basic package of rehabilitation coverage	Google scholar: All in title, 2010-2020: "rehabilitation" + "financing" (28 results)
2. Understand current structure of resource collection, pooling, purchasing	Google scholar: All in title, 2010-2020: "rehabilitation" + "resource" + "health" (9 results)
3. Identify key actors	Google scholar: All in title, 2010-2020: "rehabilitation" + "payment" (63 results)
4. Understand recommendations in approach used in other secondary health conditions	Google scholar: All in title, 2010-2020: "rehabilitation" + "fees" (4 results)
	Google scholar: All in title, 2010-2020: "rehabilitation" + "pooling" (1 results)
	Google scholar: All in title, 2010-2020: "cost" + "rehabilitation" + "health" (18 results)
	Google scholar: All in title, 2010-2020: "secondary" + "health" + "financing" (1 results)
	Google scholar: All in title, 2010-2020: "disability" + "insurance" + "rehabilitation" (10 results)
	Google scholar: All in title, 2010-2020: "assisted" + "technology" + "rehabilitation" (35 results)
	Google scholar: All in title, 2010-2020: "assistive" + "technology" + "rehabilitation" (120 results)
	Google scholar: All in title, 2010-2020: "injuries" + "rehabilitation" + "system" (34 results)
	Google scholar: All in title, 2010-2020: "integration" + "rehabilitation" + "health" (20 results)
	Google scholar: All in title, 2010-2020: "disability" + "rehabilitation" + "cost" (4 results)
	Google scholar: All in title, 2010-2020: "rehabilitation" + "financing" + "stakeholder" (1 result)
	Pubmed: Title/abstract, 2010-2020: "rehabilitation" + "financing" (190 results)
	Pubmed: Title/abstract, 2010-2020: "rehabilitation" + "resource" + "health" (16 results)
	Pubmed: Title/abstract, 2010-2020: "rehabilitation" + "payment" (3 results)
	Pubmed: Title/abstract, 2010-2020: "rehabilitation" + "fees" (4 results)
	Pubmed: Title/abstract, 2010-2020: "rehabilitation" + "funding" (6 results)
	Pubmed: Title/abstract, 2010-2020: "rehabilitation" + "pooling" (0 results)
	Cochrane Library: Title Abstract Keyword, 2010-2020: "rehabilitation" + "financing" (2 results)
	Cochrane Library: Title Abstract Keyword, 2010-2020: "rehabilitation" + "payment" (0 results)
	Cochrane Library: Title Abstract Keyword, 2010-2020: "rehabilitation" + "fees" (0 results)
	Cochrane Library: Title Abstract Keyword, 2010-2020: "rehabilitation" + "funding" (31 results)
Identifying reforms and recommendations	Search terms
1. Review and analyse exiting literature on reforms in country to address rehabilitation financing	Google scholar: All in title, 2010-2020: "rehabilitation" + "reform" + "health" (15 results)
2. Identify recommendations based on analysis of key themes of challenges and lessons learned:	Google scholar: All in title, 2010-2020: "rehabilitation" + "policy" + "health" (32 results)
<ul style="list-style-type: none"> <li>revenue collection</li> <li>pooling revenues</li> <li>purchasing</li> </ul>	Pubmed: Title/abstract, 2010-2020: "rehabilitation" + "reform" + "policy" (2 results)
3. Identify challenges in rehabilitation financing	Cochrane Library: Title Abstract Keyword, 2010-2020: "rehabilitation" + "reform" + "policy" (0 results)
4. Identify enabling and hindering factors in rehabilitation financing	

**Table A1.3** Desk review – database development

<b>General information</b>	Title
	Reference (APA style)
	Link
	Abstract
	General description of article (one/two sentences)
	Beneficiaries
	Type of rehabilitation service discussed
<b>Resource mobilization (fill in below if applicable)</b>	Sources of funds (external/taxes, earmarked government funds, private, mixed, donors, out-of-pocket, others)
	Cost or cost components of rehabilitation services
	Tag if insurance scheme (dropdown: yes or no)
	Recommendations for resource mobilization
<b>Pooling (fill in below if applicable)</b>	Pooling mechanism (external/geographic, insurance, national/state/regional government, employer, etc.)
	Pooling entity (public national, public subnational, semi-public, social insurance, private insurance, NGO, other)
	Pooling characteristics? (external/large/small, purpose of pool, pooling for risk, etc.)
	Recommendations for pooling
<b>Purchasing (fill in below if applicable)</b>	Purchasing mechanism
	Provider payment mechanism
	Payers (name organization)
	Type of entity of payer (free enter list: trust fund/ring fund mechanism, public national, public subnational, public insurance, semi-public insurance, private insurance, donor, other)
	Providers
	Package of services purchased
	Recommendations for purchasing
<b>Governance (fill in if applicable)</b>	Structure of use of or access to data for financing
	Governance of rehabilitation financing (external transparency, accountability, participation, monitoring, oversight)
	Overall recommendation in governance of rehabilitation financing
<b>Integration</b>	Notes on integration
<b>Other</b>	Other notes

## Annex 2:

# Countries and key informant interview methodology

**Table A2.1** Countries: engagement in country desk review, webinars and key informant interviews

Country	Region	Income level	Source of information		
			Desk review	KIIs	Webinars
Armenia	European	Upper-middle			x
Australia	Western Pacific	High	x		x
Azerbaijan	European	Upper-middle			x
Bangladesh	South-East Asia	Lower-middle			x
Benin	African	Lower-middle	STARS, 2019		x
Bolivia (Plurinational State of)	Americas	Lower-middle			x
Botswana	African	Upper-middle	STARS, 2018		x
Brazil	Americas	Upper-middle		x	x
Burkina Faso	African	Low			x
Burundi	African	Low			x
Cambodia	Western Pacific	Lower-middle	x		
Canada	Americas	High			x
Chile	Americas	High	x		x
Colombia	Americas	Upper-middle		x	x
Côte d'Ivoire	African	Lower-middle			x
Cuba	Americas	Upper-middle			x
Dominican Republic	Americas	Upper-middle			x
El Salvador	Americas	Lower-middle			x
Estonia	European	High			x
Ethiopia	African	Low	x		x
Finland	European	High			x
Georgia	European	Upper-middle	STARS, 2020		x
Germany	European	High	x		
Guyana	Americas	Upper-middle	STARS, 2018		x
Haiti	Americas	Low	STARS, 2019		
India	South-East Asia	Lower-middle			x
Iran (Islamic Republic of)	Eastern Mediterranean	Lower-middle			x
Iraq	Eastern Mediterranean	Upper-middle			x
Jordan	Eastern Mediterranean	Upper-middle	STARS, 2018		x

Country	Region	Income level	Source of information		
			Desk review	KIIs	Webinars
<b>Kenya</b>	African	Lower-middle			x
<b>Lao People's Democratic Republic</b>	Western Pacific	Lower-middle	STARS, 2018		
<b>Malaysia</b>	Western Pacific	Upper-middle			x
<b>Mongolia</b>	Western Pacific	Lower-middle	STARS, 2020		x
<b>Mozambique</b>	African	Low	STARS, 2020		x
<b>Myanmar</b>	South-East Asia	Lower-middle	STARS, 2019		x
<b>Nepal</b>	South-East Asia	Lower-middle	STARS, 2020		x
<b>New Zealand</b>	Western Pacific	High	x		x
<b>Occupied Palestinian territory</b>	European	Lower-middle			x
<b>Oman</b>	Eastern Mediterranean	High			x
<b>Pakistan</b>	Eastern Mediterranean	Lower-middle			x
<b>Philippines</b>	Western Pacific	Lower-middle	x		x
<b>Republic of Korea</b>	Western Pacific	High	x		x
<b>Rwanda</b>	African	Low			x
<b>Solomon Islands</b>	Western Pacific	Lower-middle	STARS, 2019		x
<b>South Africa</b>	African	Upper-middle	x	x	x
<b>Sri Lanka</b>	South-East Asia	Lower-middle	STARS, 2019		x
<b>Switzerland</b>	European	High	x		
<b>Tajikistan</b>	European	Low	x		x
<b>Thailand</b>	South-East Asia	Upper-middle	x		
<b>Togo</b>	African	Low			x
<b>Turkmenistan</b>	European	Upper-middle			x
<b>Ukraine</b>	European	Lower-middle			x
<b>United Kingdom</b>	European	High	x	x	
<b>United Republic of Tanzania</b>	African	Lower-middle	x		x
<b>United States</b>	Americas	High	X		x
<b>Viet Nam</b>	Western Pacific	Lower-middle	STARS, 2019		
<b>Zambia</b>	African	Lower-middle	STARS, 2019		x

Note: Countries in bold included in desk review.

## Key informant interview methodology

There were two phases of KIIs to inform this resource. Phase 1 focused on global experts in the rehabilitation and financing spaces with the goals of: 1) filling gaps in the literature review; 2) understanding challenges to rehabilitation financing in context; and 3) obtaining expert opinion on promising approaches. Phase 2 KIIs focused on policy-makers and managers at country level in order to: 1) fill in gaps at the country level; 2) identify models of rehabilitation financing that work well; and 3) develop case studies. In each phase, a uniform protocol to guide the KIIs was developed. Participation in the KIIs was fully optional and the participants were informed about the content, purpose and anticipated outcomes of this work. All responses were anonymized and interview recordings deleted after transcription. Interviews were then coded and analysed on Excel.

### Phase 1: Thematic focus

Phase 1 KIIs asked questions along the four key functions of rehabilitation financing: resource mobilization, pooling, purchasing and governance.<sup>12</sup> Examples of the topics explored are included by function in Table A2.2. These topics were identified as priority issues and gaps in global and country-level information on rehabilitation financing through a scoping review of rehabilitation financing literature and review of 30 countries. Phase 1 interviewees comprised a selection of global and country-level experts, researchers, policy-makers and implementers.

**Table A2.2** Themes for the key informant interviews (Phase 1)

<b>Resource mobilization</b>
Role of public-private partnerships in mobilizing funds for rehabilitation
Pros and cons of disability-focused vertical social welfare programmes
<b>Pooling</b>
Assess rehabilitation financing pools for how well they diversify risk and redistribute resources
Rationing of rehabilitation services and products in budget-funded systems
<b>Purchasing</b>
Best practices for contracting various providers for rehabilitation
Best practices for measuring quality for purchasing rehabilitation
<b>Governance</b>
Effective governance for funding, pooling and purchasing rehabilitation
Barriers and promising approaches to improving rehabilitation prioritization and integration in country
<b>Additional and cross-cutting topics</b>
Assistive technology financing
Tracking rehabilitation expenditure
Defining and tracking outcome measures for purchasing rehabilitation services
Private sector role in rehabilitation financing
Understanding donor-led rehabilitation programmes
Country-specific experience

### Phase 2: Country focus

Phase 2 KIIs focused on specific country experiences that offered potential learnings from certain contexts.

A total of 17 key informants were interviewed across both phases: Michael Allen (USAID, USA), Kirsten Armstrong (Consultant, Australia), Abdulgafoor Bachani (Johns Hopkins University, USA), Linamara Battistella (Ministry of Health, Brazil), Jacob Bentley (Johns Hopkins University, USA), Maryke Bezuidenhout (Ministry of Health, Republic of South Africa), Joachim Bruer (International Social Security Association, Germany), Anne Deutsch (RTI International and Northwestern University, USA), Sue Eitel (Consultant, USA), Patrick Lefolcalvez (Humanity and Inclusion, France), Gwynnyth Llewellyn (Sydney University, Australia), Quinette Louw (Stellenbosch University, Republic of South Africa), Luz Helena Lugo (University of Antioquia, Colombia), Claude Tardif (Consultant, Switzerland), Antonio Trujillo (Johns Hopkins University, USA), Lynne Turner-Stokes (National Health Service, United Kingdom), Ximena Neculhueque Zapata (Ministry of Health, Chile).

<sup>12</sup> For the purposes of this analysis, the governance function also includes overarching data use and integration components.

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