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MINISTRY OF HEALTH - ETHIOPIA

NATIONAL BASIC PACKAGE OF INTERVENTION FOR REHABILITATION SERVICE AT PRIMARY HEALTH CARE SETTINGS IN ETHIOPIA

Technical Guidance for Policy Makers, Program Managers, and Service Providers

July 2025
Addis Ababa, Ethiopia

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Foreward

The Government of Ethiopia, through the Ministry of Health, is committed to strengthening rehabilitation services as an essential component of universal health coverage. Rehabilitation plays a vital role in improving the quality of life for individuals with disabilities, injuries, and chronic health conditions by enhancing their functional independence and participation in society.

The National Basic Package of Intervention for Rehabilitation Services at Primary Health Care Settings has been developed as a strategic framework to ensure the delivery of standardized, accessible, and high-quality rehabilitation services across the country. This document serves as a guiding tool for healthcare professionals, policymakers, and stakeholders in integrating rehabilitation services within the primary healthcare system. By doing so, we aim to address the growing need for rehabilitation interventions and bridge existing gaps in service provision.

The package outlines essential rehabilitation interventions tailored for primary healthcare settings, ensuring that individuals receive timely and appropriate care closer to their communities. It also highlights the importance of workforce capacity building, resource mobilization, and multi-sectoral collaboration to enhance service delivery. By prioritizing rehabilitation at the primary healthcare level, we reaffirm our commitment to equity, inclusivity, and sustainable health service expansion in Ethiopia.

We extend our gratitude to all partners, experts, and stakeholders who contributed to the development of this document. We do not doubt that we will prevail in succeeding to meet the targets set out in the National Specialty and Subspecialty Service Roadmap. The implementation of this package will significantly improve rehabilitation outcomes and empower individuals to lead productive and fulfilling lives.

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Acknowledgements

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Acronyms

ADL	Activities of Daily Living
BPIR	Basic Package of Intervention for Rehabilitation
CLA	Collaborating, Learning, and Adapting
COPD	Chronic Obstructive Pulmonary Disease
CR	Clinical Resource
DALY	Disability-adjusted life years
DHIS2	District Health Information Software 2
EHAQ	Ethiopian Hospital Alliance for Quality
GBD	Global Burden of Disease
HEW	Health Extension Worker
MOH	Ministry of Health
NBPIR	National Basic Package of Intervention for Rehabilitation
NCD	Noncommunicable Disease
PHC	Primary Health Care
PHCG	Primary Health Care Guidelines
PIR	Package of Intervention for Rehabilitation
RHB	Regional Health Bureau
TOR	Terms of Reference
TOT	Training of Trainers
TWG	Technical Working Group
USAID	United States Agency for International Development
WHO	World Health Organization

Executive Summary

Globally, the prevalence of noncommunicable diseases (NCDs) has increased by 13.7% in the past ten years, and studies show that rehabilitation can promote functioning following the onset of conditions such as stroke and heart disease and prevent further decline of functioning following the onset of a disease. Furthermore, demand for rehabilitation services corresponds to the incidence of injuries, a significant portion of which are caused by road traffic accidents, which are predicted to increase in low-income countries as economies develop and vehicle use increases.

Cognizant of this rising need for rehabilitation worldwide, in 2017 the World Health Organization (WHO) launched the Rehabilitation 2030 initiative, issuing a Call for Action and developing a range of resources such as the Basic Rehabilitation Package Clinical Resource, Rehabilitation Guide for Action and broader recommendations and best practices for country leaders to strengthen rehabilitation in health systems. The WHO further recommends that rehabilitation services be integrated within all levels of the health system, including the community and primary health care (PHC) levels, to allow the health system to respond to the varying intensities of care needed as patients move between levels and enter the health system at different points.

In recent years, Ethiopia has made significant strides in prioritizing rehabilitation services to meet the growing needs of its population. As a first step to better integrate rehabilitation into PHC, the Ministry of Health of Ethiopia (MOH) has developed this National Basic Package of Intervention for Rehabilitation and implementation guide to help policymakers, program managers, and service providers integrate rehabilitation services into PHC settings. The NBPIR includes eight (8) areas of rehabilitation, namely, mental functions; vision; hearing, speech, and communication; dysphagia; respiratory and cardiovascular; motor functions and mobility; pain; and self-care and participation. Under these rehabilitation areas, twenty (20) care domains are included. The NBPIR is expected to be provided to patients whose diagnosis is settled, as it outlines basic rehabilitation interventions for six (6) common health conditions: stroke, osteoarthritis, low back pain, fracture, Chronic Obstructive Pulmonary Disease (COPD), and ischemic heart disease.

This document puts forth key considerations for implementing the integration of the NBPIR which will be done in two phases. The first phase will be a pilot of the NBPIR in select facilities to gather lessons learned on its implementation for future scale up. This will include learnings on the feasibility of training PHC workers, establishing referral pathways, and the overall cost-effectiveness, and health impact of the NBPIR. The second phase will be adjusting the NBPIR, and implementation guidance based on the lessons learned from the first phase and integrating the NBPIR to all remaining PHC settings nationwide.

This working document is intended to be updated as needed as the MOH collaborates with stakeholders to plan for the pilot phase.

Purpose of the National Basic Package of Intervention for Rehabilitation and Technical Guide

The purpose of this National Basic Package of Intervention for Rehabilitation (NB-PIR) and technical guide is to guide how to integrate basic rehabilitation services at the primary health care (PHC) level in Ethiopia, including in primary hospitals, health centers, and health posts. It also outlines the necessary steps for providing and connecting patients to basic rehabilitation services at PHC facilities using a task-sharing approach and existing national referral pathways. Furthermore, it guides policymakers on how to approach piloting rehabilitation service integration and use the resulting learnings for further scale-up.

Intended Users of the Guide

This technical guide is designed for use by:

- Policymakers and rehabilitation service program leads and managers at national, regional, zonal, sub-city, and woreda levels.
- Health service providers at community and primary health care level
- Public health and medical professionals, organizations, and other rehabilitation stakeholders
- Managers involved in training and curricula development for primary care workers

Methodology

In 2022, the Health Systems Strengthening Accelerator (Accelerator) conducted a landscape analysis on Ethiopia's health system readiness for integration of rehabilitation at the PHC level, which revealed the need to define a set of interventions to be provided as rehabilitation services at PHC. The Accelerator and the MOH then developed a concept note incorporating technical feedback from the World Health Organization (WHO) and validated the activity plan with key rehabilitation stakeholders in Ethiopia.

Through a series of consultative workshops and consultation with WHO experts, the group of local rehabilitation stakeholders decided to leverage the WHO's draft Basic Rehabilitation Package - Clinical Resource (BRP-CR) (a derivate from the WHO's Package of interventions for rehabilitation (PIR) and at the time-point of the development of the Ethiopian NBPIR for Primary Health Care Settings available as a draft version). The BRP-CR will be a global resource outlining evidence-based rehabilitation interventions that are specifically developed to be integrated at the PHC level in low-resource settings where the specialized rehabilitation workforce is not sufficiently available. The rehabilitation stakeholders developed systematic criteria for prioritizing the basic rehabilitation interventions for integration in Ethiopia.

The interventions in the PIR were scored based on the following six criteria:

1. Can be delivered safely and effectively (with minimal adverse effects)
2. The time intensity of the intervention is feasible to deliver
3. Can be delivered using only low cost and locally available equipment or consumables, or require only minimal investment
4. Existing infrastructure requirements

5. The ease in which personnel at the PHC level can safely and effectively provide the intervention
6. Indication that the intervention is easy to identify through basic screening, with or without definitive diagnosis

This resulted in the selection of 27 interventions from the PIR spreadsheet for inclusion in the NBPIR. These interventions were then harmonized with the Ethiopian Primary Health Care Guidelines (PHCG).

Contents of the National Basic Package Rehabilitation and Technical Guide

This technical guide is divided in three sections and five sub-sections as outlined below:

Section 1 – Sets the context for the NBPIR and lays out its key components. It consists of the following chapters:

1. Introduction
2. Guiding principles of rehabilitation care - including general principles of the delivery of rehabilitation care at the PHC level to achieve optimal outcomes

Section 2 – Lays out service delivery and referral modalities for rehabilitation care at the PHC level. It consists of the following chapters:

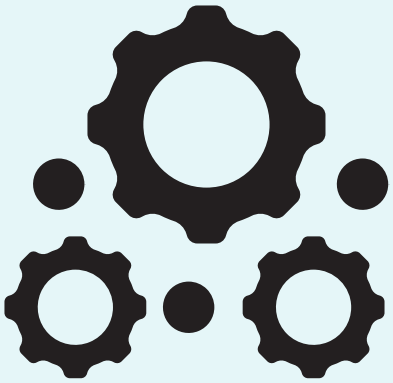
3. General safety considerations when delivering care
4. Prioritized areas of rehabilitation and care domains at the PHC level
5. Guidance on basic rehabilitation service provision and referrals

Section 3 – Provides information on how to pilot the NBPIR and learn from the pilot to implement the package nationally. It consists of one chapter:

6. Implementation guide for piloting the NBPIR

CHAPTER 1

CONTEXT AND KEY COMPONENTS OF THE NBPIR



CHAPTER 1 – CONTEXT AND KEY COMPONENTS OF THE NBPIR

1.1 Introduction

The WHO defines rehabilitation as "a set of interventions designed to optimize functioning and reduce disability in individuals with health conditions, in interaction with their environment." Rehabilitation interventions optimize functioning and well-being by addressing impairments, limitations, and restrictions in areas related to mobility, vision, and cognition while considering individual and environmental factors. Individuals with health conditions or injuries may require rehabilitation across the course of their life and along the continuum of care.

No communicable diseases (NCDs) present a huge proportion of health conditions benefitting from rehabilitation. Globally, the prevalence of NCDs has increased by 13.7% in the past ten years, and studies show that rehabilitation can promote functioning following the onset of conditions such as stroke and heart disease and prevent further decline of functioning following the onset of a disease. Furthermore, demand for rehabilitation services corresponds to the incidence of injuries,[4] a significant portion of which are caused by road traffic accidents, which are predicted to increase in low-income countries as economies develop and vehicle use increases . The demand for rehabilitation services will continue to grow due to aging populations and the rise of NCDs and injuries.[,] The number of individuals over age 60 is expected to increase by 56% by 2030, and aging is associated with natural declines in musculoskeletal strength and cognitive function, increasing vulnerability to injuries and other functioning challeges.[2,] Children can also benefit from rehabilitation through early interventions that optimize developmental outcomes for various health conditions. Such interventions can increase participation rates in education, community activities, and future capacities to work.[1,] The rise of NCDs and injuries also contributes to the increasing need for rehabilitation services and also further increase the need through associated health complications that can result in disabilities of multiple domains of functioning, such as mobility, vision, cognition, and communication.[,]

Cognizant of this rising need for rehabilitation worldwide, in 2017 the WHO launched the Rehabilitation 2030 initiative, issuing a Call for Action and developing a range of resources such as the Basic Rehabilitation Package- Clinical Resource, Rehabilitation Guide for Action and broader recommendations and best practices for country leaders to strengthen rehabilitation in health systems. The WHO further recommends that rehabilitation services be integrated within all levels of the health system, including the community and primary health care (PHC) levels' This integration allows the health system to respond to the varying intensities of care needed as patients move between levels and enter the health system at different points. For example, an individual with a traumatic injury may need both acute care and rehabilitation at a tertiary hospital. After discharge from the hospital, rehabilitation should be available at the PHC and community levels to optimize health and functioning outcomes. Differing patient needs will necessitate care at different levels and a variety of referral sequences, thus requiring flexibility and responsiveness of the health system. Figure 1 shows the WHO's Rehabilitation in Health Framework, which was developed for WHO's Rehabilitation Guide for Action and highlights the types of rehabilitation services that should be available at the different levels in countries.

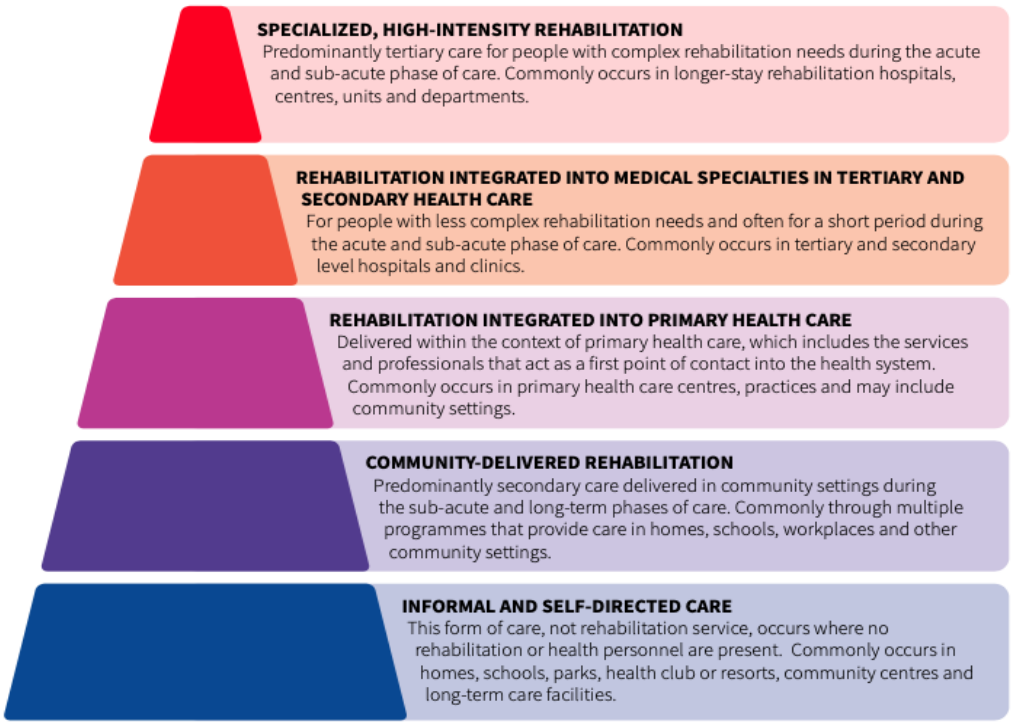


Figure 1: Rehabilitation in Health Framework, WHO, 2019

Ethiopia is currently facing a triple burden of disease (communicable diseases and NCDs, mental health issues, and injuries) that disproportionately affects children and women of reproductive age. According to the 2019 Global Burden of Disease Study (GBD) estimate, 39% of annual deaths were attributable to NCDs and 8% to injuries. More than half (51%) of deaths due to NCDs and injuries occur before the age of 40, and 63% occur before the age of 50. Additionally, NCDs and injuries contributed to 42% of total disability-adjusted life years (DALYs) lost. The WHO Rehabilitation Need Estimator shows that in 2019 approximately **1 in 5 Ethiopians (21 million people) had health conditions that could benefit from rehabilitation**, mainly musculoskeletal disorders, injuries, and sensory impairments such as vision and hearing loss.

In recent years, Ethiopia has made significant progress prioritizing rehabilitation at the national level in order to increase access to rehabilitation services in response to the rising population need. The Ministry of Health (MOH) developed the five-year National Rehabilitation and Assistive Technology Strategic Plan which has spearheaded efforts to strengthen rehabilitation within various components of the health system, including within the country's health information system, health workforce training and educational programs, and routine policy and planning processes. Given the evolving landscape of rehabilitation in Ethiopia and the momentum for continued focus on expanding access to rehabilitation services, it is important to understand the priority areas to help meet the population need by integrating rehabilitation into PHC, a key point of access for all health services.

In line with this, the MOH, in collaboration with the Accelerator project, conducted a landscape analysis to assess Ethiopia's health system readiness for rehabilitation service integration at the PHC level to increase provision of and access to rehabilitation services. One of the key takeaways from the analysis was that rehabilitation service in the PHC setting may be feasible through task sharing with regular technical support from the rehabilitation professional and by defining the catchment population, proper networking and referral pathways.

1.2 Guiding principles of rehabilitation care

1.2.1 What are the key principles for services?

To provide effective and efficient basic rehabilitation care, there needs to be some guiding principles on how to provide these services. The main principles guiding rehabilitation care are shown in the following table. These principles are adapted from WHO's BRP-CR.

Table 1: Guiding Principle of Rehabilitation service

Person-centered care	• Understand the person's life and rehabilitation priorities. • Involve the person in decision-making and goal setting. • Educate and empower the person for self-management. • Consider the person's caregivers, family, and environment where appropriate in the provision of care
Communication	• Create a private and relaxed space for the person. • Use clear, simple concise language and lay terms. • Allow the person to ask questions. • Be attentive and actively listen to the person, looking at them as they speak. • Show extra sensitivity when people talk about difficult experiences (e.g. sexual assault)
Respect and dignity	• Listen and consider what the person says. • Include the person in the conversation, even if you are not sure how much they understand. • Do not talk about the person as though they are not there. • Give the person freedom of choice and respect their choices even if you disagree. • Give the person privacy. • Treat the person the same as everyone else
Empowering	For several reasons, some people may not be motivated to actively engage in their rehabilitation, including through a self-care program. Therefore, empower people with the following: • **Educate and advise** on the causes, management, and prevention of exacerbation of the condition. • **Motivate and coach** the person by providing encouraging words with gentle correction, teaching how to adjust self-care activities to promote independence and discussing how best to create a rehabilitation plan that fits into their daily schedule. • **Provide support** to the person and caregivers by answering questions related to the rehabilitation process. Provide links to support groups or people with similar rehabilitation needs who are successfully self-managing.

1.2.2 Who can provide the NBPIR?

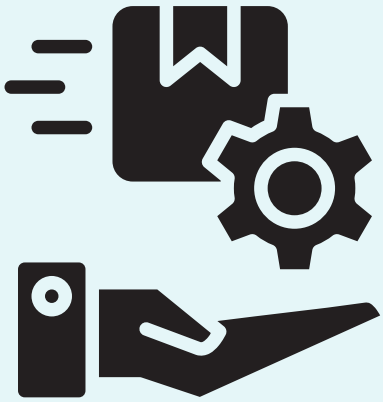
All Health care providers who are trained on basic rehabilitation service defined in the national health care package are eligible to provide the services outlined in this document. This includes rehabilitation professionals, community health workers and all other health care professionals working in primary healthcare settings.

1.2.3 Who is eligible to receive the NBPIR?

All patients presenting with signs and symptoms or conditions defined in this Basic Package of Intervention for Rehabilitation, who do not qualify for the referral per criteria outlined in the guidance for intervention and referral section of this document, are eligible for the NBPIR.

CHAPTER 2

SERVICE DELIVERY AND REFERRALS



CHAPTER 2 – SERVICE DELIVERY AND REFERRALS

2.1 General safety considerations when delivering care

During delivery of care, the care provider should follow the following safety considerations. The table below describes each level of difficulty with specific safety considerations needed during provision of rehabilitation.

Table 2: Safety considerations during basic rehabilitation service provision

Difficulty	Safety Consideration
Poor balance while standing. This can lead to falls	• Stand on the weaker side of the person to provide support
Difficulty walking, frequent falls	• Stand on the weaker side of the person to provide support when providing interventions. • Have a rail, bed, or sturdy chair on the other side if there is no one available to assist. • Remove clutter and slippery items from the environment. Make doorway accessible (e.g. Portable ramp for easier and safer entry or exit where there is a step). • Make sure the person is wearing appropriate footwear for the environment; socks will be slippery for the person. • Provide a walking aid e.g., Walking frame to support walking and prevent falls
Poor cognition, memory, attention/concentration, difficulty following the right sequence, poor judgement of safety	• Provide visual (hard copy of interventions) and verbal cues. • Reduce distractions such as closing the door or putting off the TV or radio. • Provide simple, clear instructions – one step at a time is best. • Be ready to provide physical assistance. • Ensure a family member is with you, who know them well. • If the person cannot communicate with you, ask the family member or caregiver if needed, how the person expresses themselves.
Vision problems (e.g. Visual neglect and vision impairments)	• Relocate assistive products and other equipment within the person's visual field. • Provide verbal cues or instructions. • Encourage the person to use other senses (e.g., touch) to locate assistive products, equipment, or risk area.
Hearing problems (difficulty hearing)	• Provide visual instructions or cues. • Use a sign language interpreter, if possible, for persons with complete hearing loss and who use sign language
Difficulty with sitting upright	• Support the person with pillows. • Sit on a clinical stool or chair in front of them, ready to support them if needed.

2.2 Prioritized areas of rehabilitation, interventions and care domains

Interventions with corresponding functioning domain

The NBPIR includes eight (8) areas of rehabilitation, namely, mental functions; vision; hearing, speech, and communication; dysphagia; respiratory and cardiovascular; motor functions and mobility; pain; and self-care and participation. Under these rehabilitation areas, twenty (20) care domains are shown in the table below.

Since the basic rehabilitation service will also be provided for patients whose diagnosis is settled, the NBPIR also outlines basic rehabilitation interventions for six (6) common health conditions: stroke, osteoarthritis, low back pain, fracture, Chronic Obstructive Pulmonary Disease (COPD), and ischemic heart disease.

Table 3: Areas of rehabilitation and corresponding domains of care

Areas of rehab	Mental Functions	Vision	Hearing, Speech, and Communication	Dysphagia	Respiratory and Cardiovascular	Motor Functions and Mobility	Pain	Self-Care and Participation
Domains of Care	• Memory • Sleep • Stress, anxiety and low mood	• Seeing function	• Hearing functions • Speech and Communication	• Swallowing	• Respiratory functions • Edema • Cardiovascular Fitness	Physical exercise training, Muscle Strengthening, Joint and muscle flexibility, transfers, walking and balance, and Positioning for movement and skin care.	Pain	• Self-care and daily activities • Bladder and bowel management • Community participation

The following table presents the assessment and functioning interventions for the functioning domains and the functioning targets of the intervention. The table will be a quick reference for service providers to select specific interventions for specific functioning domains found during the assessment.

Table 4: Assessment and functioning interventions and corresponding functioning domains and the functioning targets of the intervention

Assessment and functioning interventions	Included in these functioning domains	Functioning target(s) of the intervention)
1. Activities of daily living (ADL) training	• Activities of daily living	• Activities of daily living
2. Modification of the home, work and recreational environment (incl. environmental enrichment)		
3. Bowel and bladder management skills training	• Bowel and bladder management	• Urinary and defecation functions
4. Positioning for oedema control	• Cardiovascular and immunological functions	• Oedema control
5. Provision and training in the use of assistive products for compression therapy	• Cardiovascular and immunological functions	• Oedema control • Blood pressure functions
6. Swallowing therapy	• Dysphagia management	• Swallowing functions
7. Provision and training in the use of assistive products for hearing	• Hearing functions	• Hearing and vestibular functions
8. Psychological support	• Interpersonal interactions and relationships	• Interpersonal interactions and relationships • Sexual functions and intimate relationships
9. Cognitive training	• Mental/cognitive functions	• Cognitive functions

10. Physical exercise training	• Mental/cognitive functions
	  • Pain management
	  • Motor functions and mobility
	  • Secondary conditions
		• Cognitive functions
		  • Energy and drive functions
		  • Symptoms of schizophrenia (positive and negative symptoms
		• Problems with behavior
		  • Sensation of pain
		  • Movement functions
		  • Mobility
		  • Prevention of mental health problems (depression, anxiety and emotional distress)
		  • Prevention of osteoporosis
		  • Prevention of malnutrition

11. Balance training	• Motor functions and mobility	• Involuntary movement reaction functions (balance)
12. Gait training		• Gait pattern functions and walking
13. Mobility training		• Mobility
14. Muscle-strengthening exercises		• Muscle power functions
15. Orientation and mobility training		• Mobility
16. Positioning for the prevention of contractures		• Mobility of joint functions
17. Pain-relieving positioning	• Pain management	• Sensation of pain
18. Thermotherapy		

19. Range of motion exercises	• Pain management
	  • Cardiovascular and immunological functions
	  • Motor functions and mobility
	  • Prevention of secondary conditions
		• Sensation of pain
		  • Oedema control
		  • Muscle tone functions
		  • Mobility of joint functions
		  • Prevention of deep venous thromboembolism

20. Relaxation training	• Pain management
	  • Mental/cognitive functions
	  • Behaviors
		• Sensation of pain
		  • Sleep functions
		  • Problems with behavior

21. Positioning for pressure relief	• Prevention of secondary conditions	• Prevention of pressure ulcers
22. Breathing control techniques	• Respiration functions	• Sensations associated with respiratory functions (dyspnea)

23. Energy conservation techniques	• Respiration functions
	  • Mental/cognitive functions
		• Sensations associated with respiratory functions (dyspnea)
		  • Energy and drive functions (fatigue)

24. Functional positioning	• Respiration functions
	  • Motor functions and mobility
		• Respiratory functions
		  • Maintaining a body position

25. Pelvic floor exercises	• Sexual functions and intimate relationships	• Sexual functions
26. Communication skills training	• Speech, language, and communication	• Communication
27. Speech therapy		• Speech functions

2.3 Guidance for rehabilitation service provision and referrals

In this section, the areas of rehabilitation are presented in the format of the Ethiopian Primary Health Care Guideline (PHCG). All conditions that need urgent referral or consultation (in red below) should be referred to the emergency department of the PHC setting where basic rehabilitation is provided as part of the standard referral procedure as with other emergencies based on the PHCG and other national standards and protocols.

This document only gives an overview of basic rehabilitation services and thus cannot be used as a standalone document for complete basic rehabilitation service provision. The details of the services provided will be included in training materials. Basic rehabilitation services should only be provided by health care personnel working in an Ethiopian PHC setting who are getting the required training to provide basic rehabilitation services.

2.3.1 Mental Function Area of Rehabilitation

Under the Mental function area of rehabilitation, there are three care domains: memory, sleep, and stress, anxiety, and low mood.

<table>
<tr><td>Common Clinical Presentations:
Forgetting easily
Persistent low mood, emotional distress, and anxiety
Reduced interest in activities
Difficulty with sleep</td><td>Who needs urgent referral/consultation
Suicidal thoughts or behaviors
Severe depression or anxiety
Overwhelming emotional distress
Sudden onset confusion</td></tr>
<tr><td colspan="2">Care Domain for Memory</td></tr>
<tr><td>Involves educating, advising, and training in functional tasks and exercises designed to restore, retrain, or compensate for impaired.

People who may need interventions for memory problems include those who:
Often forget important information
Have difficulty learning new information
Often misplace or lose items</td><td>Interventions for Memory

1. Educate and advice on memory

2. Train in exercises that target and improve memory such as

a. Recall of items

b. Story recall

3. Provide guidance on assistive products (e.g. Pill organizers) and memory aids such as notes, reminders and calendars that can help compensate for memory difficulties.

4. Provide guidance on how to modify the environment to enable the person to better focus and remember

5. Educate and advise caregivers on how to support a person with memory difficulty</td></tr>
<tr><td colspan="2">Care Domain for Sleep</td></tr>
</table>

• Involves educating and advising on sleep functions (including sleep hygiene) • People who may need interventions for sleep difficulties include those who: • Have difficulty falling asleep • Do not feel refreshed after sleep • Wake up earlier than intended in the morning	Interventions for Sleep • Educate and advise on sleep • Recommend healthy sleep practices • Provide guidance on relaxation techniques to promote relaxation and make it easier for the person to fall asleep and staying asleep easier • Educate and advise on strategies to reduce stress which can promote sleep • Educate sleep hygiene practices (e.g., going to bed at same time every day, avoiding screen/blue light during nighttime, using the bed only for sleeping…) • Educate and advise the person on lifestyle modifications (e.g., getting regular exercise, avoiding caffeine, avoiding daytime napping…)
Care Domain for Emotional Distress, Anxiety and Low Mood	
• Involves educating, counseling, and providing emotional support for emotional distress, anxiety and low mood and the related limitations and problems in performing activities or participating in community and social life. • People who may need interventions for emotional distress, anxiety and low mood include those who have had the following symptoms for at least two weeks: • Persistent low or depressed mood, emotional distress, and anxiety • Markedly diminished interest in or pleasure from activities • Persistent sadness, hopelessness, and helplessness • Significant change in sleep, weight, and energy levels • Recurrent though of death • Feeling excessive worry or fear	Interventions for Emotional Distress, Anxiety and Low Mood • Educate and advise on emotional distress, anxiety, and low mood • Educate and advise on identifying and replacing negative thoughts with positive thoughts • Provide guidance on relaxation techniques and strategies to reduce stress • Educate and advise the person on lifestyle modifications such as regular exercise, sleep, and healthy diet to reduce stress and improve overall well-being. • Educate and advise the person on the importance of building strong social connections and engaging in social activities to coping stress and low mood.

2.3.2 Hearing, Speech, and Communication Area of Rehabilitation

Hearing, Speech, and Communication has two care domains: hearing functions and speech and communication functions.

<table>
<tr><td>Common Clinical Presentations:
Increased difficulty in understanding conversations, especially in noisy environments.
Frequent need to turn up the volume on devices.
Asking others to repeat themselves often.
Misunderstanding speech, leading to inappropriate responses.
Difficulty engaging in conversations due to hearing impairment.</td><td>Who needs urgent referral/consultation
Sudden hearing loss (unilateral or bilateral).
Sudden worsening of hearing or speech difficulty with other signs such as face drooping, weakness in a part of the body or severe dizziness.
Severe persistent tinnitus that affects daily functioning.
Children with delayed speech and language development, especially if associated with suspected hearing loss.</td></tr>
<tr><td colspan="2">Care Domain for Hearing</td></tr>
<tr><td>Involves educating and advising on ways to maintain effective communication and adaptive strategies to minimize the negative impact of hearing impairment.
People who may need interventions for hearing difficulties include those who:
Have a hearing difficulty that affects their ability to cope in the environment
Use a hearing aid</td><td>Interventions for Hearing
Educate individuals and caregivers on hearing health, prevention of hearing loss, and safe listening practices.
Provide counseling on hearing assistive technologies, including hearing aids, cochlear implants, FM systems, and mobile assistive apps.
Train users on proper handling and maintenance of hearing aids and cochlear implants to enhance device efficacy
Promote aural rehabilitation and auditory-verbal therapy for individuals using hearing aids or cochlear implants.
Educate and advise the person and caregivers on effective hearing strategies that work best for them
Educate and advise the person and caregivers on identifying environmental changes that can improve hearing</td></tr>
<tr><td colspan="2">Care Domain for Speech and Communication</td></tr>
<tr><td>Involves educating and advising on ways to maintain effective communication strategies.
People who may need interventions for hearing difficulties include those who:
Have slurred speech
Lack clear speech
Have conversations with other people that are often difficult and misunderstood
Have a hearing difficulty that affects their ability to converse in a different environment?”</td><td>Interventions for Speech and Communication
Early identification of speech and language delays in children and referral for specialist evaluation.
Provide speech therapy interventions, including exercises to improve articulation, voice control, and fluency.
Educate caregivers and teachers on effective communication strategies for individuals with speech impairments.
Educate and advise on devices and aids available to support communication e.g., picture boards
Educate and advise the person and caregivers on identifying environmental changes that can improve speech and communication.
Introduce assistive communication devices, such as pictorial communication boards, speech-generating devices, and mobile applications.
Establish support groups for speech and communication disorders, integrating peer and family counseling.
Encourage environmental modifications, such as reducing background noise and improving acoustic conditions in schools and workplaces, to enhance communication.</td></tr>
</table>

2.3.3 Vision Area of Rehabilitation

The vision area of rehabilitation has one care domain: seeing functions.

Common Clinical Presentations:	**Who needs urgent referral/consultation**
• Blurred vision • Difficulty seeing fine details or distinguishing colors • Difficulty navigating the environment (e.g. stairs, curbs, and other changes in elevation) • Night blindness (Poor night vision)	• Pain in and around the eye • Eye pain accompanied by a headache • Unstable or rapidly deteriorating vision (Sudden loss of vision) • Distortion of vision • Forward protrusion of the eyeball • Ocular trauma • Whitish spot in the eye • Red eye
Care Domain for Vision	
• Involves educating and advising on modification of the home environment and moving around in different locations to help a person cope with seeing difficulties. • People who may need interventions for seeing difficulties include those who: • Cannot see clearly or cannot see at all • Cannot see clearly in dim illumination • Suffer from glare or reflection • Cannot appreciate different colors • Have a progressive eye condition that results in vision loss • Find it difficult navigating the environment (e.g. stairs and curbs) due to seeing difficulties	Interventions for Vision • Educate and advise on vision • Provide guidance on how to modify the home environment to improve function • Educate and advise to optimize the living, educational, and working environment to facilitate accessibility and independence such as improvements to lighting and contrast • Provide guidance on how to best manage daily activities and community participation e.g. using assistive products like a white cane • Provide advice in use of non-optical aids for glare (e.g. Hat, umbrella) • Provide advice in use of non-optical aids for night blindness (e.g. torch) • Recommend strategies to minimize the risk of falls for persons with vision impairment. • Educate, advice and support caregivers on how to cope with a person with vision

2.3.4 Dysphagia (Swallowing) Area of Rehabilitation

The dysphagia (swallowing) area of rehabilitation has one care domain: swallowing function.

Common Clinical Presentations:	**Who needs urgent referral/consultation**
• Difficulty swallowing • Feeling like food or liquid is stuck in the throat or chest • Coughing or choking during or after eating or drinking • Drooling or food spillage from the mouth	• Not being able to chew food in mouth • Difficulty breathing or shortness of breath during meals • Not being able to cough well • Not able to swallow a teaspoon of water after being made to sit upright • Regurgitation of food or drink after eating • Refusal to eat or drink due to fear or discomfort
Care Domain for Dysphagia	
• Involves training in different techniques and exercises to improve swallowing. It includes exercises to make swallowing easier and advice on ways to manage and eat and drink safely. • The goal is to reduce the chances of accidentally breathing in food or liquid. The training also involves doing exercises and using stimulation to strengthen the muscles used for swallowing. • People who may need interventions for swallowing difficulties include those who: • Not being able to chew food in the mouth • Difficulty breathing or shortness of breath during meals • Not being able to cough well • Not able to swallow a teaspoon of water after being made to sit upright • Regurgitation of food or drink after eating • Refusal to eat or drink due to fear or discomfort	Interventions for Dysphagia (Swallowing) • Educate and advise on swallowing • Train in exercises to help strengthen the muscles used for swallowing and improve coordination of the swallowing mechanism • Provide guidance on how to modify the consistency and texture of food and drink to make swallowing easier and reduce the risk of choking or aspiration • Train in appropriate positions to improve swallowing function and reduce aspiration • Train in swallowing maneuvers that can help facilitate swallowing and reduce the risk of aspiration • Provide guidance to the person and caregivers on how to manage feeding periods and strategies for safe swallowing

2.3.5 Respiratory and Cardiovascular Area of Rehabilitation

Areas of Rehabilitation Respiratory and Cardiovascular have three care domains: Respiratory functions, Edema, and Cardiovascular Fitness.

<table>
<tr><th colspan="2">Care Domain for Respiratory Functions</th></tr>
<tr><td rowspan="2">Common Clinical Presentations:
People who may need interventions for Respiratory function (Breathing) problems include those who have:
Difficulty controlling their breathing
Difficulty finding an appropriate position to make breathing easier
Difficulty of breathing, especially in certain positions
Feeling tired or fatigued due to the increased effort required to breathe
Chest pain or discomfort during physical activity or when under stress</td><td>Who needs urgent referral for Respiratory Functions:
Severe shortness of breathing
Dizziness or feeling faint during exercise
Feeling very weak or very tired
Cough with blood streak sputum</td></tr>
<tr><td>Interventions for Respiratory functions (Breathing)
Educate and advise on respiratory functions
Provide guidance on positions that can make it easier to breathe in and fill the lungs with air.
Educate and advise the person on techniques that help to use the least effort to let more air into the lungs and allow breathing control.
Train on techniques that use the least effort to let more air into the lungs and allow control of breathing.
Educate and advise on ways of doing activities with as little effort as possible in order to save energy and reduce breathlessness by providing education on energy conservation techniques to individuals, emphasizing the planning and prioritization of day-to-day activities.
Teach individuals how to adjust their activities based on their physical capacity to prevent excessive fatigue and breathlessness.
Instruct individuals on the use of appropriate equipment when necessary to minimize energy expenditure during activities.</td></tr>
<tr><th colspan="2">Care Domain for Cardiovascular Fitness</th></tr>
<tr><td>Common Clinical Presentations:
People who may need interventions for cardiovascular fitness include those who:
Have had a recent heart event e.g. heart failure, heart attack which has been stabilized
Have chest pain or discomfort during physical activity or emotional stress</td><td>Who needs urgent referral for Cardiovascular functions
Nausea or vomiting during or after exercise
Palpitations or a sudden burst of a very fast heart rate
Dizziness or feeling faint during exercise
Feeling very weak or very tired
Radiating chest pain at rest especially to upper body part</td></tr>
<tr><td colspan="2">Interventions for Cardiovascular Fitness
Educating and advising on lifestyle changes to keep the heart fit and healthy.
Exercises to maintain heart function and fitness after a heart event or diagnosis
Educate and advice on cardiovascular fitness
Educate the person on how to minimize cardiovascular risk factors including lifestyle changes
Train on simple exercise to improve cardiovascular fitness
Provide guidance on how to start and continue cardiovascular exercises
Closely monitor the person while they are doing the exercises to ensure the person is progressing appropriately</td></tr>
</table>

Care Domain for Edema	
People who may need interventions for edema include those who: • Have swelling in the arms and legs	**Who needs urgent referral for Edema** • Non-pitting edema • Swelling in only one leg • Skin of the swollen part gets discolored or warm • Open sore in the swollen part • Sudden onset of pain or pain gets worse suddenly • Sudden onset of breathlessness • Tingling or numbness in the swollen limb
Interventions for Edema • Educate and advise on edema • Educate the person on ways to position the limb in order to reduce and control edema • Provide guidance on massage techniques to reduce edema • Train in exercises to manage edema and prevent joint stiffness • Provide guidance on the use of compression garments to manage edema	

2.3.6 Motor Functions and Mobility Area of Rehabilitation

Areas of Rehabilitation Motor functions and mobility have six care domains: Physical exercise training, Muscle strengthening, Joint and muscle flexibility, transfers, walking and balance, and Positioning for movement and skin care.

Common Clinical Presentations:	**Who needs urgent referral/consultation for Motor functions and mobility problems**
• Overall reduced difficulty with physically engaging in daily activities • Difficulty walking, holding on to caregiver or wall for assistance • Feeling of muscle weakness with inability to complete everyday activities • Joint and muscle stiffness or difficulty moving any of the body's joints or muscles • Difficulty moving from one position to another e.g. Standing up from sitting • Poor balance • Difficulty sitting without back support, holding on tightly to arm rests or the bed. • Difficulty standing upright or tilted to one side while standing • Presence of skin sores	• Nausea or vomiting during or after exercise • Palpitations or a sudden burst of a very fast heart rate • Severe shortness of breath • Dizziness or feeling faint during exercise • Feeling very weak or very tired • Uncontrolled pain • Acute inflammation or injury

Care Domain for Physical Exercise Training	
• Involves a variety of physical exercises (e.g. aerobic or strengthening exercises), with or without weight bearing, to improve exercise capacity, muscle strength, joint mobility, balance and walking and help to reduce pain and fatigue. • People who may need interventions for physical exercise training include those who: • Have reduced physical fitness with difficulty engaging in physical exercise	Interventions for Physical Exercise Training • Educate and advice on physical fitness • Select exercises that the person can easily engage in. e.g., if the person already likes cycling, encourage this • Consider how the exercises fit into the person's daily schedule. E.g. If the person has time to exercise in the evenings, it may be best to fit that into their schedule • Provide guidance on how to start and continue physical exercise training • Use the physical activity pyramid to guide the person on the frequency of exercise (Handout) • Tailor the exercises based on the person's baseline physical exercise level • If the person does not engage in regular physical exercise, ask them to begin at low intensity levels • If they are already engaged in low intensity exercise, progress to moderate intensity then to vigorous intensity
Care Domain for Muscle strengthening	
• Involves exercises aimed at improving muscle strength, preventing muscle wasting due to inactivity, and restoring or building muscle that has decreased in size. These exercises are performed against gravity or resistance. • People who may need interventions for muscle strengthening include those who: • Feel muscle weakness with inability to complete everyday tasks	Interventions for Muscle strengthening • Educate and advise on muscle strength • Provide strengthening exercises based on • The part of the body e.g., if the difficulty is in the arm, provide arm exercises the level of difficulty • If support is required, provide supported strengthening exercises first • If activities can be done independently, provide independent strengthening exercises (Mark the selected exercises on the handout for the person) • Provide guidance on how to start and continue muscle strengthening exercises
Care Domain for Joint and Muscle Flexibility	
• Involves exercises to improve joint or limb movements, reducing muscle stiffness, pain, swelling, and the risk of deep venous thromboembolism. These exercises activate the muscle pump and enhance joint mobility. • People who may need interventions for joint and muscle flexibility include those who: • Have joint and muscle stiffness or difficulty moving any of the body's joints	Interventions for Joint and Muscle Flexibility • Educate and advise on joint and muscle flexibility • Provide joint and muscle flexibility exercises based on a. the part of the body e.g. if the difficulty is in the knee, provide knee exercises b. the level of difficulty • if support is required, provide supported strengthening exercises first • if activities can be done independently, provide independent joint anscle flexibility exercises (Mark the selected exercises on the handout for the person) • Provide guidance on how to start and continue joint and muscle flexibility exercises

Care Domain for Walking and Balance	
• Involves exercises to improve balance and safe walking indoors and outdoors for people who: • Have poor balance and coordination • Have difficulty of walking	Interventions for Walking and Balance • Educate and advise on walking and balance • Begin with balance exercises as balance has a direct impact on walking • Remember to always support the person during balance exercises • Advise the person to warm up with gentle stretching exercises (see physical exercise handout for examples of warm-up exercises) • If the person cannot stand, begin walking exercises with seated marching exercises
Care Domain for Transfer	
• Involves safe movement of a person from one position or surface to another including the use of assistive products for individuals who: • Have difficulty of moving from one position to the other such as from lying to sitting, sitting to standing, one sitting position to the other	Interventions for Transfer • Educate and advise on transfers • Persons with difficulty transferring may require assistance from caregivers • Provide guidance to the person and caregivers on what to look out for (e.g. bed sores, pain, comfort, state of attached medical equipment) before and after transfers. • Provide guidance on how to transfer safely and correctly based on the: • The type of transfer difficulty (e.g. lying to sitting, sitting to standing) • The level of difficulty • If support is required, teach the caregiver how to support transfers • If transfer can be done without support, teach the person how to correctly and safely transfer independently
Care Domain for Positioning for movement and skin care	
• Involves in placing a person in specific positions using hands, force, or devices to lift, lower, push, pull, carry, or move for those who: • Have difficulty moving or need periods of rest due to impaired normal function	Interventions for Positioning for movement and skin care • Educate and advise on positioning for mobility and skin care • Provide guidance to the person and caregiver on how to maintain a position that will prevent skin problems and difficulty moving. • Educate and advise the person with weak arm/s and shoulder problems due to stroke on how to use the arm • Teach the different positions with lying and sitting which prevent joint stiffness and contractures from developing • If the person has a diagnosis of a stroke with one-sided weakness, teach how to lie down on the affected and unaffected sides. • Manage pressure sores or refer for management if it is present • Provide guidance on the correct positions and timing on lying and sitting to prevent bed sores

2.3.7 Pain Area of Rehabilitation

The pain area of rehabilitation has one care: domain pain.

Common Clinical Presentations: • Aches in different parts of the body • Shooting, stabbing, or burning sensation • Tingling or numbing pain	**Who needs urgent referral** Worsening or progressive pain condition • Pain associated with swelling, bleeding, or warm body parts • Constant unvarying pain
Care Domain for Pain	
• Involves pain management of people who experience pain such as aches in different parts of the body, shooting, stabbing, or burning sensation, tingling or numbing pain	**Interventions for Pain** • Educate and advice on pain • Advice individuals to stay as active as possible. • (Refer to the Motor functions and mobility module for guidance on physical activity training) • Recommend relaxation techniques for relieving stress • Advise on how to modify thinking and develop a habit of thinking positive thoughts about chronic pain • For pain due to problems with muscles and bones (e.g. a torn muscle or fracture) • Teach how to change positions to relieve pain • Provide guidance on the application of ice (usually during the first 2 weeks of an injury • Provide guidance on the application of heat (usually after 2 weeks of an injury)

2.3.8 Self-Care and Participation Area of Rehabilitation

Self-care and participation area of rehabilitation has three care domains: Self-care and daily activities, Bladder and bowel management and Community participation.

<table>
<tr><td>Common Clinical Presentations:
Difficulty taking care of oneself and engaging in daily activities such as bathing and personal hygiene, dressing, feeding, household chores, taking medications, using the telephone, managing finances, using transportation, shopping
Frequent bladder and bowel accidents
Difficulty passing urine or stool
Feeling of incomplete emptying of the bladder
Difficulty pursuing leisure or recreational interests and hobbies; religious activities and sports
Difficulty accessing the physical/public environment</td><td>Who needs urgent referral for Respiratory Functions
Acutely ill person
Fever, chills, and other signs of acute infection
Uncontrolled pain
Severe weakness or debilitation
Severe psychological distress
Pain on urination
Difficulty maintaining safety in daily activities</td></tr>
<tr><td colspan="2">Care Domain for Self-care and daily activities</td></tr>
<tr><td>People who may need interventions for self- care and daily activities include those who:
Have difficulty taking care of themselves and engaging in daily activities such as bathing and personal hygiene, dressing, feeding, household chores, taking medications, using the telephone, managing finances, using transportation and shopping</td><td>Interventions for Self-care and daily activities
Provide education and advice on how to care for self and perform daily activities based on the specific area of difficulty e.g. bathing, feeding, dressing
Provide guidance to the person and their caregivers on how to adapt the way they do a task, to make it easier or safer for them e.g. sitting on a stool to cook or to do handwashing instead of standing
Recommend adapting the person’s home to improve self-care. E.g. add handrails to stairs, grab bars in bathroom
Provide guidance to the person and their caregivers on how to keep the home safe e.g. removing clutter and wiping liquids on the floor to reduce risk of falling</td></tr>
<tr><td colspan="2">Care Domain for Bladder and Bowel management</td></tr>
<tr><td>People who may need interventions for bladder and bowel difficulties include those who have:
Frequent bladder and bowel accidents
Difficulty passing urine or stool
Feeling of incomplete emptying of the bladder
Difficulty with toileting</td><td>Interventions for Bladder and Bowel management
Educate and advise on how to manage bladder and bowel difficulties based on the type of difficulty.
If there is bladder or bowel incontinence, recommend the use of a bladder or bowel diary to record when accidents happen
Give advice on how to regulate fluid intake for bowel and bladder difficulties
Educate the person and their caregiver on how to clean and care for urinary catheters if they are being used.
Train the person on how to do pelvic floor exercises
For persons with bowel management difficulties, it may be necessary to keep a food diary to help with identifying foods that may cause bowel incontinence</td></tr>
</table>

Care Domain for Community Participation	
• People who may need interventions for community participation include those who have difficulty: • Pursuing leisure or recreational interests and hobbies either due to low mood or due to physical or social difficulties • Engaging in regular sporting activities • Accessing the physical/public environment • Accessing local community resources (e.g. clubs, faith groups, day centers, sports)	Interventions for Community Participation • Educate and advise the person including caregivers on how to increase participation in the community • Provide guidance on community events that may prevent or worsen participation based on the difficulty E.g. avoiding overcrowded events for a person with anxiety • Recommend sports and recreational activities that can be easily modified to promote participation • Recommend social and leisure activities available in the community • Advise on identifying community facilities that are accessible • Provide guidance to caregivers on how to support the person in community participation. E.g. alerting a person with visual impairment about obstacles and potential injury risks at community events.

2.3.9 Guidance for Known Health Conditions or Diagnoses

This section gives guidance for providing basic rehabilitation services for six common health conditions or known diagnoses, including how to assess the person and relevant functioning care domains (when details of each care domain needed go back and see the guidance for service provision and referral section or the specific health condition or diagnosis training materials provided).

Stroke
Ensure that the diagnosis of Stroke has been confirmed by a doctor
Assess the person who has a stroke with functioning difficulties
Assess based on the functioning difficulties using the assessment form with guidance from the common clinical presentations **Note** • Assess other functioning difficulties not related to stroke • Remember to rule out general and stroke related red flags before assessment

Deliver care	Functioning Care of domain
Educate, advise, and train on memory problems and safety considerations	Memory
Educate and counsel on sleep	Sleep
Educate, counsel, and provide support for managing low mood, anxiety, and stress	Low mood, anxiety, and stress
Educate and advise on communication impairment and strategies Train and provide practical support in speaking	Speech and communication
Educate and train in vision impairment and coping strategies	Seeing
Educate, train, and advise on swallowing	Swallowing
Educate and advise on risk factors for cardiovascular diseases	Cardiovascular fitness
Educate, advise, and train on management of breathlessness and energy conservation	Breathing
Educate, advise, and train on the use of massage, exercises, and compression garments for edema control	Edema

Educate and advise on physical exercise training	Physical exercise
Train in muscle strength	Muscle strengthening
Train in joint flexibility	Joint flexibility
Train in walking and balance	Walking and balance
Educate and train in positioning to optimize skin care and mobility	Positioning for skin care and mobility
Educate and train in correct and safe transfer techniques	Transfers
Educate and advise on general pain management	Pain
Educate, advise, and train in self-care and to improve safety and independence	Self-care
Educate and advice in community participation	Community Participation
Educate and train in bowel and bladder management	Bowel and bladder management

- Monitor the person throughout. Review based on assessment findings and the rehabilitation interventions being provided.
- Refer if there are general and/ or stroke related red flags during rehabilitation.

Osteoarthritis

Ensure that the diagnosis of osteoarthritis has been confirmed by a doctor

Assess the person who has osteoarthritis with functioning difficulties

Assess based on the functioning difficulties using the assessment form with guidance from the clinical decision trees.

Note

- Assess other functioning difficulties not related to osteoarthritis
- Remember to rule out general and osteoarthritis related red flags before assessment

Deliver care	Functioning Care of domain
Educate, counsel, and provide support for managing low mood, anxiety, and stress	Low mood, anxiety, and stress
Educate and advise on physical exercise training	Physical exercise
Train in muscle strength	Muscle strengthening
Train in joint flexibility	Joint flexibility
Train in walking and balance	Walking and balance
Educate and train in correct and safe transfer techniques	Transfers
Educate and advise on general pain management	Pain
Educate, advise, and train in self-care and to improve safety and independence	Self-care
Educate and advice in community participation	Community Participation

- Monitor the person throughout. Review based on assessment findings and the rehabilitation interventions being provided.
- Refer if there are general and/ or osteoarthritis related red flags during rehabilitation.

Low Back Pain
Ensure that the diagnosis of Low Back Pain has been confirmed by a doctor
Assess the person who has low back pain with functioning difficulties
Assess based on the functioning difficulties using the assessment form with guidance from the clinical decision trees. **Note** • Assess other functioning difficulties not related to low back pain • Remember to rule out general and low back pain related red flags before assessment

Deliver care	Functioning Care of domain
Educate, counsel, and provide support for managing low mood, anxiety, and stress	Low mood, anxiety, and stress
Educate and advise on physical exercise training	Physical exercise
Train in muscle strength	Muscle strengthening
Train in joint flexibility	Joint flexibility
Train in walking and balance	Walking and balance
Educate and train in correct and safe transfer techniques	Transfers
Educate and advise on general pain management	Pain
Educate, advise, and train in self-care and to improve safety and independence	Self-care
Educate and advice in community participation	Community Participation

- Monitor the person throughout. Review based on assessment findings and the rehabilitation interventions being provided.
- Refer if there are general and/ or low back pain related red flags during rehabilitation.

Fracture
Ensure that the diagnosis of Fracture has been confirmed by a doctor
Assess the person who has fracture with functioning difficulties
Assess based on the functioning difficulties using the assessment form with guidance from the clinical decision trees. **Note** • Assess other functioning difficulties not related to fracture • Remember to rule out general and fracture related red flags before assessment

Deliver care	Functioning Care of domain
Educate, counsel, and provide support for managing low mood, anxiety, and stress	Low mood, anxiety, and stress
Educate, advise, and train on the use of retrograde massage, exercises, and compression garments for edema control	Edema
Educate and advise on physical exercise training	Physical exercise
Train in muscle strength	Muscle strengthening
Train in joint flexibility	Joint flexibility
Train in walking and balance	Walking and balance
Educate and train in correct and safe transfer techniques	Transfers
Educate and advise on general pain management	Pain
Educate, advise, and train in self-care and to improve safety and independence	Self-care
Educate and advice in community participation	Community Participation

- Monitor the person throughout. Review based on assessment findings and the rehabilitation interventions being provided.
- Refer if there are general and/ or fracture related red flags during rehabilitation.

Chronic Obstructive Pulmonary Disease
Ensure that the diagnosis of Chronic Obstructive Pulmonary Disease (COPD) has been confirmed by a doctor
Assess the person who has fracture with functioning difficulties
Assess based on the functioning difficulties using the assessment form with guidance from the clinical decision trees. **Note** • Assess other functioning difficulties not related to COPD • Remember to rule out general and COPD related red flags before assessment

Deliver care	Functioning Care of domain
Educate and counsel on sleep	Sleep
Educate, counsel, and provide support for managing low mood, anxiety, and stress	Low mood, anxiety, and stress
Educate, advise, and train on management of breathlessness and energy conservation	Breathing
Educate and advise on physical exercise training	Physical exercise
Train in muscle strength	Muscle strengthening
Educate, advise, and train in self-care and to improve safety and independence	Self-care
Educate and advice in community participation	Community Participation

- Monitor the person throughout. Review based on assessment findings and the rehabilitation interventions being provided.
- Refer if there are general and/ or COPD related red flags during rehabilitation.

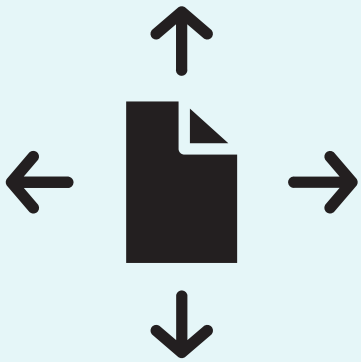
Ischaemic Heart Disease
Ensure that the diagnosis of ischemic heart disease has been confirmed by a doctor
Assess the person who has ischemic heart disease with functioning difficulties
Assess based on the functioning difficulties using the assessment form with guidance from the clinical decision trees. **Note** • Assess other functioning difficulties not related to ischemic heart disease • Remember to rule out general and ischemic heart disease related red flags before assessment

Deliver care	Functioning Care of domain
Educate, counsel, and provide support for managing low mood, anxiety, and stress	Low mood, anxiety, and stress
Educate and advise on risk factors for cardiovascular diseases	Cardiovascular fitness
Educate and advise on physical exercise training	Physical exercise
Train in muscle strength	Muscle strengthening
Educate and advise on general pain management	Pain
Educate, advise, and train in self-care and to improve safety and independence	Self-care
Educate and advice in community participation	Community Participation

- Monitor the person throughout. Review based on assessment findings and the rehabilitation interventions being provided.
- Refer if there are general and/ or ischemic heart disease related red flags during rehabilitation.

CHAPTER 3

PILOTING THE NBPIR IN ETHIOPIA



CHAPTER 3 – PILOTING THE NBPIR IN ETHIOPIA

3.1. Implementation guide for piloting the National Basic Package of Intervention for Rehabilitation

This chapter puts forth key considerations for piloting the NBPIR in Ethiopia and learning from this pilot to ensure an evidence-based and successful scale up of the model at the national level. This chapter suggests governance, implementation and learning structures for the pilot.

3.1.1 Governance Structure

The governance structure for rehabilitation service integration is under the newly established Rehabilitation and Sub-specialty Service Desk under the MOH's Medical Service Program at the national level, with equivalent structures at Regional Health Bureau (RHB). At zonal and district level a similar structure will be formed based on the regional context.

There will be a committee or task force which will coordinate, monitor, and evaluate the piloting of the NBPIR at the national, regional, and district level. This administrative level should coordinate with the PHC and Community Engagement Executive Office at the national level and its equivalent structure at the regional level. In addition, there should be clinical mentorship and referral linkages among the health care tiers to maintain the quality of basic rehabilitation services within the PHC system and for the continuity of care.

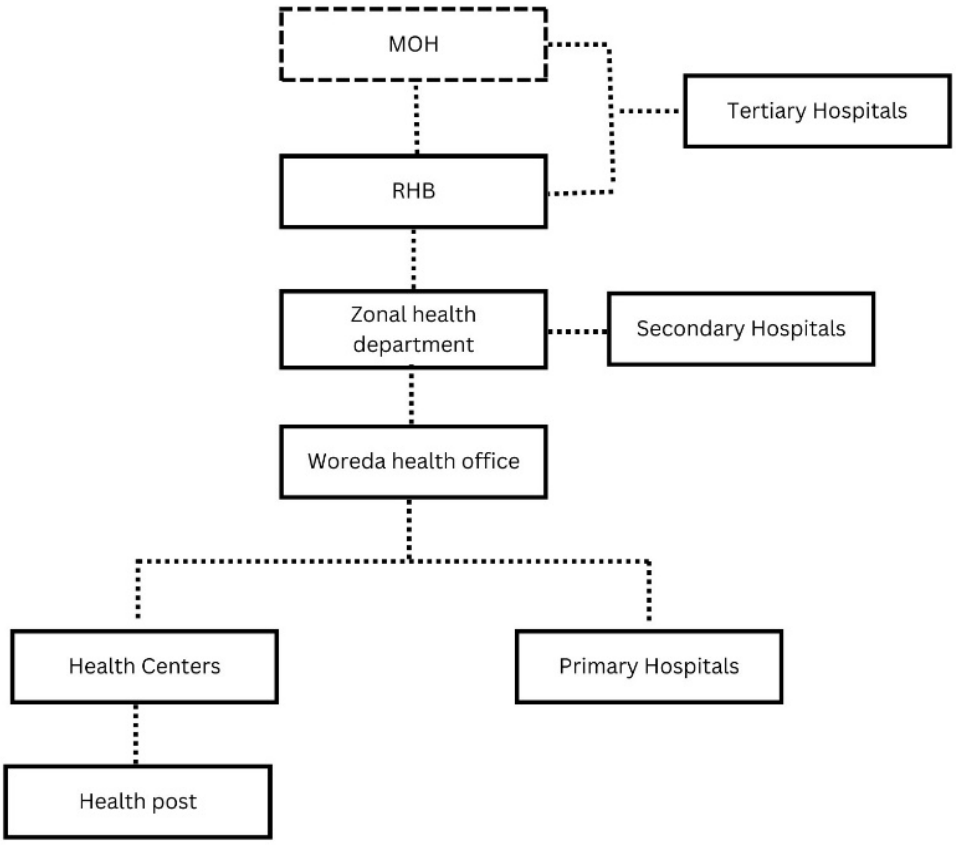


Figure 2 Administrative Structure for rehabilitation services

3.1.2 Roles and Responsibilities of Stakeholders

Ministry of Health

- Strengthen the rehabilitation structure.
- Mobilize resources.
- Outline roles of community health workers, primary care workers (doctors and nurses) and rehabilitation specialists
- Strengthen the rehabilitation service integration taskforce at national level.
- Develop and update clinical guidelines, protocols, and tools.
- Set and update national standards.
- Coordinate the piloting and scale up of the NBPIR in PHC at all levels.
- Lead capacity-building efforts at national level to create a pool of TOT and mentors/coaches at national and regional levels.
- Conduct supportive supervision to RHBs and lead hospitals and supports RHBs and lead hospitals to coach and mentor facilities.
- Participate in/support/oversee the collaborative learning activities in the catchment of implementation facilities and regions.
- Monitor the piloting and integration of the NBPIR at national level and in pilot facilities by tracking progress through implementation milestones.
- Conduct biannual and annual national review meetings on the performance of PHC facilities piloting the NBPIR.
- Customize available guides and tools for best practice documentation, collect and formulate best practices across the country.
- Develop a workplan for the pilot of the NBPIR.
- Coordinate the selection of PHC pilot sites for implementation of the NBPIR.
- Lead the Evaluation of the rehabilitation service integration, document and disseminate lessons learnt from the implementation.

Regional Health Bureaus

- Spearhead and coordinate the implantation of basic rehab package integration in PHC program within the region.
- Mobilize resources to support the NBPIR pilot in PHC.
- Strengthen the rehabilitation structure at regional, zonal, woreda and facilities with defined roles and responsibilities.
- Establish/strengthen the rehabilitation integration in PHC technical committee at RHB level.
- Adopt or adapt national guidance, guidelines, protocols, and tools.
- Lead capacity building efforts at zonal and woreda levels with aim to create the rehabilitation multidisciplinary team for PHC.

- Conduct supportive supervision to zones and woredas and supports coaching and mentoring to health facilities.
- Support regional level performance review meetings.
- Monitor the piloting and integration of the NBPIR at the regional level by tracking progress through implementation milestones and common core indicators.
- Ensure regular reports are captured from pilot facilities (monthly).
- Adopt available guides and tools for best practice documentation, collect and formulate best practices across the region.
- Facilitate data and best practice sharing to national level.

Zone/District

- Spearhead and coordinate the implementation of the NBPIR in pilot facilities.
- Closely work with the partner supporting the NBPIR pilot.
- Strengthen good governance to clients and staffs.
- Identify system/structure gaps (HR, medical equipment, infrastructures) and support their strengthening in collaboration with the RHB, MOH and partners.
- Disseminate updated national standards, protocols, and practice tools to health facilities.
- Conduct supportive supervision and coaching/mentoring to the health facilities.
- Ensure regular data reports are captured and reported at district (monthly) and facility (monthly) levels.
- Closely monitor the implementation of basic rehabilitation service integration in respective facilities.
- Organize and lead learning sessions between facilities within the LD (quarterly EHIAQ cluster review meetings).
- Facilitate data and best practice sharing to regional level.
- Advocate and engage community about the availability and referral of cases in need of rehabilitation service.

World Health Organization

- Provide technical guidance in implementation of Basic rehabilitation service integration activities.
- Provision of training of trainers
- Develop evaluation form for the pilot
- Provide guidance for planning and implementing the NBPIR pilot.
- Support documentation and sharing of best practices globally.
- Provide training of primary care workers
- Facilitate training of trainers (rehabilitation specialists) in country
- Provide technical support for monitoring and evaluation of the basic rehabilitation integration in in PHC.

Partners

- Support the implementation of the NBPIR in PHC.
- Harmonize their investment to the national and pilot facilities operational plan.
- Coordinate building of national capabilities for strengthening of national and district rehabilitation integration activities.
- Provide technical and financial support for planning, implementing, and monitoring piloting of the NBPIR in the pilot facilities.
- Advocate for increased global and national commitment to integrate the NBPIR in PHC.
- Mobilize and allocate resources for the implementation of NBPIR in PHC setting.
- Support the sharing of information, best practices and lessons learned through the national and global learning framework and the evaluation of the integration activities.

Professional societies

- Build the capacity of health workers to meet desired competencies.
- Advocate and support the implementation of basic rehabilitation service integration initiatives at all levels.
- Empower members to make it annual meeting themes and subthemes.
- Empower association leaders' area of panel discussion at their annual meeting.
- Engage community level social structures.

3.1.3 Implementation Approach

The implementation of the integration of the NBPIR will be done in two phases. The first phase will be a pilot of the NBPIR in select facilities to gather lessons on implementation for future scale up of the NBPIR for integration nationwide. The second phase will be the integration of the NBPIR to all PHC settings after addressing the necessary components and adjustments from the first phase.

Site selection

The pilot site should be selected based on pre-determined criteria. To select relevant health facilities to pilot the NBPIR, a checklist with scoring will be developed based on the following proposed selection criteria:

1. **Availability of workforce (healthcare provider capacity):** Give priority to facilities with an adequate number of healthcare workers of different professional backgrounds beyond PHC providers and with potential supervisors and coaches that are available within the catchment area.
2. **Geographic Distribution**: Choose PHC facilities from different geographic regions within the country. This ensures that the pilot program covers diverse populations and contexts.
3. **Accessibility**: Select PHC facilities that are easily accessible to the target population. Consider factors such as proximity to transportation hubs, roads, and communities.

4. **Existing Infrastructure**: Assess the availability of infrastructure and equipment at each PHC center. Prioritize centers with adequate space, equipment, and staffing to support rehabilitation services.
5. **Data Availability**: Choose PHC facilities where data collection and monitoring systems are in place. This allows for effective evaluation of the pilot program's impact.
6. **Availability of technical support:** Proximity to higher-level health care facilities that provide comprehensive rehabilitation services.

Training approach

Standardized training manuals will be prepared for the identified basic rehabilitation services. To ensure the highest quality standards, the manual will undergo a standardization process and be accredited by the MOH.

A training of trainers (TOT) approach will be used to train rehabilitation specialists to cascade training to general PHC providers on the basic rehabilitation interventions in the NBPIR:

a) Training of trainers and supervisors

b) Training of health care providers. This includes any worker in PHC units, including Health Extension Workers (HEWs).

Rehabilitation specialists receiving TOT training should:

- Be physical therapists, physiotherapy doctors, occupational therapists, or physical and rehabilitation medicine doctors
- Be able to provide the interventions in the package
- Commit to attending all the training sessions
- Be prepared to provide support and mentorship to the primary care providers through discussions, reflections, answering questions, etc.
- Assist in carrying out the monitoring, evaluation and follow up
- Commit to monthly follow-up visits to the learners' primary care settings for a 3-month period following the training and provide continued online support via social media platform post training.

If qualified trainers are not available, trainers from other countries can be considered.

Preparations for organizing trainings for primary care workers will include the following:

- Understanding the local needs and challenges
- Establishing the goals and extent of training
- Adapting the interventions to local needs
- Organizing the requirements for conducting the training (eg. Venue, equipment, materials etc.)
- Fostering equity for persons with disabilities

Technical support

After providing training on basic rehabilitation services for PHC workers, implementing continuous supportive activities like mentorship, coaching, experience sharing visits, knowledge exchange workshops, onsite supervisions, and refresher trainings is important to strengthen and apply the knowledge and skills gained during the initial training.

*Experience sharing visits***-** allows PHC workers to observe successful rehabilitation practices in action, providing them with real-life examples for implementing those practices in their own settings.

Knowledge exchange workshops and refresher training sessions - facilitate interaction and collaboration among PHC workers, allowing them to share their experiences, challenges, and innovative solutions. By engaging in ongoing mentorship, coaching, and refresher training, primary health care workers can continue developing their skills and knowledge over time. This helps them stay updated with new developments, research, and evidence-based practices in rehabilitation services.

Onsite supervision - help ensure the quality and consistency of rehabilitation services provided by PHC workers. These activities allow supervisors to assess the implementation of learned skills, identify areas for improvement, and provide feedback to enhance the quality of care.

Mentorship and coaching - the availability of mentorship, coaching, and other follow-up activities by experienced rehabilitation workers demonstrates ongoing support for PHC workers. It instills a sense of value, motivation, and confidence in their abilities, reducing burnout and turnover rates. Forms to be filled during and after each technical support should be prepared for mentorship and coaching including terms of reference (TOR), clinical support and supervision form, difficult case report form, and activity report and feedback form.

Network of facilities for rehab service integration in PHC

Effort has been made to use networking platforms like the EHAQ (Ethiopian Hospital Alliance for Quality) as a vehicle to provide technical support and define referral pathways to the PHC service delivery points with the aim to ensure quality rehabilitation services. Accordingly, the TWG formulated one catchment area network for the pilot of Rehab service integration (Basic Rehab service network):

- One tertiary hospital or general hospital that provides two or more types of rehabilitation services and has rehabilitation professionals willing to serve as trainers and/or mentors. The Hospital will also serve as a training center accordingly.
- One primary hospital
- Two health centers and health posts under these health center

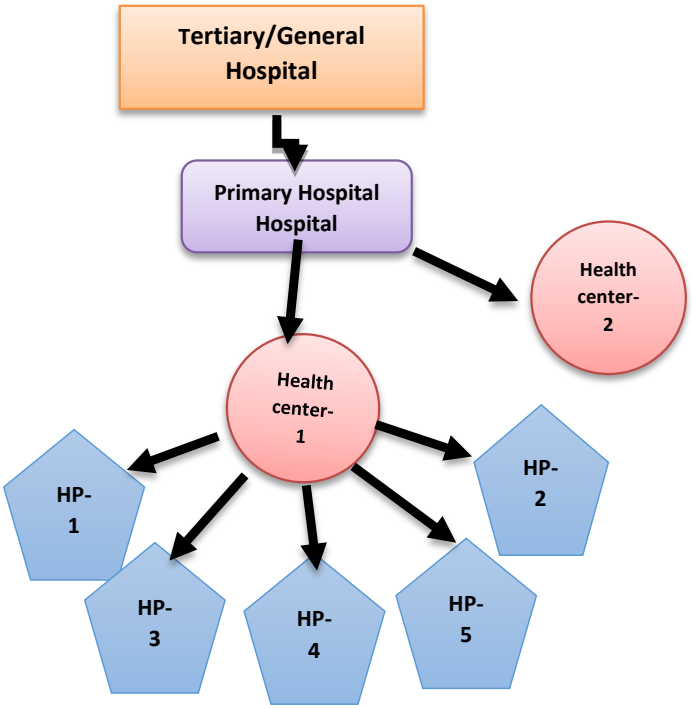


Figure 3: Network of Facilities for Basic Rehabilitation Service integration in PHC

3.1.4 Monitoring, Evaluation, and Learning

Evaluation of training for primary care workers

To evaluate the effectiveness of the training, participants will complete a pre- and post-training assessment focused on their knowledge of delivering basic rehabilitation interventions. This self-administered questionnaire, based on the training materials, will consist of 15 multiple-choice questions. The same questionnaire will be administered twice: once at the beginning of the training and again on the last day after all learning sessions have been completed. This assessment will measure the following:

a. The baseline knowledge of the PHC workers at the beginning of the training

b. The knowledge acquired by the end of the training

c. The knowledge retained at the end of the 3-month supervisory period in the field

Structured interviews for PHC workers (learners) and rehabilitation specialists (mentors) will also be conducted and will cover the following aspects:

- The perception that the BRP-CR is agreeable and has a relative advantage (acceptability)
- The perceived fit or relevance of the BRP-CR for health workers in PHC (appropriateness)
- The practicality of and extent to which the BRP-CR can be implemented in a PHC setting (feasibility)
- Their recommendations for future improvement of the BRP-CR for health workers in PHC

Data collection and reporting

Activity level data and service coverage data will be collected and reported on a monthly basis from these facilities using a structured reporting template. The main sources of data for monitoring and evaluation are the rehabilitation indicators recently integrated in the District Health Information Software 2 (DHIS2). However, indicators which cannot be captured through the DHIS2 will be collected from routine data sources such as facility registers and/or patient records through small scale surveys.

Feedback

During the implementation of this pilot program implementation, two-way feedback on case referral, reported data and overall performance will be strengthened at all levels.

Supportive supervision

Quarterly supportive supervisions will be conducted from zonal and Woreda Heath offices in collaboration with the RHB. The MOH will conduct biannual supportive supervision to these implementing facilities and the findings of the supportive supervision will be presented.

Performance review

- The implementing facilities will review their performance each month and have a performance review meeting.
- Catchment network facilities will have a collaborative learning session quarterly where all catchment level implementing facilities come together to share their experiences and discuss their performance, major challenges, solutions taken to address those challenges, and any support needed.
- Regional level performance review meetings on the integration of the NBPIR will be held every six months. During the review meetings, each facility will share their performance, challenges, and ways forward. Best practices will also be shared among the pilot districts.
- A national level performance meeting will be organized twice a year where all pilot facilities implementing the NBPIR and other rehabilitation stakeholders will review performance, shared challenges, and key takeaways.

Key Performance Indicators (KPIs)

These indicators measure the efficiency, effectiveness, and impact of rehabilitation interventions.

A. Input Indicators (Resources & Readiness)

- Availability of trained healthcare workers
- Number of facilities equipped with Basic PIR resources (assessment tools, patient handouts)
- Supply of assistive products provided to patients
- Budget allocated for rehabilitation services
- Number of rehabilitation awareness and training sessions conducted for health workers and caregivers

B. Process Indicators (Activity & Service Delivery)

- Number of patients assessed using the Basic PIR Assessment Form
- Proportion of patients referred to a rehabilitation specialist after assessment
- Number of patients receiving rehabilitation interventions categorized by domain (e.g., motor functions, hearing, speech, pain, etc.)
- Frequency of follow-up visits for rehabilitation patients
- Percentage of patients demonstrating correct use of assistive devices
- Adherence rate of patients to rehabilitation exercises provided in handouts
- Number of caregivers trained on rehabilitation interventions

C. Outcome Indicators (Short-Term Results)

- Improvement in functional ability scores (based on pre- and post-rehabilitation assessment ratings)
- Percentage of patients reporting reduced pain, improved mobility, or better communication after interventions
- Reduction in fall risk or injury incidence due to mobility improvement
- Patient satisfaction with rehabilitation services and assistive products
- Percentage of patients achieving set rehabilitation goals (SMART goals)

D. Impact Indicators (Long-Term Effectiveness)

- Reduction in disability prevalence within the target population
- Increased participation of individuals with functional impairments in community activities
- Decrease in hospital readmission rates due to untreated rehabilitation needs
- Economic productivity improvement among rehabilitated individuals
- Improvement in quality-of-life scores (WHOQOL or similar measures)

Collaborative learning and adapting

Collaborating, Learning, and Adapting (CLA) is a set of systematic and intentional practices that help improve development effectiveness. Strategic collaboration, continuous learning, and adaptive management link together all components of the pilot phase. In implementing the integration of the NBPIR, this activity will be aligned with performance review meeting and planning phase at all levels

Furthermore, implementation research will be designed and conducted with the aim of linking the learning to any adjustments or improvements needed for scale up.

Evaluation

In addition to the regular monitoring activities, the pilot of the NBPIR will be evaluated at the end of implementation of the pilot. The evaluation will assess key challenges and successes from the pilot phase to plan for further scale up of the NBPIR to PHC facilities nationwide. The evaluation will address feasibility of training PHC workers and establishing referral pathways, effectiveness integration, and the overall cost-effectiveness of the NBPIR. The evaluation will be conducted by an independent organization or institution.

Annex 1: Steps for providing rehabilitation care

The provision of rehabilitation care is done in three key steps of; assessing, delivering, and monitoring services within each area of rehabilitation, as described below:

- Assess: Assessment is a step that provides information required to deliver and monitor the care
- Delivering care: A step where service is provided based on the assessment finding as per the functioning domain and interventions identified.
- Monitoring: Monitoring is checking progress on/against the interventions being provided

Assess

Assessment is the first step to providing rehabilitation care. It obtains the information needed to deliver and monitor the care delivered. Assess care via the following steps:

- **Use an assessment form** to assess the person's area of functioning difficulty. Begin by asking questions related to the person's area of functioning difficulty to get information. The common clinical presentations can serve as a guide.
- **Rule out red flags** (condition(s) that requires immediate referral to or consultation from other care providers) and manage or refer to the appropriate specialist if available or accessible.
- Refer to a rehabilitation specialist- If there is a functioning difficulty, the first thing to do is to refer to a rehabilitation specialist if one is available and accessible.
- **Determine the level of functioning difficulty-** If there is no rehabilitation specialist available or accessible, determine the level of functioning difficulty for each care domain. A rating scale of 0-10 is used. A score of '0' means no difficulty with function and '10' means complete difficulty. If the person being assessed scores higher than '0', basic rehabilitation should be provided according to the NBPIR. If they score '0' there is no need to provide rehabilitation.
- **Set a goal and plan for rehabilitation:** Before providing rehabilitation care, guide the person in setting goals that are Specific, Measurable, Achievable, Realistic and Time-bound. Develop a plan based on the following:
    - The level of functioning difficulty
- Determining if any rehabilitation care has been received in the past and if yes, the type, duration and where it was received.
- The use of assistive products and whether they were prescribed by a person trained to do so or obtained over-the-counter. Ask if the person was assessed, fitted, taught how to use, and followed up for the assistive product.

Deliver care

Each assessment question leads to a care domain with guidance on how to deliver care. Deliver care via the following steps:

- Explain the intervention steps and sequence, safety precautions required and when to seek emergency care.
- Provide rehabilitation service.
- Demonstrate the intervention steps in-person.
- Practice what has been taught with the person or caregiver to ensure safe repetition at home/ workplace.

Monitor

Monitoring is important to check the progress on/against the interventions being provided. Using the same assessment form as before, monitor how a person receives rehabilitation care via the following steps:

- Regular reassessment of functional difficulties at every appointment with the same questions, rate the functioning difficulty level and compare with previous results. Rule out any red flags.
- Review the care provided. Ask the person to repeat interventions and check whether they are being performed correctly.
- Continue the care if on re- assessment, the person's functioning has improved.
- Integration of feedback from patients and caregivers into service improvement plans

» *Remember to record any rehabilitation care received in the past, the use of assistive products and the person's goals for rehabilitation.*

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