National Rehabilitation and Assistive Technology Services Management Guideline

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MINISTRY OF HEALTH-ETHIOPIA
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HEALTHIER CITIZENS FOR PROSPEROUS NATION

December
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FOREWORD

Disability is a multidimensional and complex concept that covers impairments, limitations in activity and participation restrictions. Rehabilitation and assistive technology services focus on improving functional limitations and assisting people with disability.

It plays an irreplaceable and fundamental role in facilitating the social integration and participation of people with physical, sensory, communicative and cognitive disabilities.

Medical rehabilitation centers have been providing rehabilitation and assistive technology services. Multiple factors hindered the medical rehabilitation centers to provide adequate and quality services.

One of the major gaps is the lack of a service management guideline which in turn results in an unstandardized provision of the required services. Hence, MOH has developed this rehabilitation and assistive technology services management guideline to solve the gap with this regard.

Thus, MOH strongly recommends Regional States, Regional Health Bureaus, Medical Rehabilitation Centers and other stakeholders to adhere to the developed guideline to standardize and strengthen leadership, service delivery, human resource capacity, supply chain & device management, financing, and monitoring & evaluation for rehabilitation and AT services. This will in turn improve the rehabilitation and assistive technology services quality and client satisfaction.

Yakob Seman Ahmed
Director General, Medical Services General Directorate-MoH

ACKNOWLEDGEMENTS

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ACRONYMS

AT	Assistive Technology
BSC	Balanced Score Card
BOFED	Bureaus of Finance and Economic Development
BoLSA	Bureaus of Social and Labor Affairs
CE	Conditional Exempted
CES	Conditional Exempted Services
CBR	Community Based Rehabilitation
CPD	Continuous Professional Development
ETB	Ethiopian Birr
FDA	Food and Drug Authority
FWS	Fee Waiver Services
GOFAMM	Government Owned Fixed Assets Management Manual
HMIS	Health Management Information System
HR	Human Resource
ICRC	International Committee of the Red Cross
KPI	Key Performance Indicator
LMIS	Logistics Management Information System
LQAS	Lot Quality Assurance Sample
MDT	Multi-disciplinary Team
MOFED	Ministry of Finance and Economic Development
MOH	Ministry of Health
MOLSA	Ministry of Labor Social Affairs
MOU	Memorandum of Understanding
MRC	Medical Rehabilitation Center
NCD	Non-Communicable Diseases
OOP	Out of Pocket
OPD	Outpatient department
P&O	Prosthetic and orthotic
PMT	Performance Monitoring Team
PPM	Planned Preventative Maintenance
PPP	Public Private Partnership
PRC	Physical Rehabilitation Center
PSA	Pharmaceutical Supply Agency
PWD	People with Disability
RHB	Regional Health Bureau
RR	Retained Revenue
SMT	Senior Management Team
SOP	Standard Operating Procedure
SPHMMC	St. Paul's Hospital Millennium Medical College
TOR	Terms of Reference
TWG	Technical Working Group
UNCRPD	United Nations Convention on the Rights of People with Disabilities
WHO	World Health Organization

BACKGROUND

The United Nations Convention on the Rights of People with Disabilities (UNCRPD) has defined disability as "the interaction between persons with impairments and attitudinal and environmental barriers that hinders their full and effective participation in society on an equal basis with others, whereas impairment as any partial or complete loss of, or loss of the function of, a body part, organ, or system; this may be due directly or secondarily to pathology or injury and may be either temporary or permanent". WHO and Schere have also defined disability as "a multi-dimensional and complex concept that covers impairments, limitations in activity and participation restrictions" Assisting persons with disabilities through all possible avenues plays an irreplaceable and fundamental role in facilitating the societal integration and participation of people with physical, sensory, communicative and cognitive disabilities. In addition to the environmental factors such as road traffic accidents, global evidences suggested non-communicable diseases (NCD), such as diabetes, stroke and hypertension are major contributing factors for disability. In 2017, the International Diabetes Federation reported 5.2% of Ethiopian adults are diabetic and the STEP wise approach to surveillance survey on communicable diseases risk factors reported prevalence of diabetes mellitus is 3.2% and hypertension in adults is 18.8%. In Ethiopia, the number of deaths due to traffic accidents is found to be the highest in the world. According to WHO's 2013 report, the road crash fatality rate in Ethiopia was 4984.3 deaths per 100,000, compared to 574 deaths per 100,000 for sub-Saharan

countries. This higher number of deaths due to road traffic accidents can easily suggest presence of many disabilities in Ethiopia.

Rehabilitation is an important health service to address the needs of those who are affected by disabilities as well as the ageing populations with rising prevalence of non-communicable diseases. Currently there are more than 15 physical rehabilitation centers operating in Ethiopia. The recent national country capacity assessment report indicated that the presence of multiple challenges that should be addressed which included lack of standards for governance and leadership, service provision, human resource management and other key issues of rehabilitation services in the country.

The intended users of this document include Ministry of Health for direction and guidance. Regional Health Bureau (RHB) and Regional Bureaus of Social and Labor Affairs (BoLSA) may also use this document as a guide for supporting and coaching medical rehabilitation centers (MRCs). MRCs will use this document as a day-to-day reference for routine operations and services provision.

This guideline aims to provide national comprehensive service management direction for rehabilitation service provision including its governance and financing issues to be used by MOH, RHB and the rehabilitation centers.

CHAPTER 1

Leadership and Governance

Section I INTRODUCTION

Medical Rehabilitation Centers (MRC) leadership, management and governance arrangements are essential to ensure effective, efficient and comprehensive rehabilitation services that contribute to the health and wellbeing of the target population. Leadership of MRC should manage their organizations and liaise with external agencies and community. There are five core functions of MRC's leadership:

- Set the MRCs mission and strategic plan;
- Prepare and implement institutional policies, rules and regulations in line with national standards;
- To mobilize resources and ensure efficient utilization;
- To oversee the activities of the MRC;
- To continue to improve the standards of service delivery at the MRC

This chapter describes the operational standards, implementation modalities and tools to assist MRC to achieve the desired leadership standards.

Section II OPERATIONAL STANDARDS

1. The MRC should have a functional senior management team (SMT) that meets regularly to manage and execute the overall activities.
2. The MRC should establish and implements resource mobilization plan and ensures resources are utilized effectively and efficiently.
3. The MRC should have a system for performance monitoring and feedback mechanisms
4. The MRC should promote good ethical practice and has an ethics violation reporting and response mechanism.
5. The RHB should assign MRC Executive Director and evaluates his/her performances every six months.
6. The MRC should conduct a client satisfaction survey biannually.

Section III IMPLEMENTATION GUIDANCE

3.1. Senior Management Team

The senior management team is the body that oversees the MRC's activities. The team defines the scope and nature of the activities and identifies the necessary resources to implement the MRC's strategic plans and activities. Resources can come from diverse sources but must be utilized cautiously and efficiently with great impact on the target population.

Each MRC should have a SMT that supports the Executive Director to oversee the day-to-day operations at the center. The SMT provides information and data to the Executive Director, and serves as a forum for shared decision making, thereby strengthening the transparency and accountability of the Centre's leadership. The SMT is accountable to and chaired by the Executive Director.

Terms of Reference (ToR) for the SMT should be defined and include: a description of the membership of the SMT; the roles and responsibilities of the SMT; frequency of meetings; voting rules and a statement of confidentiality. Each SMT member should sign a copy of the ToR indicating his/her acceptance of their position within the team. Ideally, the SMT should meet every week to provide appropriate directions/decisions, evaluate performance of each unit and identify issues that require the RHBs direction/decision.

Responsibilities of Senior Management Team

The main purpose of the SMT is to assist the Executive Director and serves as a forum for collective decision making and shared responsibility. Indeed many of the functions of the Management Committee are similar to that of the Executive Director who ultimately has final approval and responsibility to the RHB.

Specific responsibilities include:

1) Work with the Executive Director to prepare and implement strategic objectives and annual plans
2) Ensure that activities of the MRC are carried out efficiently, with transparency and accountability and that all required reports are submitted

to higher authorities (e.g. RHB, BOFED, MOH, and MOFED) in accordance with government requirements.

3) Provide cost-effective financial oversight, advising the Executive Director on mechanisms to generate income.

4) Ensure proper management of rehabilitation center infrastructure, including estates, equipment and supplies.

5) Resolve departmental or case team problems or disputes when these are beyond the ability of the department head or case team director.

6) Ensure high quality services by establishing and implementing mechanisms to measure and improve the quality of care.

7) Support workforce recruitment and retention, protecting the health and wellbeing of staff, and creating opportunities for staff development including leadership opportunities.

8) Work to enhance the organization's public standing and strengthen relationships with community, government and professional audiences.

9) Establishes mechanisms to involve clients and the public in the planning and delivery of rehabilitation center services and to maintain close consultation with community leadership.

10) Establishes rules and regulations of the MRC including procedures relating to disciplinary action and processes of appeals.

11) Establishes mechanisms of communication both top down and bottom up, thereby creating an inclusive environment within the MRC.

12) Works with Hospitals and PHCs in Zones and Woredas within the MRCs catchment areas to communicate the MRCs activities.

13) Where appropriate, organize outreach programs to identify PWDs in areas of inaccessibility.

Membership of Senior Management Team

The SMT should be comprised of medical rehabilitation center unit leaders such as department or unit heads, senior clinical staff and key administrative personnel.

The exact membership will be determined by the organizational structure of the MRC and should include the following personnel (or individuals with similar responsibilities):

1. MRC Executive Director (Chairperson of SMT)
2. Prosthetic and orthotic (P&O) Unit head – Technical Coordinator
3. Physiotherapy Unit head
4. Low vision and Blind Service Unit head
5. Hearing and Ear Services Unit head
6. Cognitive and Communication Unit head
7. Planning Unit Head
8. Finance and Procurement Unit Head
9. Human Resources Unit Head

The Secretary of SMT shall be assigned by the Executive Director and selected by his/her appropriate technical capacity and professional roles in coordination and leadership.

Appointment of Senior Management Team Members

The Executive Director should determine the membership of the SMT, taking into consideration the organization structure of the medical rehabilitation center and key leadership positions. He/she should recommend the proposed membership to the RHB for approval. After approval, specific individuals will automatically be appointed by virtue of their position within the MRC. When a committee member leaves the office which he/she represented, he/she will be replaced on the SMT by the next person assigned to that post.

Procedures of SMT meetings

A) Frequency and timing of SMT meetings

SMT meetings should be held at least monthly or more often as the need arises. Extraordinary meetings maybe called by the Executive Director at any time. As far as possible SMT meetings should be held during regular working hours, and committee members should have dedicated time within their work schedule to attend and prepare for committee meetings.

B) Agenda items for SMT meetings

The agenda should be set by the Executive Director. All SMT members should be invited to nominate agenda items for consideration by the Executive Director. The agenda and any documents for discussion at the meeting should be distributed to SMT members at least one week in advance of the meeting.

The following should be regular standing items on each and every agenda of the SMT:

1. Approval of previous meeting minutes
2. Executive Director's report–providing an overview of MRC operations, discussion of pressing issues and immediate concerns
3. Reports from each SMT member providing an overview of their department/ function and any pressing issues and immediate concerns
4. Old business– issues unresolved from last meeting
5. New business – any issues SMT members want to raise and
6. Action points – Plans for taking action on decisions reached by the Committee, with the assignment of follow up responsibilities to nominated individuals as appropriate.

3.2. Major Functions of MRC leadership

Resource Mobilization

The MRC should prepare a resource mobilization policy, plan and procedures to mobilize new and additional financial resources. The medical rehabilitation center can mobilize resources from the following sources:

- Public sector financial support
- Donor funding
- Fund raising activities
- Private sector support

To ensure efficient and effective utilization of resources the center needs to develop written guidelines to implement financial management system as described in chapter 5.

Performance Monitoring and Evaluation

The RHB is responsible to direct and supervise the overall activities of the MRC:

- To provide proper financial oversight and auditing procedures
- To ensure adequate resources are available for hospital operations
- To ensure that the center provides services to the highest possible standard.

A performance assessment includes:

- Perform supervision using assessment checklist biannually
- Regular monitoring & evaluation of key performance indicator (KPI) reports
- Conduct performance review meetings

After every performance assessment it is the responsibility of SMT and RHB to have a feedback mechanism and intervene accordingly.

Ethical practice

Discipline Management

In cases where an employee demonstrates behavior that is unacceptable or in conflict with the center's Code of Conduct it may be necessary to take disciplinary action.

- A disciplinary committee should be established to investigate all disciplinary charges and to determine the appropriate disciplinary measure.
- The committee should be chaired by the human resource unit head
- Additional membership should be determined by the Executive Director.

Client satisfaction

Client's satisfaction regarding the overall service provided by the MRC should be assessed by assigned staff members on biannual basis.

The client satisfaction assessment shall include all contact points in the service provision and the overall medical rehabilitation center environmental conditions including:

- Accessibility
- Reception service
- Triage handling
- Specific service areas
- Devices and other related variables.

3.3. MRC Executive Director Evaluation

The Executive Director is accountable to the RHB and his/her performance assessment should be conducted at least every six months. Evaluation criteria should be based on the job description of the Executive Director.

The RHB shall take the correction action based on the evaluation result. The discussion can lead to goals for performance improvement in the future. If gaps have been addressed in the past and no improvements have been made, the discussion may ultimately lead to the termination of employment of the Executive Director following the process described by Federal or Regional Directives.

Section IV IMPLEMENTATION CHECKLIST AND INDICATORS

In order to determine whether the Operational Standards of Leadership and Governance have been met by the center a self-assessment checklist and assessment tool has been developed to be used by center management and an external body such as the RHB or MOH respectively.

Self-assessment checklist

No	Checklist	Yes	No
1.	Obtain a copy of the center's organogram and check it with the membership SMT		
2.	SMT Meets every week		
3.	Check whether minutes are taken at each meeting and agendas are relevant		
4.	TOR is prepared and signed by all members		
5.	There is an annual plan cascaded to each unit		
6.	The SMT submits regular report to RHB, MOH & relevant bodies.		

7.	Annual budget of the center is approved by the RHB		
8	Check if there is a plan to mobilize additional resources for the Center		
9	Check resources are mobilized based on the plan		
10	Internal and external audit reports are reviewed by the SMT and findings and recommendations are attended		
11	View the performance expectations/plans are submitted by each units/ department and are approved by SMT		
12	The performance of each units/departments are reviewed, and feedback is provided every month		
13	A recognition system for units/departments and health workers who accomplished established standards		
14	Check if there is established ethical/discipline committee		
15	Check the committee is led by HR unit head		
16	Obtain minutes of a meeting held on ethical committee		
17	Check whether the Executive Director is evaluated by the RHB by obtaining a copy of performance appraisal		
18	Check whether the appraisal result is submitted to MOH or their respective RHB head.		
19	Check whether client satisfaction is performed twice in the previous year		
20	Check the SMT has discussed for intervene major client dissatisfaction identified factor in the last quarter		

Assessment tool

The following table can be used as a data tool to record whether the main recommendations outlined above have been implemented by the center. The table does not measure attainment of each Operational Standard but rather provides a checklist to record implementation activities.

MET: when all criteria's met

UNMET: when less than half criteria's unmet

PARTIALLY MET: when half and greater criteria's met

#	Standard	Verification criteria	Met	*Partiallymet	Unmet
1.	The Medical rehabilitation center has a functional SMT that meets regularly to manage and execute the overall activities. (6)	1. Obtain a copy of the center's organogram and check it with the membership SMT 2. SMT meets every week 3. Check whether minutes are taken at each meeting and agendas are relevant 4. TOR is prepared and signed by all members 5. There is an annual plan cascaded to each unit using the balanced score card(BSC) framework 6. The SMT submits regular report to the RHB, MOH and relevant bodies.			
2.	The Medical Rehabilitation center SMT mobilizes resources from diverse sources and makes sure resources are utilized effectively and efficiently. (4)	1. Annual budget of the center is approved by the RHB 2. Check if there is a plan to mobilize additional resources for the Center 3. Check resources are mobilized based on the plan 4. Internal and external audit reports are reviewed by the SMT and findings and recommendations are attended.			
3.	There is a system and practice of measuring performance and	1. View the performance expectations/plans are submitted by each units/ department and are approved by SMT			

	results in the rehabilitation center. (3)	2. The performance of each units/ departments are reviewed, and feedback is provided every month 3. Established for each units/departments and health workers who meet established standards.			
4.	The medical rehabilitation center should promote good ethical practice and has an ethics violation reporting and responding mechanism. (3)	1. Check if there is established ethical/ discipline committee 2. Check the committee is led by HR unit head 3. Obtain a minute of a meeting held on ethical committee			Observe the minute
5	RHB assigns MRC executive director and evaluates his/ her performances six months regularly. (2)	1. Check whether the Executive Director is evaluated by the RHB by obtaining a copy of performance appraisal 2. Check whether the appraisal result is submitted to MOH or their respective RHB head.			
6	The medical rehabilitation center should assess client satisfaction biannually (2)	1. Check whether client satisfaction is performed twice in the previous year 2. Check the SMT has discussed for intervene major client dissatisfaction identified factor in the last quarter			Check client satisfaction assessment report and SMT Agenda in the last quarter

Indicators

No	Indicators	Formula	Frequency
1	Total number of SMT meetings held in the reporting period	Total number of SMT meetings held in the reporting period	Quarterly
2	Number of SMT meetings cancelled or deferred	Total number of SMT meetings cancelled or deferred in the reporting period	Quarterly
3	Average attendance rate at SMT meetings	Number of attendees ÷ [number of SMT members x number of meetings] x 100	Quarterly

CHAPTER 2

Service Delivery

Section I INTRODUCTION

Medical rehabilitation service is about restoring and compensating for the loss of body functioning and preventing or slowing deterioration in functioning in every area of a person's life. It includes a wide range of activities including rehabilitative medical care, physiotherapy, speech therapy, occupational therapy, assistive technology service delivery, eye health, and ear and hearing service.

Based on the WHO recommendation and taking in to account the current Ethiopian health care delivery structure, medical rehabilitation services should be integrated into and between primary, secondary and tertiary levels of health systems, for identification of needs and for an effective continuum of care throughout a person's recovery.

The existing physical rehabilitation centers are not at a similar level of service delivery status and their service provision is inconsistent from center to center. The Ministry of Health has also foreseen the need to establish a National Medical Rehabilitation Institution that is going to give technical backup for the regional centers and work on further development of the sector.

As an intervention action, this service delivery guideline aims to upgrade the Physical Rehabilitation Centers (PRCs) to full-fledged comprehensive medical rehabilitation service delivery institutions, equivalent to secondary level health care and with special focus on the integrating existing PRCs into the health service system. This chapter of the document provides a set of standard care processes to be used by medical rehabilitation centers to improve existing rehabilitation service provision or develop new services.

Section II OPERATIONAL STANDARDS FOR THE SERVICE

1. The medical rehabilitation center should have a triage service
2. The medical rehabilitation center should provide physical rehabilitation service.
3. The medical rehabilitation center should provide standardized assistive technologies for people with different types of physical, sensorial and cognitive impairments and disability.
4. The medical rehabilitation center should perform refraction screening, provide service for low vision clients, and produce low cost spectacles.
5. The medical rehabilitation center should provide standardized hearing aids and assistive listening systems.
6. The medical rehabilitation center should provide appropriate psychosocial counseling during the medical rehabilitation process.
7. The medical rehabilitation center should work on the health components of Community-Based Rehabilitation service (CBR).
8. The medical rehabilitation center should provide mobile outreach service for people with disabilities who are living in rural areas.
9. The medical rehabilitation center should have a written standard and operational procedure for all rehabilitative service provision.
10. The medical rehabilitation center should establish strong two-way referral and follow-up linkage with inter/intra departments of the center and other health care settings outside the facility.

Section III IMPLEMENTATION GUIDANCE

3.1. Services Delivery Approach

All rehabilitation units should have adequate number of professionals who follow their job description for treatment procedures and intervention. The units are led by appropriate professional to the service. Provision of assistive technology requires multidisciplinary approach for patient assessment, goal setting and planning activities, the team should be coordinated by technical coordinator.

Personnel

In order to deliver efficient and quality rehabilitation services, the medical rehabilitation center should be staffed by appropriate and adequate number of professionals based on the volume of services and workload. Medical rehabilitation centers should have the following positions and professional mix: physiotherapist, occupational therapist, prosthetist and orthotist, social worker, psychologist, Mid-level professionals for vision and audiology services, community based rehabilitation workers, assistant technicians for P&O services as required for the service standard and whose license and registration is current.

Premises

There should be a clear and appropriate infrastructure around the service area to enable accessibility for persons with a mobility problem. The bathroom should be in accessible location and suitable for the persons with disabilities. Different units should have enough separate room for the procedures such as exercise therapy, casting, production, examination room, staff private room, unit leader office, stores for devices and accessories.

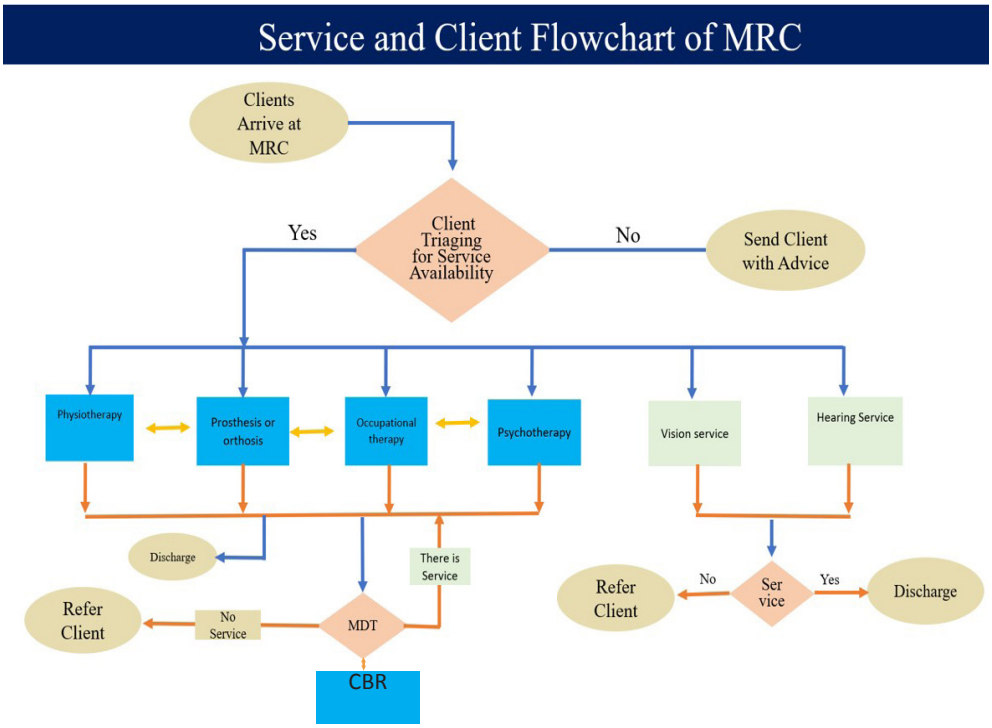
Equipment and supplies

Standard equipment and consumables which shall be available for all rehabilitation services. Equipment shall be clean and functional stored in a safe and accessible place. (Refer chapter four)

3.2. Organization of the service

These services are provided in two ways: directly in the medical rehabilitation center and through the outreach program.

There has to be a multidisciplinary team (MDT) approach to ensure the quality of service and maximize the service user capacity. The multidisciplinary clinical teams are in agreement with the treatment plan and treatment goals. In the MRC, it is the responsibility of the technical coordinators to coordinate the MDT.



Triage

Triage is the primary point of contact for clients who come to the center in need of medical rehabilitation service. Workers in triage should do initial evaluation, selection and forwarding of clients to the respective unit according to initial evaluation findings and review of referral documents.

Physical rehabilitation service

The physical rehabilitation services in a medical rehabilitation center includes production and provision of a wide range of appropriate orthotic and prosthetic devices, wheelchairs, mobility aids, physiotherapy and occupation therapy.

Physiotherapy service - is an essential part of physical rehabilitation service and it should always be integrated into physical rehabilitation services. Physiotherapy interventions (e.g. mobilization of joints, muscle strengthening, and reduction of contractures, stump bandaging, posture correction, exercise programs, gait re-education, and pain management)

compliment the fitting of the devices.

Occupational therapy service - includes environment adaptations, daily living aids, use of the device at home, workplaces, schools, etc. Children, the elderly, and other family members need to be oriented to facilitate their reintegration into the communities.

Prosthetic and Orthotic Services- Prosthetist / Orthotist participate in the multidisciplinary team for the assessment and prescription. Ideally, s/he is the responsible person for assessment, casting, fabrication, gait training and device delivery.

Low vision service

The medical rehabilitation center should provide examination like refraction screening, produce low cost spectacles, dispense low vision aids and counsel clients with low vision and their caregiver to cope with the loss of vision and to enable them to live productive and functional lives. The service is provided with trained nurses or a low vision therapist in a fully equipped unit.

Hearing care service

Provision of assistive hearing devices includes hearing aids, assistive listening systems and voice amplification, and visual alerts.

A hearing aid is any customized electronic device fitted to the ear and designed to amplify and deliver sound to the ear.

The provision of hearing aid services includes, dispensing of the prescribed aid, verification and validation of the benefits of the hearing aids as well as the provision of ongoing support and follow up for patients.

Community based rehabilitation (CBR)

CBR should be available for those clients living in rural areas, with limited infrastructure.

The CBR service should comprise of education for the community on creating a positive attitude towards people with disabilities. They should also detect disabled children early and refer them to the MRC or health inistitutions

for medical care, physiotherapy, occupational therapy and follow disabled within the community to evaluate their progress and take measures based on their findings. The service should be provided with a team consisting of CBR workers in collaboration with an MRC physiotherapist.

Mobile outreach program

The medical rehabilitation center should provide walking aids, braces, shoes and walking frames for those discharged clients who live far away and cannot afford to come to the center. The out- reach program team should consist of a physiotherapist and P&O professionals. The team should also identify new clients in their community as well.

Section IV IMPLEMENTATION CHECKLIST AND INDICATORS

Self-assessment checklist

No	Self-assessment checklist	Yes	No
1	There is an assigned room for triage		
2	There is an assigned professional in the triage room		
3	There is a document that shows the triage service process		
4	There is a functional production room for prosthetics		
5	There is a functional production room for orthotics		
6	There is a functional production room for wheelchair		
7	There is a functional production room for other mobility aids		
8	All assistive devices service provision follows service provision procedures.		
9	Assistive technology users get an individual assessment		
10	Vision services are provided in a separate room		
11	Trained ophthalmic nurses or related health professionals provide the low vision services		
12	There is a document that shows the vision service process		
13	Hearing aid service is provided in separate room		
14	There is a mid-level audiologist or trained nurses to provide hearing service		

15	There is a document that shows the hearing service process		
16	There are CBR workers working in the community, physiotherapists		
17	The physiotherapists are engaged in in CBR activity		
18	There is an identified catchment area for CBR services		
19	Mobile outreach service should be provided by Orthotist/ prosthetist and physiotherapists		
20	Follow-up document for mobile outreach services is available at the center		
21	Standard operational procedure for physiotherapy service is available.		
22	Standard operational procedure for P&O service is available		
23	Standard operational procedure for hearing service is available		
24	Standard operational procedure for low vision service is available		
25	MDT team is available		
26	MDT team meets at least every week		
27	There is an MOU with other institutes		
28	Referral directory is available		
29	There are standard referral documents		
30	MoU is established with other health facilities.		
31	There is referral tracking database installed at center level.		
32	Work plan is available in each service unit		
33	Reports are made periodically from each service unit.		

Implementation Checklist

MET: when all criteria's met

UNMET: when less than half criteria's unmet

PARTIALLY MET: when half and greater criteria's met

No	Standard	Verification criteria	Met	Unmet	Partially met	Remark
1	The medical rehabilitation center should have a triage service. (3)	1. There is an assigned room for triage 2. There is an assigned rehabilitation nurse 3. There is a document that shows the triage service process				Triage registration book
2	The medical rehabilitation center should provide physical rehabilitation service.(5)	There is an available and functional production and service provision of 1. Orthotic & prosthetic devices 2. wheelchairs, 3. Mobility aids – crutch, cane, 4. Physiotherapy service 5. Occupation therapy				observation of the specific services unit and work process

3	The medical rehabilitation center provides assistive technology that fits an individual life situation. (2)	1. Provision of all assistive devices should follow service procedure. 2. Users get individual assessment that take in to account their lifestyle, living environment and physical condition.				At least five patient cards should be reviewed and if possible, crosscheck with client
4	The medical rehabilitation center should perform low vision service. (3)	1. The service provided in separate room 2. Trained ophthalmic nurses or related health professionals to undergo refraction screening, minor low vision services 3. There is a document that shows the vision service process				
5	The medical rehabilitation center should provide standardized hearing aids and assistive listening systems.(3)	1. The service is provided in a separate room 2. Trained middle level audiologist or trained nurses 3. There is a document that shows the hearing service process				
6	The medical rehabilitation center should have community based rehabilitation service. (3)	1. There should be trained CBR workers, physiotherapists				

		2. There should be follow-up documents 3. 4. There should be identified catchment area for CBR services				Check documents for newly identified cases and the services provided.
7	The medical rehabilitation center should provide mobile outreach service for people with disabilities who are living in rural areas. (3)	1. Orthotist/prosthetist and physiotherapists is responsible 2. The center should have suitable vehicle that for outreach service) 3. There should follow-up documents				
8	The medical rehabilitation center has quality assurance documents for the service provision. (2)	1. There are written standard operational procedure documents in each service unit. 2. There is service guideline in each unit				Check the documents
9	The medical rehabilitation center should establish strong two-way referral and follow-up linkage with inter/intra departments of the center and other health care settings outside the facility. (6)	1. There is a functional MDT team that decides any referral procedures 2. There should be a referral paper form 3. There should be an MOU with other institutes				See referral registration book and availability of a referral directory listing

		4. See availability of a referral directory listing which facilities that the center can receive patients from or refer patients to. 5. There is referral tracking database installed at center level. 6. There should be a system for intra-unit referral protocol documents in the center.				
10	Periodical plan and report in each service units. (2)	1. Each service units should prepare month, quarter and annual plan 2. There is reporting format				

Indicators

The medical rehabilitation service provision maybe monitored using the following indicators to assess the effectiveness and the implementation of the service.

No	Indicator	Formula	Frequency
1	Number of patients received physical rehabilitation service. Proportion of patients received physical rehabilitation service.	No. of physical rehabilitation service provided * 100/Total number of clients seen at MRC	Quarterly
2	Number of patients received mobility assistive service Proportion of patients received mobility assistive service	No. of mobility device given*100/Total number of patients seen	Quarterly
3	Number of clients received visual assistive service Proportion of clients received visual assistive service	No. of visual aids device*100/Total number of patients seen	Quarterly
4	Number of clients received hearing assistive service Proportion of clients received hearing assistive service	No. of hearing device given*100/Total number of patients seen	Quarterly
5	Number of referrals made to other facilities	The total number of referred patients to another facility with a referral paper	Quarterly

CHAPTER 3

Human Resources

Section I INTRODUCTION

In order to attain a quality rehabilitation service with good patient care, an efficient and well performing health work force with fair distribution is essential. Shortage of health professionals specialized on rehabilitation services have been a major challenge in providing service. We do not have sufficient professionals for the service and no schools for some disciplines; implying that there is a need to ensure professional development through training (both short and long term).

A work force with various types of health professionals is involved to deliver the service. Assistive technology products also need a professional who works on the assistive device production and fitting. There is also a need to have a clear HR structure in rehabilitation centers for specific services with defined roles and responsibilities of each level professional. MOH is working on to improve career structure of rehabilitation care workers, implement task shifting in some professions, curriculum development and national short term and long term training plan for the professionals development.

This chapter is intended to develop minimum operational standards and implementation guides to improve and standardize medical rehabilitation centers human resource management through reducing attrition rate and establishing policies and procedures for the work environment.

Section II OPERATIONAL STANDARDS

1. The medical rehabilitation center should have human resource unit.
2. The medical rehabilitation center should have a human resource development plan.
3. The medical rehabilitation center should develop a written human resource

policy on professional ethics that is known and adhered to, by staff.

4. The medical rehabilitation center should provide a job description for all staff, with detailed roles, responsibilities and qualifications.
5. The medical rehabilitation center should have staff motivation mechanisms in place.
6. The medical rehabilitation center should have an occupational health risk assessment mechanism that ensures the safety of staffs.
7. The medical rehabilitation center should maintain a personal record for all employees.
8. The medical rehabilitation center should conduct a staff job satisfaction survey biannually.

Section III IMPLEMENTATION GUIDANCE

3.1. Human resource unit

The human resource unit is responsible for the planning, recruitment, placement, performance appraisal, training and development, motivation and retention, employee services and benefits, occupational safety and health of employees and for establishing policies and procedures to manage employee/employer relations. The HR unit should be led by a competent individual who possesses management skills and experience dealing with HR issues. He/she should be a member of the center's Senior Management Team (SMT). The HR unit should have sufficient space to store personnel files securely.

3.2. Human Resource Policies

A) Human resource development plan

The executive manager of the center should be a qualified, registered and licensed professional, graduated from a recognized university or institute. The center shall have an adequate number of rehabilitation care professionals based on the flow of patients who work as outpatient, inpatient service providers and if possible social or community services. Each service delivery unit is managed by department heads. The service should also be provided by only licensed professionals to maintain the standard for safety of patients and professional protection.

Recruitment procedures: Each department head makes a request for any vacant positions and the HR unit works on filling the vacancies. The unit works on the procurement procedure which includes vacancy announcement, screening of applicants, job application interviews, reference checks, employment offers, new staff induction/ orientation, promotion and transfers. This helps to have the right number and type of professionals needed for the service.

Human resources in MRC includes professionals who are specialized in physical medicine & rehabilitation, middle level health professionals and supportive staffs. The minimum list of professionals that commonly exist in MRC includes Physical Therapists (PTs), Prosthetic and Orthotic practitioners, Occupational Therapists (OTs), Speech-language Pathologists, PT/OT Assistants, Prosthetics Orthotics Technicians , Social workers, Vision aid professionals (Optometrist, low vision professionals Ophthalmic Nurse or else), Hearing aid professionals, Software engineer (for hearing aids), Counselor, Nurses, Community Based Rehabilitation Workers (CBR), Biomedical engineers and Supportive staff (non-clinicians working in areas like security, store management, data management, administrative issues, financing, procurement and asset management).

Continuous professional development: Continuous professional development on both long and short-term trainings and educational opportunities should be encouraged and facilitated by the center. Every year each clinical employee should attend an upgrade training sponsored by the center or the Regional Health Bureau/Federal Ministry of Health. The center ensures trainings attended are relevant to the employees' current or future job responsibilities. Trainings on fire safety, the major incident plan, occupational health and safety risks and infection prevention practices should be provided to all staff.

Performance appraisal procedures: The performance management has three main components: 1) Supportive supervision, 2) Periodic performance-based evaluation and 3) Performance improvement for staff with a job performance below the expected standard. It is an on-going process focused on reinforcing high performance or improving substandard performance to enhance the knowledge, skills and behaviors of all employees in order to achieve organizational goals. All employees are formally evaluated at least twice annually, higher performers are recognized and rewarded, and action plans for improvement are documented.

B) Staff code of conduct, disciplinary and grievance procedures

The facility should establish employer-employee relationships that contribute to satisfactory productivity, motivation and morale. The code of conduct policy describes unacceptable behavior and actions, establishes the formal process for delivering, investigating, responding and addressing complaints based on adequate assessment of facts. In addition, all staffs must be fully aware and strictly abide by the rules including confidentiality and shared confidentiality of clients on the service they provide.

The center should develop a policy for staff discipline management. The disciplinary measures may include an oral warning, a written warning or a fine of up to one month's salary which are simple disciplinary penalties. A fine of up to three month's salary, downgrading of position for up to two years, or dismissal are rigorous disciplinary penalties. Evidence of rigorous penalties should remain in the employee record for 5 years while simple penalties should remain in the employee file for 2 years. In addition, all grievances should be responded to promptly and a written response should be given to the complainant following the investigation. A copy of the grievance form and written response should be kept in the employee file. All grievances should be kept confidential unless required to disclose to senior management or higher authorities (based on severity).

C) Employee job description

This describes the professional type/qualification, duties and responsibilities of an employee needed for a specific service which helps as a guidance for the facility and an employee too. The job description should include the job title, department, employment type, job summary, essential duties and responsibilities, supervisory responsibilities, educational qualifications, certificates, licenses, experience, other required skills, physical demands, description of job site and work environment, occupational exposure, salary and benefits. This can be adopted from MOH or RHBs if available and should be filled in the employees' personal file.

D) Benefits/reward and compensation system development

In addition to a basic salary, employees may be provided with additional benefits in different ways/ mechanisms developed by the center. This will directly affect

the organization's ability to attract new employees, motivate staffs to improve performance, and retain qualified professionals within the facility. Benefits may be in the form of medical benefits, pension, top-up, housing, vehicles, telephone, duty allowance, risk and hazard allowance, uniforms, vacations, training opportunities, reward for high performers or a bereavement allowance for families if the employee dies. Benefits must be evaluated to maximize employee satisfaction and minimize costs.

E) Occupational health and safety risk assessment

The center should assign an occupational health and safety officer who is responsible for reviewing new staffs clinical condition, set safety risks and protection measures, conduct site visits to address risks; specially staff working with machinery, investigate reports of injuries or accidents and facilitate access to treatment and compensation mechanisms for staff's who have been injured in the work place. The Centre shall prepare specific training for all staff on Occupational Health & Safety conducted and reviewed periodically.

F) Personal Records

The MRC should maintain and regularly update a file on each employee. Staff records, whether hard copy or computerized, should be kept secure to maintain confidentiality. Staff records include information such as credentials for hiring, job description for the position, job application, offer of employment, education and trainings, ongoing performance evaluations, any documentation concerning performance improvement action, disciplinary action and exit of employment (exit interview).

G) Job satisfaction

An employee satisfaction survey should be done regularly; twice a year to assess staff satisfaction with the workplace and suggestions for improvement. Results should be presented to the SMT.

Section IV IMPLEMENTATION CHECKLIST AND INDICATORS

Self-assessment checklist

The following table can be used as a tool by the MRC itself to measure implementation activities; whether the main recommendations have been implemented or not.

No	Check list	Yes	No
1	The MRC has a human resource unit		
2	The human resource unit head is represented on the senior management team.		
3	A human resource development plan has been prepared		
4	Policies and procedures for staff recruitment and promotion have been developed and implemented		
5	Policies and procedures for performance evaluation have been developed and implemented.		
6	Policies and procedures for employee recognition have been developed and implemented		
7	Policies and procedures for training and development have been developed and implemented.		
8	Training need assessment has been conducted and training and development plan developed		
9	Policies and procedures for compensation and benefits have been developed and implemented.		
10	Job descriptions have been developed for each position at the hospital		
11	Policies and procedures for occupational health and safety services have been developed and implemented.		
12	Each employee has a personnel file that is maintained by the Human Resource unit.		
13	Staff job satisfaction survey is conducted regularly		

Assessment tool

This checklist can be used to record implementation activities which are developed, in order to identify whether the main recommendations outlined as a standard are met. This assessment is done by external body like RHBs/MOH.

MET: when all criteria's met

UNMET: when less than half criteria's unmet

PARTIALLY MET: when half and greater criteria's met

No	Standard	Verification criteria	Met	Partially met	Unmet
1	The medical rehabilitation center has a human resource unit. (3)	1. Review organogram of the center 2. Human Resource unit has head and officers 3. The HR unit head is represented on the SMT.			
2	A Human Resource development plan that addresses recruitment procedures, continued professional development, performance appraisal and/or evaluation procedures.(6)	1. Review a copy of the human resource development plan. 2. Ensure that it addresses recruitment procedures, staff numbers, skill mix and staff training and development. 3. Identify written policies and procedures for staff recruitment and promotion.			

		4. Identify written policies and procedures for training and development. 5. Identify documented record for training need assessment that has been conducted 6. Random check on five staff files for documentation of performance evaluation conducted			
3	The rehabilitation center has a Code of Conduct and Professional Ethics that is known, and adhered to, by staff. (2)	Obtain a copy of employee code of conduct. Random check on five staff by asking their familiarity			
4	The center should provide job description with detailed roles and responsibilities and qualification for all Staff. (1)	1. A random check on five staff files for availability of job description			
5	Policies and procedures employee recognition, compensation and benefits have been developed and implemented.(1)	1. Identify documented policies that support employee motivation and retention			
6	Policies and procedures for occupational health and safety services have been developed and implemented.(1)	1. Obtain a copy of occupational health and safety policies and procedures			

7	Each employee has a personal file.(1)	1. Take a random sample of five employees file; ensure that they contain important information.			
8	Staff job satisfaction survey is conducted regularly.(3)	1. View results of last staff survey. 2. Confirm that survey was conducted within last 6months 3. View summary results with recommendation sent to SMT.			

Indicators

No	indicator	Formula	Frequency
1	Total number of medical rehabilitation care professionals available at the facility as per the required standard	A) Total number of professionals for each department at the end of the reporting period	Quarterly
2	Attrition rate (done for each department separately)	B) Number of rehabilitation care professional who left during the reporting period in each department / Total number of rehabilitative care professionals in each department at the beginning of the reporting period * 100	Quarterly
3	A) Total number of non-clinical staff B) Attrition rate	A) Total number of non- clinical staff at end of reporting period B) Total number of non- clinical staff who left during reporting period/total number of non-clinical staff at beginning of reporting period * 100	Quarterly

CHAPTER 4

Supply Chain and Device Management

Section I INTRODUCTION

> **Medical Devices:** are defined in this standard as instruments, apparatus, machines, appliances, calibrators, spare parts, software, components, raw materials or other similar or related articles that are made or used for rehabilitation services including assistive devices; can be mechanical or electrical. (See annex)

Medical devices are essential for a fully functioning health system. Technologies in particular are crucial in the diagnosis, treatment and rehabilitation of the service user. As healthcare delivery continues to expand and improve, an increasing number of sophisticated devices are introduced therefore a system capable of supporting and managing these technologies must be in place to avoid interruption of services.

Effective supply chain management is essential for moving medical devices, components and materials through the health care delivery process. It is also crucial to implement medical devices management in the medical rehabilitation centers to direct and coordinate the device management cycle which includes planning, assessment of needs, procurement, production, use, training, operation, maintenance and disposal.

Section II OPERATIONAL STANDARDS

1. The medical rehabilitation center should have a devices management unit with the required staff and defined roles and responsibilities.
2. The medical rehabilitation center should have a devices management committee.
3. The medical rehabilitation center should have an effective and efficient logistics and supply chain management system to ensure uninterrupted supply of devices, components and materials.
4. The medical rehabilitation center should have a paper-based and computer

based or automated inventory management system that tracks all device included in the device management once in a year

5. The medical rehabilitation centers should have their own functional assistive device production unit.
6. The medical rehabilitation center has a store management system to manage the supply and distribution of devices.
7. The medical rehabilitation center should have policies and procedures in place for medical device management.
8. The medical rehabilitation center should have an appropriately equipped devices maintenance workshop.
9. The medical rehabilitation center should ensure proper disposal of devices according to a guideline prepared in alignment with international, national and regional legislations.

Section III IMPLEMENTATION GUIDANCE

3.1 Device Management Unit

The medical rehabilitation center should have an in-house devices management unit with the required staff and be led by rehabilitation professionals. The unit needs to develop an operational plan and revise it as necessary. The unit should adapt the supply chain and device management systems to achieve the greatest benefit.

The number and profile of staff within the device management unit will depend on the different services the medical rehabilitation center provides. The centers should employ skilled technicians who are able to undertake corrective maintenance on both small and larger, more complex equipment or outsource technical services for maintenance.

Responsibilities of the unit:

- The unit should prepare a device development plan which defines goals for acquisition, maintenance, and replacement of devices in the short term and long term taking into consideration the current model device list.
- The unit should participate in production planning, purchase, installation, maintenance, staff in-service training, technical support and disposal.

- The unit should have a paper and computer-based inventory and store management documentation system that tracks all devices, raw materials and spare parts for planning, budgeting, requisition, reporting and other purposes.
- The unit should establish standard operating procedures (SOPs) for device use, safety, planned preventive maintenance and disposal procedures.
- The unit should ensure the medical rehabilitation center allocates sufficient funds for regular and incident-based maintenance budget, including spareparts.
- The unit should develop and maintain a written procedure describing the processes for managing risk, improving safety and quality of devices.

The head of medical device management unit should be a member of the management and participate in the overall centers planning and evaluation of performance. He/she should also conduct weekly periodical work-planning meetings to assess, prioritize and assign outstanding jobs based on the Work Order File.

3.2 Devices Management Committee

The medical rehabilitation center should have a devices management committee composed of rehabilitation professionals, technicians, and administrative personnel that oversee the device management program.

The committee should have TOR which should be revised annually. The TOR should ensure the following responsibilities are included:

- Verify that medical devices committee membership consists of all parties.
- Develop and monitor the implementation of medical device strategy;
- Oversee the establishment of a medical devices inventory; develop a model medical devices list;
- Develop and implement medical devices management and production policies;
- Determine annual budget for medical devices strategy;
- Review incident reports related to medical devices.

Model Device List

Each medical rehabilitation center should have a model medical device list in accordance with the national list that describes the 'ideal' number and types of device required by the center. A multi-disciplinary team brought together from across all the units/case teams should develop an outline for the medical rehabilitation center that describes the core functions and services provided. This Service Package will determine the corresponding model device list of all items that are necessary to provide each service. The List should be approved by the senior management team.

3.3 Supply Chain Management of Devices

The center must have an effective and efficient supply chain management system to ensure an uninterrupted supply of safe, effective and quality devices. This needs a well-organized and functioning Logistics Management Information System/LMIS. In addition, assessing stock status of the center regularly, selecting the right supplies in the right quantities, delivering to the right place at the right time, for the right cost, in the right condition, is very critical.

Acquiring of Medical Devices

Acquiring medical devices should be undertaken in accordance with the Ethiopian government/MOFED/BOFED directives. The medical rehabilitation center can own medical devices through one of the following means:

1. Purchasing
2. Donation
3. Production
4. Leasing and Renting
5. Cluster based equipment sharing

All medical rehabilitation centers should procure preferentially through pharmaceutical supply agency (PSA) and the payment can be made either credit/cash based by signed agreement between PSA and the center.

Further guidance on procurement processes and development of a procurement policy can be found in the national/regional finance directives.

Medical Devices Donation

The medical rehabilitation center medical device unit should strictly follow the National Medical Equipment Donation Directive for the receipt of donated medical equipment.

The medical device unit should establish a list of desired equipment that is based on the model medical device list and associated annual plan. The list of desired items and donation policy should be given to all individuals/ organizations that are willing to make a donation to the medical rehabilitation center. (All devices donations should be reviewed by the medical device unit and approved by the centers management before acceptance.)

Supply chain management at centers should involve the following basic functions:

Selection

The centers medical device unit should have a list of supplies approved by the management. The unit in consultation with the various departments in the center should select the required supplies for procurement as per the approved list. Whenever there is a need for procuring supplies which are not included in the list of the center, it is necessary to demonstrate their significance for safe and effective care of individual patients.

A) Quantification

The medical device unit should collect relevant data from Health Management Information System/ HMIS/, and other relevant sources of information which are essential for forecasting and supply planning.

Forecasting: The medical device unit should assemble a quantification team members composed of rehabilitation professionals and other departments, technical experts in quantification and others as appropriate annually.

Once the team has built consensus on the forecasting assumption, the demand for each product should be forecasted using the appropriate method.

Supply planning: Based on the above forecast, the medical device unit of the center should prepare a monthly supply planning regarding the product, supplier (if the product is unavailable from PSA), budget, amount, procurement method, lead time, distribution related costs, current stock status, minimum and maximum stock level.

B) Procurement

The medical device unit should prepare specifications based on the national specification for the selected supplies to be procured. Then, it should assess the appropriate procurement options and calculate the budget requirements based on the results of quantifications and consider all the necessary expenses.

As per the public procurement policy of the country and the proclamation of pharmaceutical supply agency, the devices management unit should procure the required supplies and also assess its performance. All centers should procure preferentially through PSA and the payment can be made on credit/ cash based on the signed agreement between PSA/PSA hubs and the center.

Whenever supplies are not available at PSA and an out of stock is secured from the agency, procurement from private suppliers can be considered as per the conditions set by the public procurement agency of Ethiopia. Additionally, for products that cannot be supplied by PSA, but their timely purchase and delivery are critical for the rehabilitation service, the center may consider establishing preferred supplier arrangements as an option each year by signing a flexible framework agreement.

C) Receiving, Storage and Distribution

The produced supplies will be received by the store manager of the center. Before receiving the supplies, the store manager shall assure their type, quality, usability and quantity.

The store manager should properly store supplies following the national guideline for good storage practice, undertake visual inspection, identify and resolve common product quality problems found during a visual inspection.

After issuing, the store manager updates the bin cards which are clearly displayed for each item in the store and are regularly updated with movement of each device. There should be a system for returning of expired, damaged, leftover and empty packs from the service areas and other areas to the store.

Device Inventory

The medical rehabilitation center should have a paper-based and computer based or automated inventory management system that tracks all devices (equipment/technology, tools, raw material and spare parts) included in the device management program. The inventory management system should be updated every quarter both on paper and on the computer.

Before establishing a medical device inventory, the medical device committee should determine which items should and should not be included in the inventory and the medical equipment management program, based on the MRCs standard inclusion and exclusion criteria.

The inventory team is responsible to visit every department and record every item of equipment/device. The centers policy should prohibit use of medical devices without inventory tags/stickers.

Production process

The medical rehabilitation center shall have its own assistive production unit with a fully equipped production workshop and appropriate staff. After an assistive device is prescribed for a client, the production process starts with evaluation, design, production, testing, fitting and the final preparation for delivery of the finished product to the user.

For the process of production to start it is essential that the production unit has proper planning, appropriate staff and supply of raw materials, tools and equipment and other components, and that the inventory is well maintained.

The raw materials and components used in the production of devices must be durable, comfortable, and easy for patients to use; easy for technicians to maintain and repair; standardized, but compatible with the climate in

different regions of the country; affordable, but modern and consistent with nationally accepted standards and readily available. The technology must also be tailored to the needs of the service user.

The devices produced at these medical rehabilitation centers must be affordable and cheaper than the commercial readymade ones improving the accessibility of services for people with physical disabilities.

A) Return of faulty/defected products

The medical rehabilitation centers need to have the capacity for the return of faulty/defected products, along with a highly responsive consumer grievance redress unit. The production unit may expect the return of products under various circumstances. Even the best quality control processes may have unavoidable momentary lapses. In the case of such lapses, inevitably followed by user complaints, the center must, instinctively, recall the product/s. This not only creates a good customer relationship, but also maintains goodwill in the long run.

B) New product research and development

These medical rehabilitation centers have a vast range of rehabilitation professionals, so the centers need to conduct ethically accepted research on new AT devices/technologies and develop more affordable, durable and esthetically pleasing products. And when the medical rehabilitation centers become advanced, they should consider producing other new devices in the future.

C) Food and drug authority (FDA) certification

All the locally produced prosthetics and orthotic and other device/ products must be FDA approved and must meet the national standards.

Store management

The medical rehabilitation center has a store management system in accordance with the national standard to manage supply and distribution of devices.

There should be a dedicated space with sufficient capacity for storage of various types of materials and devices in an organized and accessible manner. The store is managed by a storekeeper who has training on supply chain management and is familiar with all devices in the center.

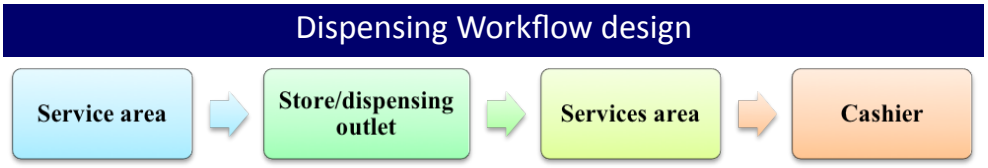
All items received and dispensed (items going in and out of the store) are registered in the paper-based and computer based/automated inventory management system. All items are stored in the best possible conditions following recommended manufacturer storage conditions to prevent damage of stored items or deterioration in quality.

A Bin Card should be prepared for each product in the Store. The medical rehabilitation center should have a written stock management guideline, including an appropriate schedule for ordering devices, maintaining minimum stock balance and buffer stock.

A) Supply performance monitoring and reporting

The store manager collects, analyzes and interprets data on the centers supply management performance and prepares reports for the management team.

B) Dispensing of devices



The dispensing workflow begins when the storekeeper receives and evaluates the prescription. Then the storekeeper should calculate the price of the device. The storekeeper then writes the device with uniquely identifying codes and retail prices on the prescription and selects and delivers the device to the service provider. (From the store/dispensing outlets devices are dispensed to the service area and transported by the service provider).

Once the client receives the finished product, the prescription is given to the client for payment to the cashier (finance department or in the store).

Once payment is effected, the cashier gives the receipt to the client.

Devices dispensed should be recorded and documented as proof of transaction between the client and the center. Prescriptions can therefore be traced back if any need arises. There should be regular monthly reports for sales of devices which is evaluated by finance unit and senior management team.

3.4 Medical Device Management

The medical rehabilitation center should have policies and procedures in place for medical device management prepared in alignment with the national and regional legislations.

Device Delivery and Commissioning

When an order has been placed to purchase a new item of device, or a donation has been accepted, preparations must be made for receipt of the item. Preparation includes site preparation, organizing warehouse space, preparation for acceptance testing and installation and, preparation for User Training.

Acceptance Testing

All new devices should undergo acceptance testing prior to its initial use to ensure the equipment is in good operating condition and are installed and commissioned in accordance with the manufacturer's specifications.

Calibration, Inspection, Testing and Maintenance

There should be a schedule for inspection, testing and preventive maintenance for each device as guided by the manufacturer's recommendations and that schedule should be appropriately implemented. There should be a written protocol for notification and a work order system for corrective maintenance and adjustment of device/equipment/technology based on the need.

A) Planned Preventative Maintenance: All medical devices should undergo regular Planned Preventative Maintenance (PPM) to ensure that the equipment is working properly and to prolong its expected lifetime.

PPM should be carried out by both equipment users (for simple, easy, everyday tasks) as well as biomedical technicians from the maintenance department (for more complex tasks requiring special skills and/or tools). SOPs for each item of equipment should include instructions on simple PPM and troubleshooting that can be performed by users of the item.

B) Calibration: Some medical devices, particularly those with therapeutic energy output (e.g. hearing aids, physical therapy stimulators, etc.), need to be calibrated periodically. This means that energy levels are to be measured and if there is a discrepancy from the indicated levels, adjustments must be made until the device functions within specifications.

C) Safety Inspections: These are performed to ensure the device is electrically and biomechanically safe. When these inspections are done, the results should be compared to national or regional standards as well as to the manufacturers' specifications.

D) Corrective Maintenance: Involves repair and replacement of parts according to manufacturers' guidelines. Instrument operators can follow SOPs to perform simple corrective maintenance or simple troubleshooting. However, the majority of corrective maintenance must be performed by a qualified technician.

Whenever corrective maintenance is performed, a corrective maintenance report should be completed and stored in the equipment/device history file.

E) Work Orders and Reports: Whenever device is faulty this should be reported immediately to the device maintenance department using a Service Request/Work order. Three copies of the Work Order Form should be prepared using carbon copy paper.

F) Outsourcing of Technical Services: When the device maintenance department is unable to perform PPM or corrective maintenance of a particular device, support from external maintenance contractors will be required. The medical device management unit should follow national guidelines for the use of outside contractors.

Maintenance Workshop

The medical rehabilitation center should have an appropriately equipped assistive device maintenance workshop. If the center has in-house electricians or technicians to maintain production equipment and other appliances, then there needs to be a general maintenance workshop that is separate from the assistive devices maintenance workshop.

The workshops should be equipped with the necessary testing, calibration, measuring instruments, maintenance tools, spare parts, raw materials, personal protective equipment, computer, printers, reference books, operator and service manuals, and internet access needed to carry out the overall device management services.

Training on medical device forecasting, use and maintenance

Various capacity building activities have to be undertaken to enable medical rehabilitation centers to forecast their medical device demand for the pooled procurement at the national level. Proper management and use of medical devices is also essential to maintain optimal performance of devices and preserve the safety of patients as well as the staff operating the devices.

Given the variation in technical characteristics of the different medical devices, all clinical staff should be trained to operate each medical device that they use. The medical devices unit is responsible for overseeing all training for medical devices as it sees fit, whether in service or conducted by suppliers/external parties.

Medical Devices Incident Reporting

The medical rehabilitation center should establish a process to report and investigate all critical incidents that arise from the use of medical device. An Incident Officer should be assigned to investigate all incidents and to ensure that any required follow up action is implemented.

Disposal of Medical Devices

The medical rehabilitation center should ensure proper disposal of medical devices according to the centers guidelines which should be prepared according to international, national or regional legislations to protect the environment and reduce health risks.

The center should establish a disposal committee to oversee the disposal of all medical devices that are no longer required. Whenever a device is disposed it should be removed from the centers inventory and a record should be entered into the devices history file to indicate that the item has been disposed.

Reusable parts, components or waste materials are separated during the manufacturing, maintenance or repair process and reused or recycled. Further guidance on the disposal of assets is presented in the Finance Chapter.

Section IV IMPLEMENTATION CHECKLIST AND INDICATORS

Self-assessment checklist

No.	Check list	Yes	No
1	A medical devices management unit has been established		
2	The Medical equipment management unit has the required staff and is led by rehabilitation professional.		
3	The unit has an operational plan with specific roles and responsibilities.		
4	A medical device Management committee has been established.		
5	The committee is composed of all the appropriate staff		
6.	The committee has defined ToR to ensure roles and responsibilities The medical device management unit has assembled a quantification team composed of all rehabilitation professionals, program managers, procurement specialists, monitoring and evaluation officers, store managers, technical experts in quantification and other as appropriate.		

7	The unit has an organized and functioning Logistics Management Information System		
8	An effective and efficient logistics and supply chain management system has been established to ensure an uninterrupted supply of devices		
9	Policies and procedures have been put in place for medical device management.		
10	The center has a device maintenance workshop which has all the necessary tools and supplies.		
11	The center has a functional maintenance workshop.		
12	The maintenance workshop is fully equipped and has all the appropriate staff.		
13	There is a functional production unit for devices.		
14	The production workshop is fully equipped.		
15	The production unit has proper planning, appropriate staff and supply of raw materials in the workshop.		
16	The unit conducts new product research and development.		
17	All devices produced by the unit have FDA certification.		
18	An inventory management system to manage medical equipment has been established.		
19	All devices in the device management program is listed in the inventory system.		
20	The inventory management system is updated every quarter both on paper and on the computer.		
21	A store management system has been put in place to manage the supply and distribution/dispensing of devices.		
22	Bin cards are clearly displayed for each item		
23	There is sufficient space for storage of various types of materials and devices		
24	All devices are stored in the best possible conditions following recommended storage conditions.		

25	There is a record of all dispensed devices.		
26	There are regular monthly reports of sales of devices which evaluated by the finance unit and senior management team.		
27	There are policy and procedures in place for medical device management.		
28	A device history file is maintained for all medical devices		
29	There are procedures for medical equipment acquisition.		
30	There are procedures for medical equipment donations.		
31	All new devices undergo acceptance testing prior to their initial use.		
32	All service providers and fitters have been trained on the use and management of devices.		
33	Standard operating procedures/manuals are readily available to the service provider and user.		

Assessment tool

MET: when all criteria's met

UNMET: when less than half criteria's unmet

PARTIALLY MET: when half and greater criteria's met

No	Standard	Verification criteria	Met	Partially met	Unmet
1	The medical rehabilitation center should have a devices management unit with the required staff having specific roles and responsibilities. (4)	1. Confirm that medical rehabilitation center has a medical equipment management unit. 2. Check the unit has developed an operational plan. 3. Check the unit has specific roles and responsibilities. 4. Confirm that the unit is led by a rehabilitation professional			
2	The medical rehabilitation center has a devices management Committee. (2)	1. Confirm the center has devices management committee composed of all appropriate staff. 2. Review medical device committee TOR and ensure the following responsibilities are included: A) Verify that medical device committee membership consists of all parties.			

		B) Develop and monitor the implementation of the medical device strategy; C) Oversee the establishment of medical devices inventory; develop a model medical device list; D) Develop and implement medical devices policies; E) Determine the annual budget for medical device strategy; F) Review incident reports related to medical devices			
3.	The medical rehabilitation center has an effective and efficient supply chain management system to ensure uninterrupted supply of safe, effective and quality devices. (2)	1. The unit has an organized and functioning Logistics Management Information System 2. The medical device management unit assembles a quantification team composed of all rehabilitation professionals and other departments; program managers, procurement specialists, monitoring and evaluation officers, store managers, technical experts in quantification and others as appropriate.			
4.	The medical rehabilitation center has an appropriately equipped device maintenance workshop.(2)	1. Availability of maintenance workshop 2. The workshop is well equipped with the necessary tools, reference materials, benches, SOPs.			

5	The Medical rehabilitation center has its own production unit.(5)	1. The unit has a functional production unit with the appropriate staff. 2. The center has a fully equipped production workshop. 3. The center has proper planning, appropriate staff and supply of raw materials in the workshop. 4. The unit conducts new product research and development. 5. All devices produced by the unit have FDA certification			
6	The medical rehabilitation center should have a paper-based and computer based or automated inventory management system that tracks all device. (3)	1. View inventory management system and confirm that is updated every quarter both on paper and on the computer. 2. Confirm that all devices in the device management program is listed in the inventory. 3. Confirm that the inventory system is used to manage the stock of spare parts with update on bin card.			
7.	The medical rehabilitation center has a store management system to manage the supply and distribution/dispensing of devices. (7)	1. Before receiving supplies, the store manager assures their type, quality, usability and quantity. 2. Bin cards are clearly displayed for each item. 3. Sufficient space for storage of various types of materials and devices.			

		4. All items are stored in the best possible conditions following recommended storage conditions. 5. The store dispenses devices prescriptions. 6. Check for recorded and documented dispensed devices as proof of transaction. 7. Check for presence of regular monthly reports of sales of devices which is evaluated by finance unit and senior management team.			
8	The medical rehabilitation center has policies and procedures in place for medical device management.	1. Obtain copy of policies and procedures for medical device management and verify that they address at least: acquisition, commissioning, decommissioning, disposal, donations, and outsourcing technical services.			
9	A device history file is maintained for all medical devices containing all key documents for the equipment.	1. Take a random sample of 10 device history files and check that each includes at least: ✓ SOP for device use ✓ Inventory data collection form ✓ Risk assessment form			
10	All new devices undergoes acceptance testing prior to their initial use.	1. Take list of devices purchased in the past year: ✓ Randomly select items and review device Log File is prepared/filled & attached to each. ✓ Confirm that file contains a copy of the acceptance test log form and is filled and attached to each.			

11	All service providers and fitters should be trained on proper operation, safety, and maintenance of devices with standard operating procedures/ manuals readily available to the user. (3)	Visit a minimum of 3 different departments/case teams and select two devices in each department: 1. Interview staff on duty and confirm that each one has received training on the use and maintenance (where relevant) of the devices. 2.Check if refresher training has been given 3. Check manuals and SOPs in file in each service areas for devices used as a reference			
12	There is a schedule for inspection, testing and preventive maintenance for each device guided by the manufacturer's recommendations. (4)	1. Selected 10 device history files & confirm inspection, testing and PPM has been conducted as described in the schedule. 2. Check calibration service done at least for high risk medical devices. 3. Check if preventive maintenance done at least every 6 months for devices having no manufacturer manual. 4. Check safety inspection is done at least for devices that emit radiation or involve having dangerous gases/chemicals.			
13	There is a written protocol for notification and work order system for corrective maintenance and adjusting of device based on the need. (2)	1. Identify written protocol for work orders. 2. Review at least 5 copies of notification and work order and reports and check data for: No. of work orders received, No. of work orders completed,			

		No of incidents related to devices and actions (all in separate file)			
14	The medical rehabilitation center should ensure proper disposal of devices according to a guideline prepared in alignment with international, national and regional legislations.(3)	1. Check guideline for waste disposal is available. 2. Check waste materials are separated and reused or disposed according to the guidelines. 3. Check if disposed devices updated/removed from inventory lists			

Indicators

No	Indicator	Formula	Frequency of reporting
1	% functional medical devices	Total number of medical devices that is functional/ total number of medical devices *100	Quarterly
2	Number of incident reports related to medical device malfunction.	Total number of incident reports received related to medical device malfunction	Monthly
3	Consumption to Stock Ratio	$Costofdispensed$ devices, supplies $duringthemonth/$ $Stockavaialblefor saleatcostduringthemonth\ x\ 100$	Monthly

CHAPTER 5

Health Financing

Section I INTRODUCTION

Financing is the process of providing a budget for an organization to realize its purpose and attain predetermined goals. Financial management in an organization refers to the strategic planning, organizing, directing, and controlling of financial activities. Proper financial management is guiding an organization to carry out its purpose as satisfactorily as possible.

Medical Rehabilitative Health Financing is aimed to enhance the efficiency of resource utilization, improving the services quality and coverage of rehabilitative services. Lack of financial resources is one of the main obstacles that hinder people with disabilities from accessing the right rehabilitation service and AT products (WHO, 2005).

According to existing physical rehabilitation centers assessment reports, almost all Medical Rehabilitation Centers in Ethiopia have financing problems that includes shortage of budget, poor financial management, absence of separate financing, lack of transparence with the allocated budget and big allocation budget gaps as compared to the actual needs of the rehabilitation centers.

Therefore, this health financing chapter has aims to improve the financial management problem, minimize budget gaps and ensure transparence, accessibility, equity and sustainability of care among all medical rehabilitation centers.

Section II OPERATIONAL STANDARDS

1. The Medical Rehabilitation Center should establish a finance management department that contains a finance unit, procurement and asset management team.

2. Medical Rehabilitation and Assistive Technologies services fee schedule posters are displayed in appropriate areas and provide receipts for all direct payments. The fee poster is prepared in braille for people with vision difficulties.
3. The Medical Rehabilitation Center provides/facilitates rehabilitation services in collaboration with Public-Private partnership in accordance with the agreement and the list of available services at appropriate locations.
4. The Medical Rehabilitation Center should submit timely payment requests/reimbursements to the partners and fee waiver beneficiaries.
5. The Medical Rehabilitation Center should register, maintain and submit timely reports to the relevant bodies at all levels.
6. The Medical Rehabilitation Center should establish procedures to monitor the quality if services are out sourced to ensure the standards and contractual agreements comply with relevant government directives.
7. The Medical Rehabilitation Center should conduct an internal audit quarterly and an external audit at least once in a year and reports are reviewed by the senior management.
8. The Medical Rehabilitation Center shall provide conditional exempted services.

Session III IMPLEMENTATION GUIDANCE

Medical Rehabilitation health financing refers to the function of a Medical Rehabilitation and Assistive Technology system concerned with the mobilization, accumulation and allocation of money to cover the health needs of the people with disabilities. The main purpose of health financing is to ensure the availability of funding to Medical Rehabilitation services, staff, and to ensure the accessibility of Assistive Technology to clients in need.

3.1 Organization of Health Financing department

A Medical Rehabilitation Center health financing team consists of financial, procurement and asset management teams. Financial, purchasing and asset management requires teamwork and a multi-disciplinary approach. Financial department officers are responsible for financial, purchasing process and assets management responsibilities. Moreover, the department is responsible for planning, directing, monitoring, organizing and controlling financial resources to ensure an adequate supply of funds to provide health services and optimize resource utilization.

A) Budget planning

The Medical Rehabilitation Centers shall prepare detailed financial planning and approved the budget as per established procedures. All Financial resources within the MRC should be spent with proper accountability in accordance with expenditure guidelines established by the MOFED/BOFED.

B) Revenue retention and utilization

The medical rehabilitation center finance department must collect, retain and utilize the revenue for improving the quality of MRC and assistive technology devices. The MRCs should implement health care financing strategy as per the respective regional and federal laws that allowed health facilities to retain and use their revenue. This will be applicable at MRCs either by amendments of the legislation and/or special government decision.

C) Fee waiver

It is a right conferred to people with disabilities to obtain medical rehabilitation services or assistive technologies in medical rehabilitation centers at no direct charge or at reduced price. Beneficiaries are identified and issued with a 'fee waiver certificate' by the relevant authority, public and private organizations. Medical rehabilitation centers should enter into a Memorandum of Understanding (MOU) with the waiver certificate granting authorities. The MOU should provide details on the type of service and mode of payment.

The Medical rehabilitation centers should maintain a record of expenses incurred for services provided to fee waiver beneficiaries. The summary of registration should be completed by the finance officer using source information from the patient's medical record, lab order forms, prescription etc.

The Medical rehabilitation centers should submit a request to the waiver certificate granting authority and/or organization as per their agreement period mostly within the interval of 1-3 months for reimbursement of expenses incurred for services provided to fee waiver clients. Upon receipt of the bill, the waiver certificate issuing authority should verify the request and instruct the respective finance offices to make the payment. In the meantime, the medical rehabilitative center financial department must closely follow the reimbursement process.

D) Conditional Exempted Medical Services

Conditional Exempted Medical services refer to those services that are rendered free of charge to disabled patients who are poor and have a poor certificate from respective local administrative authority. In these cases, poor certificate provider authorities are not responsible for reimbursement of clients/service user health services fees. Providing conditional exempted medical rehabilitation services helps improve the health seeking behavior of the patients with disabilities. Conditional exempted medical services include:

- Diagnosis, treatment and follow-up of disabled patients for any medical problems
- Medical rehabilitation services and provision of assistive technologies

MOH and RHB will approve the aforesaid conditional exempted medical rehabilitation services and allocate a contingency budget to reimburse for this service. The MRC should compensate the costs of conditional exempted services from the appropriated government budget and donations. MRC should maintain records of conditional exempted services and submit monthly, quarterly and annual reports to the MOH & RHB.

E) Services outsources

It is the agreement between a medical rehabilitation centers as a purchaser, and a third–party provider of services as a vendor pursuant to which the vendor provides to the medical rehabilitation center certain defined services. The center can outsource AT devices, consultancy services and other guard and hygiene services. However, the medical rehabilitation center should establish procedures to monitor the quality outsourced services to ensure the standards of services and devices as per contractual agreements.

F) Public private partnership

A public private partnership (PPP) is an arrangement between the public sector and private sector which aims at joining forces together to meet public needs through the most appropriate allocation of resources. Public private partnership in medical rehabilitation services is needed to manufacture indigenous health products, alleviate human resource constraints and nurture the existing PPP with the objective to encourage the private sector to support medical rehabilitation services and other unmet needs of assistive technologies. It also helps the out-sourcing of nonmedical services, such as building and equipment maintenance and AT. However, it must be implemented according to the national guide.

3.2 Assets and Procurement Management

Government assets are mainly categorized into fixed assets and supplies. A fixed asset is “a tangible asset costing >1000 ETB for operational use and has a useful economic life of more than one year, such as furniture, computers, equipment, vehicles, and buildings” (Hospitals and Initiative, 2016; MoFED, 2001). Supplies: are all other items owned by the government institutions such as stationary, cleaning supplies, gloves, syringes, etc. The management of assets includes procurement, inventory, storage, maintenance and disposal of assets. Effective asset management ensures that assets are purchased to meet the needs of the MRC and maintained in good working order. The assets management is governed by national legislation as set out in proclamations, regulations and directives related to the procurement, inventory control and disposal of assets.

Management of fixed asset acquired through donation

The MRC should strictly follow national medical equipment donation directives for the receipt of donated fixed assets and medical equipment. When items are donated, the MRC and donor must agree on the responsibility of customs clearance and approval. All donations should be reviewed and approved by the MRC management before acceptance.

Disposal of fixed assets

Fixed assets may be disposed when the item becomes unserviceable, obsolete, and surplus or abandoned. Government regulations describe the approval methods of disposing includes Transfer to other public bodies, Disposal by sale, Sale by public auction, Sale through public tender, Sale as scrap and Discarding. A Disposal Committee should be established as an advisory body to medical rehabilitation center management. The Committee should be comprised of Heads from appropriate Departments or Units such as procurement, finance, legal etc. Full guidance on disposal procedures is provided in the GOFAMM manual.

3.3 Auditing

Auditing is referred as the process by which a competent, independent person, accumulates and evaluates evidence about quantifiable information related to a specific economic entity for the purpose of determining and reporting on the degree of correspondence between the quantifiable information and established criteria (Hospitals and Initiative, 2016). Auditing can be mainly categorized into four areas: financial, compliance, value for money and environmental audits. Auditors can be categorized in to internal and external auditors

Internal auditors: the role of internal audit in an organization is to measure and evaluate the effectiveness of an internal control system. Internal auditors provide an independent and objective consultancy service specifically to help management improve the public body's risk management, control and

governance. Internal auditors are responsible for conducting regular internal audits at least every quarter. The accounts of the MRC should be closed on the last day of the financial year.

External auditors: are auditors who are entirely independent of the audited entity. Their duty is to report primarily to third parties. External auditors undertake procedures designed to obtain sufficient and appropriate financial audit evidence, in accordance with generally accepted auditing standards and relevant legislation. An external audit should be conducted by external auditors from the Office of the Auditor General or authorized private auditors, and approved by the institutional senior management, within six months of the closing of the accounts. Audit reports should be submitted to the Executive Directive and he/she is present to the SMT. the RHB and MOFED/BOFED shall access and investigate all accounting records and take corrective actions.

3.4 Reporting

The MRC should register; maintain books of accounts and formats. These should provide complete and adequate monthly information on how funds are allocated and have been utilized and prescribed in the regional financial proclamation and regulation and shall report to the respective health and finance office at all levels.

Section IV IMPLEMENTATION CHECKLIST AND INDICATORS

Self-assessment Checklist

This can be used as a tool to record whether the main recommendations outlined above have been implemented by the medical rehabilitation center. This tool is not meant to measure attainment of each Operational Standard, but rather to provide a checklist to record implementation activities.

S/no	Health financing implementation checklists	Yes	No
1	The Medical Rehabilitation Center has an established finance, procurement and asset management case team, and has an approved plan		
2	There are multilingual services and assistive technologies fee schedule posters in each services area.		
3	The MRC has created official collaborations with Public-Private partnerships for facilitating medical rehabilitation services.		
4	Fee waiver and exempted services are provided, beneficiaries are registered, and reports have been submitted.		
5	All types of services provided in the medical rehabilitation center have been registered, kept and reported to the relevant bodies regularly.		
6	The medical rehabilitation center has conducted an assessment on the feasibility of services outsourcing and achievement on consensus/decisions.		
7	Internal and external audits had been conducted according to the schedule; reports are reviewed by the SMT and action has been taken.		
8	The Medical rehabilitation center has provided conditional exempted services and has set up a clear execution criteria.		

Assessment Tool

This assessment tool has been developed to determine the process of how health financing has been implemented as pre-determined by the operational standards for health financing. It also deals about the criteria for the attainment of a standard and a method of assessment. This tool can be used by the medical rehabilitation center senior management or by an external body such as the RHB and FMOH to measure attainment of each operational standard.

MET: when all criteria's met

UNMET: when less than half criteria's unmet

PARTIALLY MET: when half and greater criteria's met

Assessment tool

S/no	Standards	Verification criteria	Met	Partial met	Unmet
1	The Medical Rehabilitation Center should establish a finance management department that contains a finance unit, procurement and asset management team. (5)	1. The MRC has a cost unit staff 2. The MRC has a financial annual operational plan 3. See planned activities and check the implementation based on the schedule 4. Check whether monthly and quarterly report has been submitted for the SMT 5. Check whether the assets management has a guideline to receive, use and dispose of assets			
2	Medical rehabilitation and assistive technologies services fee schedule posters are displayed at appropriate areas and receipts are provided for all direct payments. The fee poster has been prepared in braille for people with vision difficulties. (3)	1. Visit different departments (OPD and inpatient wards and cash collection points) and confirm that multilingual service fee schedule posters are clearly displayed. 2. Confirm that the poster shows fees and advice that patients should keep receipts for all payments. 3. Check that the fee poster was prepared in braille for people with vision difficulties.			

3	The Medical rehabilitation center provides/facilitates rehabilitation services in collaboration with Public-Private partnership in accordance with the agreement displayed on the lists of available services at appropriate locations. (4)	1. Get the memorandum of understanding 2. Obtain lists of services in MRC and visit the relevant department and confirm whether those services are properly provided. 3. Check unavailable services in MRC and confirm whether it has facilitated with PPP to assist the clients/patients. 4. The MRC has posted lists of available services at appropriate locations			
4	The medical rehabilitation center should submit timely payment requests or reimbursements to the partners and fee waiver beneficiaries. (3)	1. Confirm that financial records and fee waiver service beneficiaries are properly registered, kept & documented 2. View most recent two quarterly reports are submitted to concerned bodies 3. Take list of sample beneficiaries and confirm whether the they are included in the list of fee waiver and exempted service			
5	The medical rehabilitation center should establish procedures to monitor the quality of services are outsourced to ensure the standards and contractual	1. Check the assessment of the feasibility of outsourcing services have been undertaken and project plan developed. 2. Check contractual agreement procedures have been developed that define the outsourcing process and what services are outsourced			

	agreements comply with relevant government directives. (3)	3. View the most recent performance reports of outsourced service			
6	The medical rehabilitation center should conduct an internal audit on a quarterly basis and an external audit at least once in a year and reports are reviewed by the senior management.(3)	1. Internal audit is operational for the medical rehabilitation and meets professional standards. 2. Reports adhere to a fixed schedule and are distributed to the SMT and relevant bodies. 3. Action by management on internal audit findings is prompt and comprehensive.			
7	The medical rehabilitation center shall provide conditional exempted services. (3)	1. There is a consensus on conditional exempted services among MRC and FMOH/RHB and allocated contingency budget for CES. 2. Obtain identified conditions for conditional exempted rehabilitation services 3. Confirm that poor clients who fulfill conditional exempted services criteria are utilizing CE services free of charge.			
Total					

Indicators

No	Indicators	Formula	Frequency	Remarks
	1. Rate of allocated budget utilization	I. Treasury Budget utilized/allocated budget	Quarterly	
		II. Total expenditure from Retained Revenue source	Quarterly	
		III. Retained Revenue utilized/ budget allocated from RR	Quarterly	
	2. Cost per patient-day equivalent	I. Total recurrent expenditure (Treasury + RR)/ (MRC visits/4)	Quarterly	
		II. Total recurrent expenditure (Treasury + RR)/ [number of Inpatient days + (OPD visits/4)]	Quarterly	

CHAPTER 6

Monitoring and Evaluation

Section I INTRODUCTION

Recording, monitoring, reporting and evaluation is an integral part of any health information system, this can be an electronic or paper-based data management system. Currently, there is no national monitoring and evaluation system for rehabilitation services. Unlike other health services provision facilities in Ethiopia, there is no standardized reporting, monitoring, and evaluation system in place for rehabilitation centers in the country. Only International Committee of the Red Cross (ICRC) supported centers are reporting performance through the database developed by the donor.

The long-term goal in relation to the establishment of a robust monitoring and evaluation system for the center completely aligns with the existing HMIS. There is a need to incorporate medical rehabilitation related indicators to the national recording and reporting tools (DHIS 2).

In addition to this, the Ministry of Health has recently assumed full responsibility for providing rehabilitation services in Ethiopia including AT services – a function that was previously under the Ministry of Labor Social Affairs (MOLSA) for several years.

This chapter aims to develop minimum operational standards and implementation guides for dynamic monitoring, reporting and evaluation systems that ensure effective and efficient ways of provision for medical rehabilitation services.

Section II OPERATIONAL STANDARDS

1. The center should have a functional performance monitoring, reporting and evaluation team.

2. The center should conduct a self-assessment performance every quarter.

3. The center should perform medical records auditing, data quality checks, archiving/culling procedures and take corrective actions on a regular basis.
4. The center should submit monthly, quarterly and annual reports to the regional health bureau within the agreed timelines.
5. Lot quality assurance sample (LQAS) should be ≥85% which means the correspondence between reported in the monthly/quarterly reporting forms and recorded in registers.

Section III IMPLEMENTATION GUIDANCE

3.1 Performance Monitoring Team (PMT)

PMT of MRC consists of representatives from service providers, planning units, and data management staff. The objective of PMT is to ensure service provision and data quality improvement in the MRC. The team will synthesize routine program performance data and prepare a program performance tracking dashboard. SMT and department heads will review the dashboard of the MRC on a quarterly basis; accordingly an action plan for areas those needs corrective measures will be developed.

The responsibility of PMT includes the day to day operation of the center's performance. These include: -

- To ensure that activities are proceeding as planned and on schedule
- To monitor the day to day activities of the MRC
- To organize and conduct bi-annual review meeting
- Develop a performance monitoring dashboard and update quarterly.
- To participate and conduct internal and external data quality assurance assessments
- To maximize the quality, effectiveness and efficiency or services
- To ensure that the center contributes to the attainment of national health sector targets and objectives.
- To ensure the MRC is submitting periodical reports on the standard format in a timely manner.

Self-assessment

The purpose of performance self-assessment is to identify areas of strength and to maintain them, to identify weakness areas and to develop improvement plan. This looking inward exercise creates opportunities for staff of the MRC to improve service provision and efficiency in general. The MRC conducts self-assessment of its own performance on a quarterly basis; the checklist for this assessment is annexed in this document.

3.2 Key Performance Indicators (KPI)

A key performance indicator is a measurable value that demonstrates how effectively a company is achieving its key business objectives. Organizations use KPIs at multiple levels to evaluate their success at reaching targets. High-level KPIs may focus on the overall performance of the business, while low-level KPIs may focus on processes in departments.

Rehabilitation Service Recording: -is the process of capturing all the required information of service recipients and all types of services provided with unique identifiers that will facilitate service report, and also can be used as a benchmark for planning and epidemiological estimation.

Data Quality: - data quality is defined as the ability of a given data set to serve its intended purpose. High quality data can deliver the intended insight out of it, in contrary poor-quality data affects the management decision in a wrong way.

Data archiving: -is the process of moving data that is no longer actively used to a separate storage device for long-term retention. Archive data consists of older data that remains important to the organization or must be retained for future reference or regulatory compliance reasons. Data archives are indexed and have search capabilities, so files can be located and retrieved. An important aspect of a MRC's data archiving strategy is to inventory its data and identify what data is a candidate for archiving and also to refer government regulations for a minimum standard.

Data culling: - is the action of removing data altogether to save space, considered no longer essential and therefore not accessible in future.

Periodical Reports: - A document containing information organized in a narrative, graphic, or tabular form, prepared on periodic, recurring, regular, or as required basis. Reports may refer to specific periods, events, occurrences, or subjects and may be communicated or presented in oral or written form. MRC is to produce at least the following periodical reports monthly, quarterly, and annually, the reporting format includes all KPI of MRC and other outcome level indicators.

To facilitate reports of the MRC, the MOH has developed standardized registers, tally sheets, and a reporting format. An integrated data collection and reporting system provides the foundation for harmonizing the requirements of information consumers need within and outside the MOH. It creates the basis for the harmonization concept (one report).

These registries and reporting formats should be correctly filed in order to have quality data at all levels of the health system. Inappropriate use of the registries will lead to erroneous data entry, aggregation into reporting formats and poor data quality, unhelpful for planning, decision making and process improvement. Therefore, correct and appropriate use of the registers and reporting formats is crucial in maintaining data integrity and quality.

The MRC reporting system is designed to generate different types of reports that can capture important data elements required to monitor and evaluate medical rehabilitation services in Ethiopia.

Types of reports by period: Weekly, Monthly, Quarterly, Annual

3.3 Lot Quality Assurance Sample (LQAS)

If the monthly data report is inaccurate, then decisions based on those data may not produce the effects that are intended. LQAS is a methodology that originated in manufacturing as a low-cost way to assess and assure quality. Based on a small sample size, one can estimate the level of quality. In recent years this methodology has been applied to assess the quality of various aspects of health services, including data quality. The following steps show how the quality of MRC service data can be estimated using a sample of 8 data elements and comparing the results with a standard LQAS table. Selected data elements from the monthly report submitted to the RHB are compared with

the tallies and register sums that are the sources of these data elements. If a high proportion of the numbers are the same, then the quality of the data can be assumed to be high; if a low proportion is the same, then the quality of the data is low. Selection of data elements is random, which means data elements are selected without any preference. A broad representation of the data elements from different sections of the monthly report form is required to assure all data elements are given equal opportunity for selection. A sample of 8 data elements is required based on LQAS table.

Select randomly one data element from each section of the previous monthly report. Write the selected data element in the first column of the data accuracy check sheet given below. Repeat the procedure until all data elements from different sections are entered in first column. Copy the figures of the selected data elements as reported on the monthly report form in second column of data quality check sheet, under the heading of "figures from monthly report form". Pick the register or tally sheet which has the selected data element. Sometimes there may be several registers or tally sheets. Count the actual entries in the register or tally related to a specific selected data element. Put the figure you counted in third column of check sheet, under the heading "figure from register". Repeat this procedure for all data elements. If the figures in column 2 and 3 are same, tick under YES in column four. If they are not the same (do not match), put a tick under NO in column four. Repeat this procedure for all data elements. Count the total ticks under "YES" and write in row of total for "YES". Repeat the procedure for "NO" column. The sum of YES and NO totals should be equal to the sample size of 8.(The table is annexed)

The total number in the "Yes" column corresponds to the percentage of data accuracy in the following LQAS table. For example, if total "yes" number is 2, the accuracy level is between 30-35%; if total number in the "yes" column is 7, the accuracy level is between 65-70%. The decision rule table is annexed.

Section IV IMPLEMENTATION CHECKLIST AND INDICATORS

Self-assessment Tool for Operational Standards

In order to determine if the operational standards of monitoring and reporting have been met by the MRC, an assessment tool has been developed which describes criteria for the attainment of a standard and a method of assessment. This tool can be used by MRC management or by an external body such as the RHB or FMOH to measure attainment of each operational standard.

S/no	Health financing implementation checklists	Yes	No
1	The medical rehabilitation center has established a functional performance monitoring, reporting and evaluation team		
2	The medical rehabilitation center has developed a self-assessment tool to measure its own performance		
3	The medical rehabilitation center conducts a self-assessment of its own performance on a quarterly basis.		
4	The medical rehabilitation center has identified Key Performance Indicators (KPIs) to assess performance.		
5	The medical rehabilitation center conducts a review of performance through KPIs.		
6	The medical rehabilitation center records all services provided on the service provision register.		
7	The medical rehabilitation center has developed a data quality improvement plan with clear responsibilities and deadlines.		
8	The medical rehabilitation center implements a data quality improvement plan.		
9	The medical rehabilitation center has a data archiving/culling plan.		
10	The medical rehabilitation center implements a data archiving/culling plan.		
11	The medical rehabilitation center has a copy monthly, quarterly, and annual reporting formats.		
12	The medical rehabilitation center submits monthly, quarterly, and annual reports to Regional Health Bureaus within agreed timelines.		
13	The medical rehabilitation center has a copy submitted monthly, quarterly, and annual reports.		
14	The medical rehabilitation center conducts Lot Quality Assurance Sample (LQAS) on a quarterly basis.		

Assessment tool

The following table can be used as a tool to record whether the main recommendations outlined above have been implemented by the center. The table does not measure attainment of each operational standard but rather provides a checklist to record implementation activities.

MET: when all criteria's met

UNMET: when less than half criteria's unmet

PARTIALLY MET: when half and greater criteria's met

#	Standard	Method of evaluation	Met	Partially met	Unmet
1	The center should have a functional performance monitoring, reporting and evaluation team. (2)	1. There is assigned staff that is responsible for PMT 2. There is TOR for PMT			
2	Self-assessment tools (6)	1. Leadership and governance 2. Service delivery 3. Human resource 4. Supply chain and device management 5. Financing 6. Monitoring and evaluation			
3	KPIs identified to assess performance(1)	1. KPI identification in each chapter of this guideline			
4	All services provided are recorded on the service provision register.(1)	1. Service prevision register is complete and correct			
5	Data quality improvement plan. (2)	1. Conduct periodical data quality assessment 2. Implement action points identified from previous data quality assessments			
6	Dataarchiving/culling. (1)	1. Proper filing of documents			

Indicators

The table below demonstrates the national MRC Result Framework, that consists of requirements, use and purpose of the proposed monitoring and evaluation system. Major indicators from global, regional and national level are exhibited in the framework. The national level indicators are pulled out from the major thematic area; from each chapter of this document.

National MRC Result Framework

Objectives	Performance Indicators	Means of verification	Assumption
Leadership and governance	Total number of SMT meetings held in the reporting period.	Meeting minutes	Monthly SMT
	Number of SMT meetings cancelled or deferred.	Meeting minutes	There might be unforeseen problems, that hinder regular meetings.
	Average attendance rate at SMT meetings	Meeting minutes	All members of the SMT will attend the meeting
Service Delivery	Number of patients received physical rehabilitation service.	Service records	The standard meets relevant criteria
	Number of patients received mobility assistive service	Service records	The standard meets relevant criteria
	Number of clients received visual assistive service	Service records	The standard meets relevant criteria
	Number of clients received hearing assistive service	Service records	The standard meets relevant criteria
	Number of referrals made to other facilities	Service records	Clients with additional services needs referred to other facilities.

Human Resources	Total number of medical rehabilitation care professionals available at the facility as per the required standard.	Human resource records of MRC	Complete profile of MRC staff available at HR unit
	Attrition rate (done for each department separately)	Annual HR unit report of MRC	Attrition rate is one of the reporting indicators in the annual report
	Total number of non-clinical staff	Human resource records of MRC	The MRC have clinical and non-clinical staff
Supply chain management	Percentage of functional medical devices	Status report of medical devices	MRC plan to maintain non-functional medical devices
	Number of incident reports related to medical device malfunction.	Incident and operation reports	MRC plan to maintain non-functional medical devices

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Annex 1

Required human resource for rehabilitation and AT services (The minimum standard). However, the total number for each position in a MRC will depend on various factors.

1.	Physiotherapy professional	13	Audiologist
2.	Physiotherapy technician	14	IT technician for maintenance of devices
3.	P&O (Certificate, Level III, IV & V)	15	Social worker or counselor
4	Orthopedic footwear technician	16	Clinical psychologist
5	Occupational therapist	17	Special needs children trainer
6	Speech therapist	18	Sign language trainer (communicator)
7	Community based rehabilitation /CBR/ worker	19	Data encoder
8	Leather and or Shoe maker	20	Storekeeper
9	Orthopedic technician	21	Secretary
10	Bio medical engineers	22	Purchaser, accountant, cashier
11	Optometrist	23	Finance officer
12	Cleaner	24	Security

Annex 2 Data Accuracy Check Sheet

Week for which data accuracy is checked_____

Randomly Selected Data Elements from the monthly reporting form	Figures from the Monthly report form (2)	Figures counted from registers & tallies (3)	Do figures from columns 2 & 3 Match?	
			Yes	No
1. Disability cases for a single disability / age / gender group				
2. Orthotic services monthly report section				
3. Prosthetic services monthly report section				
4. Vision services monthly report section				
5. Hearing services monthly report section				
6. Cognitive services monthly report section				
7. Communication services monthly report section				
8. Logistic				
Total				

Annex 3 LQAS decision rules

LQAS Table: Decisions Rules for Sample Sizes of 12 and Coverage Targets/ Average of 20-95%								
Sample Size	Average Coverage (Baselines)/ Annual Coverage Targets (Monitoring and Evaluation)							
	Less than 25% N/A	25 %	37%	50%	62%	75%	87%	100%
8	N/A	2	3	4	5	6	7	8

Annex 4 National priority of assistive technology and device list

Area/Type	Name of Product
Mobility	Clubfoot braces
	Foot Orthoses (FO)
	Ankle Foot Orthoses (AFO)
	Knee Ankle Foot Orthoses (KAFO)
	Hip Knee Ankle Foot Orthosis (HKAFO)
	Spinal Orthoses (SO)
	Shoulder Elbow Wrist Hand Orthoses (SEWHO)
	Trans_ Tibial (Below Knee(BK))
	Above Knee (AK)
	Trans Femoral
	Trans-Radial (below elbow)
	Trans-Humeral (above elbow)
	Crutches
	Walking Canes/sticks
	Walker & Frames
	Manual wheelchairs
	Tricycle
Cognitive	Fall detectors
	Apps That Help People with Speech and Communication
	Multiplication machine
Vision	Spectacles
	Filters
	Audio Players with DAISY Capability
	Braille displays (note takers)
	manual Braille writing equipment
	White canes
	Talking/touching watch
	Global Positioning System (GPS)
	Balls with Bell, sound
	Screen readers
	Keyboard and mouse emulation software
	Balls with Bell, sound
	Braille embossers
	Magnifying Devices
	Audio players with DAISY

Hearing & Communication	Hearing aids Hearing Loops/FM System/ Personal Wireless Remote Microphone Systems Alarm Signalers with Light/Sound/Vibration Closed captioning displays Deaf blind communicator Capability Step by step communicator Sets of picture exchange communication system Communication boards/books/cards Talk pad

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