



NATIONAL GUIDELINES FOR REHABILITATION SERVICES IN SRI LANKA

MINISTRY OF HEALTH AND INDIGENOUS MEDICINE

National Guidelines
for Rehabilitation Services in Sri Lanka
(2014 - 2018)



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Ministry of Health & Indigenous Medicine

Directorate for Youth, Elderly and Disabled Persons

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PREFACE

Persons with disabilities deserve to have quality health services especially for rehabilitation. National Guidelines for Rehabilitation Services were developed to provide rehabilitation information on structure, process, content and networking for policy planners and programme implementers, to provide better sustainable rehabilitation health service for persons with disabilities in the country.

We would like to acknowledge the contribution made in developing National Guidelines for Rehabilitation Services by the Deputy Director General of Health Services (Public Health Services - II), College of Rheumatology & Rehabilitation, College of Surgeons, College of Neurologists, Sri Lanka Association of Orthopedic Surgeons and experts from all the Associations including Physiotherapists, Occupational therapists, Speech & Language therapists, Prosthetists & Orthotists, School of Prosthetics & Orthotics, Government Medical Officers Association, all related public health programmes, Provincial Directors of Health and Deputy Provincial Directors of Health, Hospital Directors, Medical Officers-In charge of rehabilitation health Institutions, and Non Governmental Organizations.

The support extended by the Ministry of Social Services and the dedicated work rendered by Dr.Padmani Mendis & Dr.Kumari Navaratne is highly appreciated. Printing of the National Guidelines for Rehabilitation Services is financially supported by the Family Health Bureau, Ministry of Health.

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Foreword

It is with my great pleasure to pen down this foreword to congratulate and appreciate the development of National Guidelines for Rehabilitation Services, Sri Lanka by the Directorate for Youth, Elderly and Disability, Ministry of Health and Indigenous Medicine.

Disability is part of human condition and it is complex, dynamic, multidimensional and contested. Many people with disabilities do not have equal access to health care (World Report on Disability). Considering the high demand and the timely need for delivering high quality rehabilitation services in the country in a sustainable manner, National guidelines on rehabilitation services is developed based on a right based approach.

National level and provincial level health services are being operated to provide better health care for the people with disabilities and to minimize the health service delivery gaps. National guidelines for rehabilitation services would pave the way for the health service providers to achieve the best health service outcomes for the people with disabilities.

In developing National Guidelines for Rehabilitation Services a wide range of activities were carried with the involvement of multitude of stakeholders from the government and non government professional bodies and partners.

I wish, National Guidelines for Rehabilitation Services will be a very useful document for all those who have interest and motivation towards achieving sustainable health services for the persons with disabilities in the country.



Dr.P.G.Mahipala

Director General of Health Services.

Abbreviations:

CBO	Community-based Organisation
CBR	Community-based Rehabilitation
CRPD	Convention on the Rights of Persons with Disabilities
CRT	Community Rehabilitation Team
DGH	District General Hospital
DGHS	Director-General Health Services
ICF	International Classification of Functioning, Disability and Health
ICU	Intensive Care Unit
DNR	Disability Notification Register
DPO	Disabled People's Organisation
DS	Divisional Secretariat
IDRT	Inter-disciplinary Rehabilitation Team (IDRT)
MoH	Ministry of Health
MOH	Medical Officer of Health
AMOH	Additional Medical Officer of Health
MoSS	Ministry of Social Services
NAPD	National Action Plan for Disability
NHSL	National Hospital of Sri Lanka
P & O	Prosthetics and Orthotics
PDHS	Provincial Director of Health Services
PGH	Provincial General Hospital
PHC	Primary Health Care
RDHS	Regional Director of Health Services
SLSPO	Sri Lanka School of Prosthetics and Orthotics
SSO	Social Service Officer
TH	Tertiary Level hospital
YED	Youth, Elderly and Persons with Disabilities
UN	United Nations

Glossary of Terms:

Rehabilitation: Defined as "a set of measures that assist individuals who experience or are likely to experience disability to achieve and maintain optimum functioning in interaction with their environments". It is instrumental in enabling people with limitations in functioning to remain in or return to their home or community, live independently, and participate in education, the labour market and civic life.

Rehabilitation measures are aimed at achieving the following broad outcomes:

- prevention of the loss of function
- slowing the rate of loss of function
- improvement or restoration of function
- compensation for lost function
- maintenance of current function¹

Health-related Rehabilitation: Health-related Rehabilitation describes rehabilitation services within existing health systems².

In this document "Rehabilitation" rather than "Health-Related Rehabilitation" has been used to indicate that rehabilitation interventions for people with disabilities need to extend outside the health system to achieve maximum impact of health outcomes.

Disability: The International Classification of Functioning, Disability and Health (ICFWHO, 2001) approach to disability understands functioning and disability as a dynamic interaction between health conditions and contextual factors, both personal and environmental³. In the ICF, problems in functioning are categorized in three interconnected areas: impairments, activity limitations and participation restrictions. Disability refers to difficulties encountered in any or all three of these areas. The ICF emphasizes environmental factors in creating disability⁴.

Persons with disabilities: Persons with disabilities include people who are traditionally understood as disabled. The disability can be either physical or mental or both. These include conditions such as children with cerebral palsy and muscular dystrophies etc, physical disabilities following all forms of injuries, persons who are blind or deaf or people with intellectual impairments or mental health conditions, and also the wider group of persons who experience difficulties in functioning due to a wide range of conditions such as strokes, chronic lung diseases, cancers, injuries and other non-communicable diseases.

neurological disorders, and those disabilities that result from the ageing process⁵.

**Inter-disciplinary
Rehabilitation
Team (IDRT):**

The IDRT is made up a group of persons within a hospital who are directly and closely involved with and work together in the patient's rehabilitation. They address the patient's problems and needs within the scope of their profession but with common goals. With the inclusion and participation of the patient and family member or caregiver at the core, an IDRT may include specialists in rheumatology and rehabilitation, other physicians, surgeons, medical officers, physiotherapists, occupational therapists, speech and language therapists, prosthetists and orthotists, nurses, social service officers and clinical psychologists.

**Multi-
disciplinary
Team:**

In a Multi-disciplinary Team the skills and experience of individuals from different disciplines are utilized, with each discipline and member approaching the patient from their own perspective and having their own goals.

**Rehabilitation in
the Community:**

Refers to the rehabilitation services that will be made available to people with disabilities in their own homes, usually as a follow-up of individuals who have had rehabilitation in hospitals. This may also include individuals who have been located within their communities and for whom institutional rehabilitation is not found to be necessary. Such rehabilitation may be supported by a Community Rehabilitation Team working in collaboration with the Primary Health Care Team.

**Community
based
Rehabilitation
(CBR):**

CBR is a strategy within general community development for the rehabilitation, equalization of opportunities and social inclusion of people with disabilities. CBR is implemented through the combined efforts of people with disabilities themselves, their families, organizations and communities and the relevant governmental and non-governmental health, education, vocational, social and other services⁶.

1 Introduction:

National Guidelines for Rehabilitation Services have been prepared within the framework of the National Health Policy (2013)⁷, Health Development Master Plan 2007- 2016⁸, National Health Development Plan 2013 - 2017⁹, National Policy on Disability (2003)¹⁰ and the National Plan on Ageing (2010)¹¹

The Guidelines comply with the health-related articles of the UN Convention on the Rights of Persons with Disabilities (CRPD)¹². Specifically, CRPD Article 25 requires States to "recognize that persons with disabilities have the right to the enjoyment of the highest attainable standard of health without discrimination of disability". This, together with Article 26 (Habilitation and Rehabilitation) outlines measures States Parties should undertake to ensure people with disabilities are able to access rehabilitation with "effective and appropriate measures, including through peer support, to enable persons with disabilities to attain and maintain maximum independence, full physical, mental, social and vocational ability, and full inclusion and participation in all aspects of life"

Article 26 further calls on States to provide services that must begin at the earliest possible stage, are based on multidisciplinary assessment of individual needs and strengths, support, participation and inclusion in the community and are available to them as close as possible to their own communities including in rural areas, and should include provision of assistive devices. All these concepts have been adopted in the development of these National Guidelines for Rehabilitation Services.

Also in keeping with the spirit of the CRPD, people with disabilities have been consulted in the formulation of these National Guidelines. Their continuing inputs are invaluable to enhance the acceptability of services.

WHO recognizes disability as a global public health issue, a human rights issue and a development priority¹³. WHO has encouraged countries to make multisectoral National Plans of Action for Disability with Health and Rehabilitation as a key component. These National Guidelines are designed to complement this key component in Sri Lanka's National Action Plan for Disability (2014)¹⁴.

Implementation of these Guidelines will throughout take into consideration the first principle of the UN Convention on the Rights of Persons with Disabilities (CRPD) which is "Respect for inherent dignity, individual autonomy including the freedom to make one's own choices, and independence of persons (*with disabilities*)".

2 Purpose and scope:

The main objective of these National Guidelines is to provide adequate information to planners and implementers on appropriate levels of rehabilitation services that should be made available to people with disabilities in Sri Lanka. The document contains acceptable parameters which, if adhered to with the expansion of services for rehabilitation, will enable them to function effectively and efficiently to benefit those needing it.

The document provides guidelines on the structure, process, content, procedures and networking that comprises rehabilitation and that need to be followed in the development of rehabilitation services within health institutions, at household level and in the community.

The guidelines foresee that ensuring the best health outcomes for people with disability calls for collaboration of the health sector with others, notably directly with social services and communities. These will ensure that credible rehabilitation will be available to people with disabilities through health-related rehabilitation services set up at all levels of the health system whilst extending follow-up in their homes and communities, which will facilitate their inclusion in the country's development activities.

The Guidelines however will not be static. Rather, they are designed to be dynamic and evolve with the overall development of the National Health System to deliver a quality rehabilitation service.

The development of rehabilitation services will be based on a Rights-Based Approach with the following principles:

- an interdisciplinary strategy within the hospital system
- referral pathways to other health specialities, institutions and service levels
- empowering individuals to manage their own health conditions
- structured treatment programmes and daily activities
- family and community support and participation
- facilitating entry to a multisectoral and comprehensive continuum of cross-ministerial activities that will lead to the equalization of opportunities and the social and economic inclusion of people with disabilities in the country's mainstream.

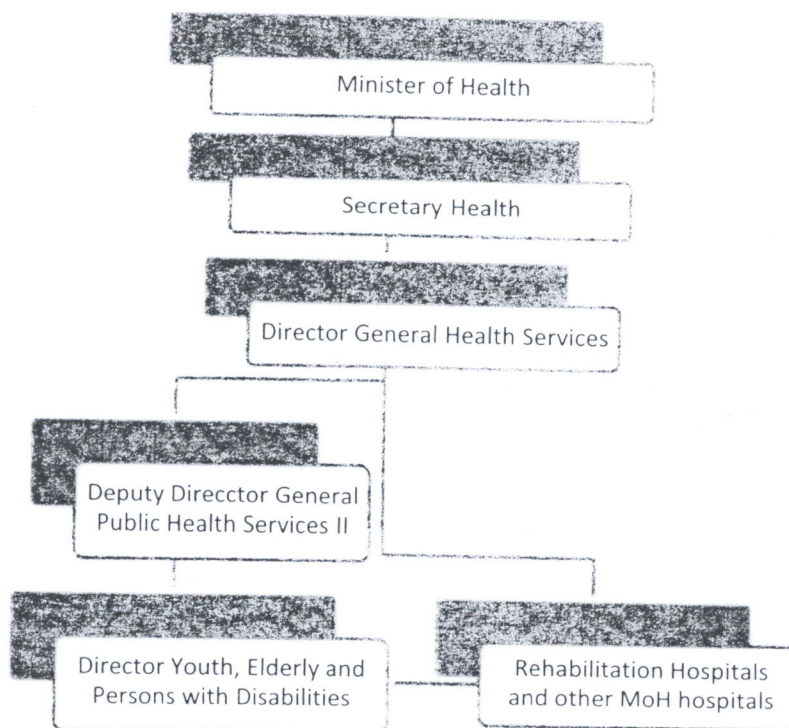
The guidelines will be reviewed after a period of 5 years and changes made accordingly.

3. Organizational structure at central and provincial levels:

3.1 Central Ministry of Health:

The organizational structure of rehabilitation services at central level is indicated in Fig. 3.1.

Fig. 3.1: Organizational structure at the central level



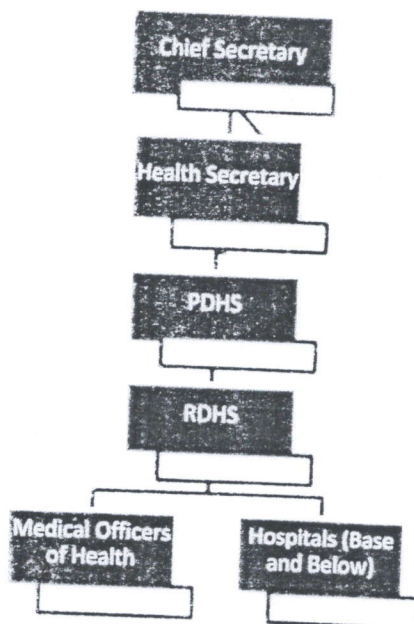
At the central level the Director Youth, Elderly and Persons with Disabilities (YED) is responsible for providing support to rehabilitation facilities managed by the Central Ministry of Health. These include some rehabilitation hospitals and other hospitals with rehabilitation departments and facilities. Director, YED provides this support under the guidance of the Deputy Director General Public Health Services II (DDG PHS II), Director General Health Services (DGHS) and the Secretary, Ministry of Health.

A National Steering Committee for the Care of People with Disabilities is chaired by the Secretary Health. The Committee reviews policy issues related to disability and rehabilitation and meets quarterly. The Secretary of this committee is the Consultant Community Physician YED.

3.2 Provincial Ministry of Health:

The organizational structure of rehabilitation services at provincial level is indicated in Fig. 3.2.

Fig. 3.2: Organizational structure at provincial level



At provincial level, the Provincial Director Health Services (PDHS) is responsible for providing disability and rehabilitation services in the facilities managed by the province. Technical guidance including on policy and guidelines is supported by the central ministry of health while responsibility for implementation lies with the province.

3.3 Institutional Administration:

Depending on the level of hospital, overall responsibility for hospital administration lies with the hospital director, medical superintendent, district medical officer or the medical officer in charge¹⁵. If the facility is a tertiary hospital, provincial general hospital, district general hospital or base hospital, administration of rehabilitation departments is the responsibility of the relevant specialist, who may be a consultant in rheumatology and medical rehabilitation, orthopaedic surgeon, neurologist, paediatrician or another medical or surgical specialist or a designated senior medical officer. The stroke unit is managed by a consultant neurologist.

Those therapy departments or units with two or more staff will have a competent, experienced senior or superintendent therapist who will be responsible for supervising, coordinating and guiding the internal activities of the respective therapy department or unit. In the P & O centres a manager or senior P & O or orthopaedic technician will have these responsibilities.

4. Rehabilitation facilities and components:

4.1 Rehabilitation facilities:

Four types of health institutions are considered in these guidelines for the provision of effective, appropriate and accessible rehabilitation services. They are (i) rehabilitation hospitals (ii) hospitals with rehabilitation departments (iii) hospitals with rehabilitation services and (iv) hospitals with no rehabilitation services.

(i) *Rehabilitation hospitals*

These are hospitals that provide rehabilitation services on an intensive basis. Such services are provided under the guidance of a consultant in rheumatology and medical rehabilitation, to be replaced in the future by a Rehabilitation Physician. When necessary, referrals will be made to medical and surgical specialists (such as neurologists, paediatricians and orthopaedic surgeons) attached to tertiary or secondary level hospitals that are closest to the rehabilitation hospital.

Services available in a rehabilitation hospital include physiotherapy; occupational therapy; speech and language therapy; assistive devices including those provided by prosthetic and orthotics services; social work; and clinical psychology when possible.

Patients with the following conditions and impairments will benefit from short term, medium term and long term rehabilitation - stroke; spinal cord injury; brain injury; amputations; fractures and other orthopaedic conditions including those following surgery; chronic non-communicable disorders (cancer, cardiovascular disorders and chronic respiratory disorders); neuromuscular disorders; and cerebral palsy and other paediatric conditions.

The Rheumatology & Rehabilitation Hospital Ragama serves as a tertiary level institution receiving referrals for specialized rehabilitation from all parts of the country, especially from those that are underserved. It is being developed as a Centre for Excellence in Rehabilitation.

It is expected that there would be at least one smaller rehabilitation hospital in each district beginning with one district rehabilitation hospital per province.

(ii) *Hospitals with rehabilitation departments*

All tertiary level general hospitals will have rehabilitation departments headed by a consultant in rheumatology and medical rehabilitation to be replaced in the future by a rehabilitation physician. Provincial general hospitals and some secondary level hospitals namely district general hospitals and base hospitals will also have rehabilitation departments, depending on the availability of consultants in rheumatology and rehabilitation and in the future of rehabilitation physicians.

Consultants in Rheumatology and Medical Rehabilitation (or Rehabilitation Physicians) in these hospitals will work closely with other medical and surgical specialists in Orthopaedics; Neurology; Neurosurgery; Neurotrauma; Paediatrics; General Medicine; General Surgery; Gynaecology and Obstetrics; Oncology; Ear, Nose and Throat Surgery; Psychiatry; Cardiology; Cardio-thoracic surgery Pulmonary care; Intensive care; Plastic and Reconstructive Surgery; Trauma care; and Nephrology among others.

Each rehabilitation department will have a paediatric unit to meet the rehabilitation needs of children with cerebral palsy; autism; spina bifida; muscular dystrophy; traumatic spinal cord injury; Down syndrome; and children with hearing, visual, communication and intellectual impairments and other conditions and impairments.

A Stroke Unit will be established in a selected tertiary level hospital in each province. These will be headed by neurologists and will provide mainly acute care.

Physiotherapy, occupational therapy and speech and language therapy units will be in attached as is relevant to the various medical and surgical specialities listed above and to the paediatric and stroke units. A prosthetic and orthotic centre in selected hospitals will produce mobility aids and seating and positioning devices (*see section 10*). Other assistive devices not produced by the prosthetic and orthotic centre and required by patients will be procured.

Rehabilitation departments will provide short and medium term rehabilitation for inpatients and long term rehabilitation for outpatients. Those patients requiring long term inpatient rehabilitation will be referred either to rehabilitation hospitals or to secondary level hospitals closer to their homes.

(iii) Hospitals with rehabilitation services

Some secondary care facilities (district general hospitals and base hospitals A and B) at present provide rehabilitation services to varying degrees. That is usually physiotherapy. In the future rehabilitation services will be made available at all secondary level hospitals and include physiotherapy, occupational therapy and speech and language therapy.

Prosthetic and orthotic services at appropriate levels will be available through centres in selected hospitals at provincial or district level (*see section 10*). Other assistive devices not produced by the prosthetic and orthotic centre and required by patients will be procured.

Referral for rehabilitation services will be made by medical and surgical specialists and medical officers from within the hospital or from other tertiary, secondary or primary level hospitals. This will be through designated medical officers within that hospital.

(iv) Hospitals without rehabilitation services

Divisional Hospitals (A,B,C at the primary level) do not have rehabilitation services. Patients needing rehabilitation will be referred to appropriate hospitals at other levels or to the Medical Officer of Health for rehabilitation in the community.

4.2 Rehabilitation components:

Individuals with disabilities supported by their family members and other caregivers are the core component of all rehabilitation actions and are the primary focus of rehabilitation. They need to be recognized as such. Their role is described in (i) below.

Other components of rehabilitation include (ii) physiotherapy (iii) occupational therapy (iv) speech and language therapy (v) prosthetic and orthotic services (vi) provision of assistive devices not made in prosthetic and orthotic centers (vii) nursing care (viii) social work and (ix) and clinical psychology wherever possible.

(i) Individuals with disabilities, family members, other caregivers

Individuals need to know about the purpose, value and possible outcomes of the rehabilitation interventions they are being given, together with risks if any. They need to be supported, advised and given space to discuss their decisions and to participate actively in their own rehabilitation. Individuals and families need to know about their health and disability rights and how to access them. They need to be encouraged to ask for information and seek answers to questions and solutions to problems as perceived by them.

Support needs required by children and adults who have disabilities vary from individual to individual and need to be addressed following individual assessments. Support needs are influenced not only by the type and degree of impairment itself but also by personal and environmental factors as well as the availability and accessibility of rehabilitation services.

Each member of the rehabilitation team has a responsibility to enhance patient's capacities including knowledge and skills, so they are better able to manage their own health and disability conditions and situations. People with disabilities, families and caregivers must be informed about services and opportunities available to them both within the health system and outside it.

(ii) Physiotherapy

Physiotherapy provides services to individuals and populations to develop, maintain and restore maximum movement and functional ability throughout the lifespan. This includes providing services in circumstances where movement and function are threatened by ageing, injury, pain, diseases, disorders, conditions or environmental factors. Functional movement is central to what it means to be healthy.

Physiotherapy is concerned with identifying and maximizing quality of life and movement potential within the spheres of promotion, prevention, treatment and rehabilitation. This encompasses physical, psychological, emotional, and social wellbeing. Physiotherapy involves the interaction between the physiotherapist, patients, other health professionals, families, care givers and communities in a process where movement potential is assessed and goals are agreed upon, using knowledge and skills unique to physiotherapists¹⁶.

Physiotherapy modalities include mechanical (manual power), heat and cold energy, electrical energy, sound energy, light energy, electromagnetic energy and hydro energy. These modalities are used for treatment and rehabilitation of a wide range of health conditions and areas including orthopaedics; rheumatologic; neurological, neurotrauma & neurosurgical; paediatric; noncommunicable diseases; cardiac; pulmonary; intensive care; cancer care; women's health; geriatric care; burns and wound care; and sports. Physiotherapists also carry out tasks in rehabilitation in the community and in community-based rehabilitation.

(iii) Occupational therapy

Occupational therapy is a client-centred health profession concerned with promoting health and well being through occupation. The primary goal of occupational therapy is to enable people to participate in the activities of everyday life. This outcome is achieved by working with people and communities to enhance their ability to engage in the occupations they want to, need to, or are expected to do, or by modifying the occupation or the environment to better support their occupational engagement¹⁷.

In occupational therapy, occupations refer to the everyday activities that people do as individuals, in families and with communities to occupy time and bring meaning and purpose to life. Occupations include things people need to, want to and are expected to do.

Occupational therapists work with a diverse range of people who all have different health conditions, impairments and needs. These health conditions, impairments and needs are generally considered to be within the following eight areas of an individual's daily life - intra personal, inter personal, sensory, motor, cognitive, activities of daily living, leisure and work.

Health conditions related to the above include conditions affecting the central and peripheral nervous system; orthopaedic and rheumatologic conditions; burns and injuries; psychiatric conditions such as psychoses and neuroses; and paediatric conditions such as cerebral palsy and other developmental disorders and delay; spina bifida; autism; intellectual impairment; and hyperactivity. Occupational therapists also carry out tasks in rehabilitation in the community and in community-based rehabilitation.

(iv) *Speech and language therapy*

Speech and language therapy is concerned with the management of disorders of speech, language, communication and swallowing in children and adults¹⁸.

The overall objectives of speech and language therapy are to enhance the individual's quality of life through early interventions to maximize an individual's communication potential and optimize an individual's ability to swallow.

Health conditions and impairments treated commonly include specific speech and language delays and difficulties in children due to developmental disorders such as cerebral palsy and other conditions such as Down syndrome; autism and social interaction difficulties; learning difficulties; hearing impairments; cleft lip & palate; feeding & swallowing difficulties in infants; language, voice, speech and communication disorders; stammering; dyslexia (specific reading difficulties) and motor learning difficulties. In adults, speech and language therapy is used in acquired speech and language difficulties and eating and swallowing problems following neurological impairments; in conditions such as stroke, head injury, Parkinson's disease, dementia; and in head, neck or throat cancers. Speech and language therapists also carry out tasks in rehabilitation in the community and in community-based rehabilitation.

(v) *Prosthetic and orthotic services*

Prosthetic and orthotic (P & O) services are provided through centres manufacturing a range of assistive devices required by people with mobility impairments. P & O centres are required to plan, design, fabricate, modify, fit, repair and follow-up patients needing and using these devices taking into account each person's individual requirements. Devices not made at P & O centres need to be procured.

Devices made at P & O centres of the ministry of health include the following:

Mobility devices¹⁹: These are designed to facilitate or enhance an individual's personal mobility. This includes their ability to change and maintain the position of their body and to walk or move from one place to another. Common mobility devices made by P & O centres are the following: (i) orthoses - calipers, braces, splints and spinal braces (iii) prostheses - artificial legs and arms. (iii) some corrective and positioning devices are also made – for example cervical collars and positioning belts.

(vi) *Provision of assistive devices not made in prosthetic and orthotic centres*

All assistive devices provided by Government are free of cost. Those not made in P & O centres need to be procured and are indicated below. They include;

- Mobility devices; walking sticks (tripods and quadrupeds), crutches, walking frames, wheeled walkers, wheelchairs and tricycles

- Seating aids and corrective and positioning devices: These include (i) adapted seating (ii) corner seats (iii) head supports and cervical collars (iv) standing tables (v) positioning belts.
- Visual devices and hearing devices (e.g. white canes, eyeglasses, Braille systems and talking books and hearing aids;
Spectacles and hearing aids are distributed by the Ministry of Health through eye clinics conducted by the National Programme for the Prevention and Control of Avoidable Blindness and by the National Programme for Prevention of Hearing Impairment and Deafness in Sri Lanka 2012 – 2030; by the Ministry of Education to school children in need; and by the Ministry of Social Services at Mobile Secretariats and through the National Community-Based Rehabilitation (CBR) programme.
- Other assistive devices most commonly required in rehabilitation;
These include communication devices (communication boards and electronic speech output devices) cognitive devices (diaries, calendars and schedules); and daily living devices (adapted cutlery and cups, shower seats and commodes)²⁰. Some of these could, and are, made by therapists and parents. Others may need to be purchased.

Many other assistive devices are distributed by the Ministry of Social Services and Department of Social Services both at central and provincial levels. These include mobility devices (wheelchairs, tricycles, walking aids) and referral for prostheses.

Projects implemented by some non-governmental organizations also manufacture and/or distribute various devices in certain areas. The private sector also produces some devices for purchase.

(vii) Nursing

Nurses with knowledge of disability and rehabilitation are invaluable in the provision of comprehensive care to people with disabilities to maintain and restore function and prevent complications. They perform hands-on nursing care to facilitate the achievement of overall rehabilitation goals and a high level of independence. They teach nursing techniques to patients and family members to develop self-care skills and prepare patients for discharge with follow-up plans²¹

(viii) Social work

Social work in the Government disability sector in Sri Lanka is carried out by social service officers (SSOs) and social development officers (SDAs) employed by the ministry and department of social services at central and provincial levels. They interact closely with individuals with disabilities who have social problems, recognizing and helping them and their families. Institutional personnel will refer patients when necessary to field counterparts in the area in which the patient lives for follow-up. They will be a link between an individual

with disability and her/his family and community. They will supply information regarding services provided by the ministry and department of social services both at central and provincial levels and assist them to obtain such services when needed.

(ix) Clinical psychology

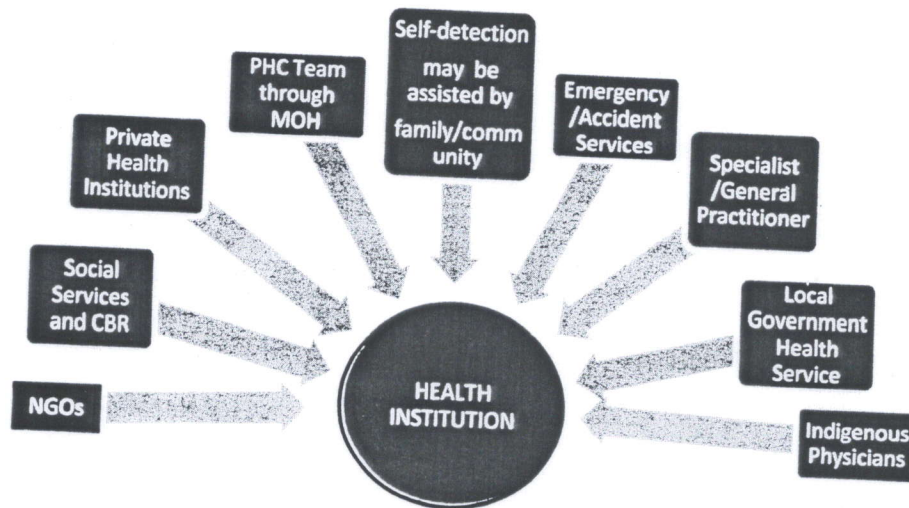
Knowledge and skills used by clinical psychologists enhance rehabilitation outcomes related to functional abilities and social participation across the life span²². Clinical psychologists will meet the emotional needs of those patients who have difficulty in coping with their situation and are in need of specialized help and psychosocial support to adapt to lifestyle changes²³. They help patients adjust to new conditions and situations in the best possible way when returning to their previous activities.

5. Service delivery:

5.1 An individual's entry to obtain rehabilitation services:

Fig. 5.1 indicates the multiple entry points through which a person with disability may have admission to a rehabilitation facility or service.

Fig. 5.1: Individual's entry into hospital rehabilitation service



5.2 Rehabilitation approaches available to patients:

Table 5.1 indicates that patients have access to multiple rehabilitation service approaches to enable them obtain maximum benefit.

In an Intensive Care Unit (ICU) patients will have physiotherapy within a multidisciplinary approach²⁴ to commence their rehabilitation and continue this when they are transferred to wards. Here rehabilitation expands to include many other components and adopts an inter-disciplinary approach²⁵.

Patients may be referred for rehabilitation when they are being treated in-ward or attending outpatient clinics. Other approaches a patient may use start from their home and community or as a participant in a CBR programme.

Table 5.1: Individual's access to multiple rehabilitation approaches

Location rehabilitation accessed		Rehabilitation Stream					Rehabilitation format
		Short-term	Short-medium term	Medium-term	Medium – long term	Long-term	
Hospital	ICU						Treatment by professionals with Multi-disciplinary approach Rehabilitation by Interdisciplinary Team (IDRT)
	Ward Bed						
	Out-patient Clinic						
Follow-up	Rehabilitation in the Home						Community Rehabilitation Team (CRT) with PHC Team
	Rehabilitation in the Community						
	Community-Based Rehabilitation (CBR)						Multisectoral Inclusive Development Framework
Individual, in Consultation with IDRT/CRT, exits from Rehabilitation when goals have been achieved							

Adapted from Infrastructure Unit Support Systems (IUSS) Guides, August 2013, Department of Health, South Africa²⁶

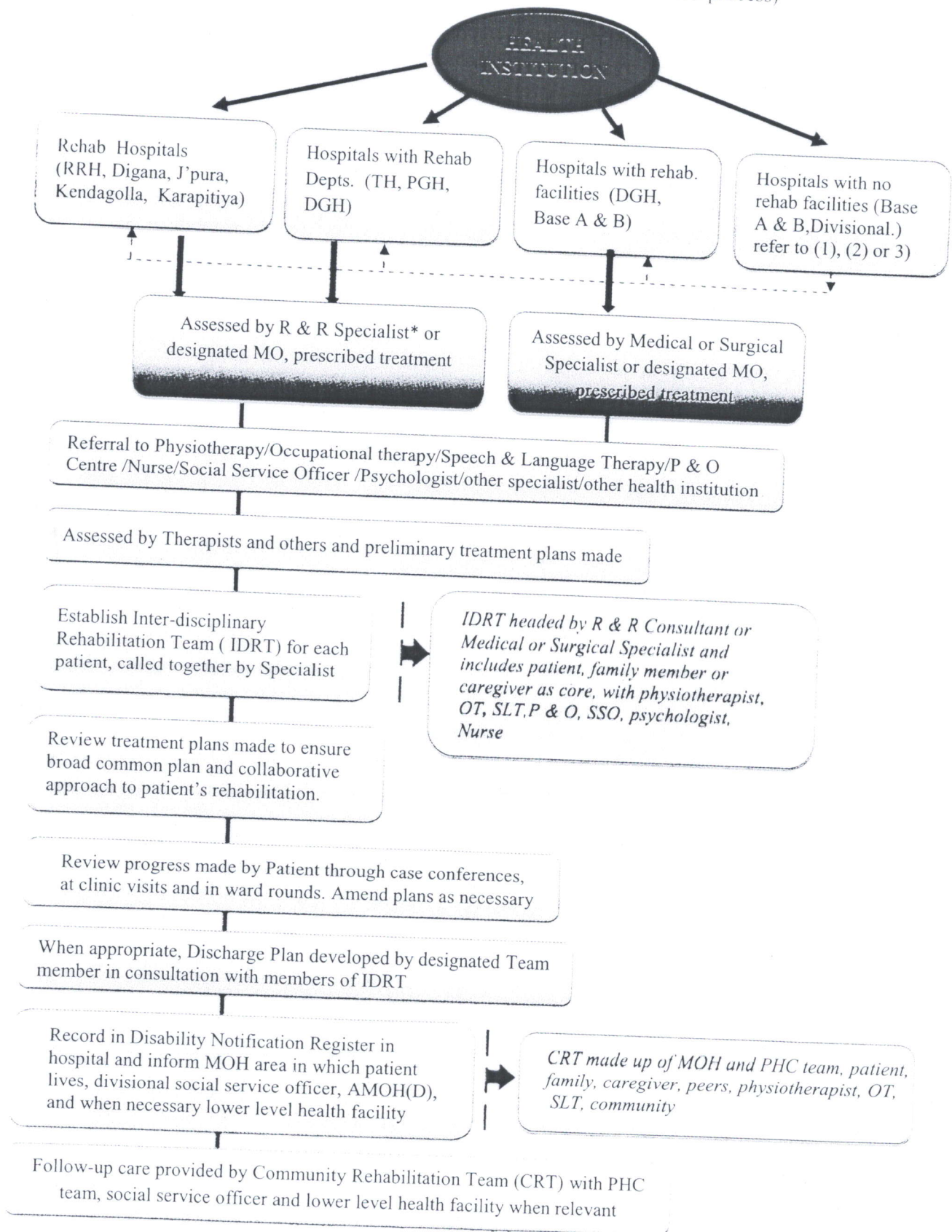
Rehabilitation required by a patient may be short, medium or long-term. There is no defining or finite length, and periods may overlap with a seamless interface as indicated in Table 5.1.

The length of a patient's period of rehabilitation is determined by how the health condition and impairment affects that particular individual and on personal and environmental factors that impact on that particular individual. One patient who has a stroke may, for instance only require short-term rehabilitation (a few days) while a second may require a lengthened period as an inpatient (2 weeks) or as an outpatient (a month or two) and a third a may require a long stay in a rehabilitation hospital (over 2 months).

Individuals who have visual impairment, hearing impairment and mental health problems and children with disabilities: The Ministry of Health currently implements a National Programme for the Prevention and Control of Avoidable Blindness (Vision 20-20)²⁷ and a National Programme for Prevention of Hearing Impairment and Deafness²⁸. The National Institute of Mental Health runs training courses for all staff at hospitals islandwide and for staff at field and community level of public health services as well as employees at the Institute with the aim of providing better mental health services to the community²⁹. A National Programme for children with special needs is being field tested and is to be expanded in 2015. All these include rehabilitation. These National Guidelines will be applied to these programmes as and when relevant.

5.3 Rehabilitation pathways in hospitals:

Fig. 5.3 Rehabilitation pathways for patients in hospitals
(follows from Fig. 5.1 and is described in 5.4 Rehabilitation process)



5.4 Rehabilitation process:

5.4.1. Admission for rehabilitation

A patient's admission to rehabilitation may be either as an inpatient or as an outpatient to a rehabilitation hospital, a hospital with a rehabilitation department or one with rehabilitation facilities (Fig. 5.3). Following examination, diagnosis and treatment by a consultant in rheumatology and medical rehabilitation or other medical or surgical specialist or a medical officer designated by a specialist, patients will be referred when necessary for therapy or to the prosthetic and orthotic centre.

The therapist receiving a referral will then screen and assess each patient using validated assessment tools and plan and carry out a suitable treatment programme, recording progress, constraints and results. This will happen similarly in prosthetic and orthotic centres.

5.4.2 Inter-disciplinary team work: An Inter-disciplinary Rehabilitation Team (IDRT) for each patient is then called together by the consultant in rheumatology and medical rehabilitation (or in the future, rehabilitation physician) or other medical or surgical specialist. With the active participation of the patient as the core, and in the case of children or adults when relevant, the family or caregiver, other members of the IDRT include medical officers, physiotherapists, occupational therapists, speech and language therapists, prosthetists and orthotists, nurses, social worker & a psychologist when available and others who may be necessary (such as a dietician). The IDRT works together through case conferences held on a planned basis or on ward rounds or planned out-patients' visits. Team members share with each other information about what interventions they will carry out and discuss the role of each member. Patient assessment, treatment and progress will be discussed at these conferences and treatment plans amended accordingly. In this way a collaborative interdisciplinary approach and team work within the rehabilitation service will be promoted.

See section 6 for further information on the structure and role the IDRT.

5.4.3 Referral:

When patients require it, they will be linked by the IDRT through the horizontal and vertical health network to other health specialties, or to appropriate health institutions closer to their home (for example; secondary or divisional hospitals) more convenient to them. The IDRT will also develop a two-way referral system to link patients to the medical officer of health and to community rehabilitation teams.

5.4.4 Discharge and follow-up:

When a patient is ready for discharge from rehabilitation in the hospital, this will be discussed at the case conference, ward rounds or clinic visits. The responsible specialist, medical officer, therapist and other staff member treating the patient will inform the patient and family/caregiver about follow-up of their interventions and provide this also in writing.

Following a stay in hospital patients may be discharged from rehabilitation or follow-up as an outpatient. If longer term rehabilitation is needed, the patient may be transferred to a rehabilitation hospital or to a health facility closer to their home or be referred to the MOH for rehabilitation in the community.

The task of preparing written discharge plans and of following up discharge-related procedures will be allocated by the IDRT to a house officer or suitable team member. The designated team member will prepare discharge plans, inform the patient, family or caregiver about them and inform also other IDRT team members. The designated team member will also enter required information in a Disability Notification Register to be maintained in each hospital which has rehabilitation services and carry out follow-up tasks for each patient.

See section 11 for more information on Disability Notification Registers.

5.5 Tools, protocols, norms and standards for use in rehabilitation:

The following tools and procedures will be developed to be used in rehabilitation. The Ministry of Health will work with Professional Associations and others to have these tools developed.

- Assessment (Screening) Tools to be used in each related rehabilitation component including P& O centers. Such tools will ensure coordination between components to benefit the patient and to avoid duplication of rehabilitation effort.
- Clinical Guidelines and Treatment Protocols for the impairments and disabilities observed most frequently.
- Quality Norms and Standards with the involvement of both of those delivering rehabilitation and of users to ensure, maintain and continually improve quality of rehabilitation provided to patients. These will include also professional standards (including continuing education), minimum standards of work and ethical practice in rehabilitation work³⁰.

6. Structure and role of Inter-disciplinary Rehabilitation Teams (IDRTs) in hospitals:

An IDRT includes those within a hospital who work directly and closely in the patient's rehabilitation to address problems and needs within the scope of each profession. The IDRT is built around the needs and problems of the patient that are to be addressed. All members work together to establish, coordinate and achieve mutually agreed goals, focusing these around the patient and family. With the inclusion and participation of the patient and family member or caregiver, an IDRT may include specialists in rheumatology and rehabilitation (or in the future rehabilitation physicians), other specialist physicians and surgeons, medical officers, physiotherapists, occupational therapists, speech and language therapists, prosthetists and orthotists, nurses, social service officers and whenever possible, clinical psychologists. Dieticians may be called in when necessary.

To start with each patient is examined by the specialist in rheumatology and rehabilitation or other specialist physician or surgeon (or designated medical officer). According to the patient's needs the medical specialist refers a patient to relevant professionals who are then called together by the specialist to be the IDRT for that patient.

Each team member receiving a referral will then carry out an initial assessment with the patient and family member or caregiver. Discussions with patients will indicate what the priorities and goals may be for them in the period ahead. Based on this, and taking into account the patient's problems, needs and views, and their priorities, lifestyle and interests, each team member will identify overall short and long-term rehabilitation goals as well as determine treatment aims and draft treatment plans within anticipated time frames for their own contribution to the overall goals. The team then meets to agree on and consolidate short and long-term rehabilitation goals and plan the rehabilitation programme with the aims of the treatment or advice and tasks that each relevant member will provide.

In this way the IDRT works together to provide cross-disciplinary rehabilitation interventions including wheelchair services. Together they coordinate and monitor those interventions so that they are of maximum benefit to the patient. IDRTs enable rehabilitation professionals to interact with each other using a process of joint decision-making with the patient at the core. This facilitates successful and sustainable outcomes for the patient and family³¹.

Fig. 04 describes the role of the IDRT as carrying out a logical sequence of action. These are identifying the patient's problems and needs, relating them to personal and environmental factors, defining rehabilitation goals, planning and implementing interventions and assessing effects. It is a problem-solving approach based on the international classification of functioning, disability and health or ICF.

Fig. 6.1: Role of Inter-disciplinary Rehabilitation Team (IDRT)³²



Adapted from "REHAB-Cycle", a modified version of the "Rehabilitation Cycle" using the ICF Model as a Clinical problem-solving tool and developed by Stucki and Sangha.

7. Rehabilitation in the community:

Some patients may complete their rehabilitation when they are discharged from a health institution. Others may need to continue their rehabilitation when they are discharged home and live within their community. Disability Notification Registers will be used to inform Medical Officers of Health in the area in which the individual resides if and when a patient requires to be followed up in the community. *See sections 5.4.4 and 12.2 for more on patient discharge plans and disability notification registers).*

Patients will be followed up in the community by Community Rehabilitation Teams (CRTs) working together with the primary health care team

7.1 Community Rehabilitation Team (CRT):

The CRT will be led by the Medical Officer of Health.

Members will include the following (i) individuals with disabilities, family members and caregivers (ii) physiotherapists, occupational therapists, speech and language therapists, nurses, social workers and psychologists (iii) primary health care team (iv) peers and peer support (v) communities (vi) community-based rehabilitation personnel when available.

(i) Individuals with disabilities, family members and caregivers;

Whilst individuals with disabilities together with family members and other caregivers participate as core members of the inter-disciplinary rehabilitation team (IDRT) in hospitals, they continue this role in rehabilitation in the community. *See section 4 (i) above for role.*

Individuals with disabilities together with family members and caregivers will be given the knowledge and skills they need to carry out the tasks required of them in the rehabilitation process.

(ii) Physiotherapists, occupational therapists, speech and language therapists, nurses, social workers and psychologists.

These cadres will visit homes to provide rehabilitation support to individuals and families. They will also interact with communities to obtain needed support to enhance rehabilitation outcomes. *See section 4 (ii – ix) above for role.*

(iii) Primary health care team:

The PHC team will work with the CRT in each MOH area. Together they will interact with community members participating in the individual's rehabilitation, particularly in community-based rehabilitation. They will liaise with social service officers regarding community care of patients referred to them from hospitals. In the case of children, Public Health Midwives (PHMM) locate, refer to medical officer of health, work with children and families and carry out follow-up tasks in the home through their role in family health.

Working within communities the PHC team has the potential to influence health behaviours related to disability – to enhance within communities the value to detecting impairment early and in seeking health care without delay. Also in making known to communities recent trends in disability and rehabilitation and information about available services and opportunities.

(iv) Peers and Peer Support³³:

Peer Support is a valuable adjunct to rehabilitation in the community. It also has value in long-term institutional settings such as rehabilitation hospitals. Individuals who have shared similar experience with disability (e.g. spinal cord injury, blindness) come together as peers to share with and offer each other knowledge and experience and offer each other emotional, social or practical help and advice³⁴. They gain much strength and confidence from each other. Peer-based training is used to enhance skills and to provide information about health maintenance, rehabilitation services and welfare and support measures.

This applies also to "peer support" within groups of parents of children with disabilities. Peer support groups are to be encouraged and supported through primary health care and community-based rehabilitation programmes.

(v) Communities:

Communities in which individuals with disabilities live have an important role in rehabilitation. Community participation and responsibility are essential to achieve rehabilitation goals of social and economic inclusion.

Through the formal and informal leadership and through community-based organizations (CBOs) and self-help groups including peer groups members of the CRT have the possibility of harnessing support required by individuals with disabilities and their families. Interest and concern shown and time and assistance given by community members as for instance, in sharing with the individual and family social interaction and respite care provide emotional support.

(vi) Community-based rehabilitation personnel:

The National CBR programme is coordinated by the Ministry of Social Services. The Ministry of Health and Indigenous Medicine will work together with the Ministry of Social Services. Disabled people's Organizations (DPOs) and others involved to integrate and strengthen health components in existing CBR programmes. This enables the health sector to share knowledge and skills for rehabilitation with community workers and community-based organizations. And through them, to empower people with disabilities with the technical knowledge and skills they need for taking responsibility for their own rehabilitation.

8 Access to the built environment of health institutions, health services, health equipment, health information and transportation:

8.1 Built environment

Physical barriers in health institutions will be identified through an accessibility audit and steps will be taken to remove such barriers. This will be the responsibility of the head of the health institution. Priority will be given to those buildings most used by people with disabilities and elderly patients such as wards and out-patients clinics and include accessible toilets. New buildings will have accessible design. To facilitate this the Ministry of Health has prepared "Design Considerations on Accessibility for Persons with Disabilities". This is available from the Directorate of Youth Elderly and Persons with Disabilities (YED)³⁵.

8.2 Health clinics and services

An appointment system will be organized giving preferential access to people with disabilities to all health clinics and services³⁶.

8.3 Health equipment

Accessibility criteria will be developed and included in tender procedures and other formalities which are followed for the purchase of equipment that will be used by people with disabilities and elderly patients.

8.4 Health information

Informational barriers and communication difficulties are a significant barrier to people with disabilities not being able to access health and rehabilitation services³⁷. Specific barriers many face include not being able to express their opinions and seek, receive and impart information and ideas using their chosen means of communication, usually sign language. Health workers will be encouraged to learn sign language.

Steps will be taken to produce the most widely used health information materials in accessible formats (large print, Braille). Also to make health information programmes on television available in sign language.

8.5 Transportation

Some persons with disabilities are not able to access or use public transportation to travel to and from health institutions. Many may not be able to afford costs of using private transportation such as even three-wheelers. Besides, private transportation is often not accessible. In such instances wherever possible provincial and regional health authorities and hospital administrators may be in a position to provide a vehicle to assist individuals requiring to travel to a health facility.

9 Physiotherapy, occupational therapy and speech and language therapy - requirements for equipment, human resources and space:

Requirements for equipment, human resources and space for physiotherapy, occupational therapy and speech and language therapy services need to be considered in the context of the three types of hospitals delivering these services, their bed strength and in-ward and outpatient turnover.

Therapists working in rehabilitation in the community will be field workers and will not require any technical equipment. They would require space in the Medical Officer of Health administrative office complex with relevant office furniture.

The three types of hospitals are as follows:

Rehabilitation hospitals: Rehabilitation Hospital Ragama is a tertiary level hospital.

Others at present are situated at district level at Digana (Kandy), Jayanthipura (Polonnaruwa), Kendagolla (Badulla), and a rehabilitation unit (Maliban) at the teaching hospital, Karapitiya (Galle).

It is foreseen that in the future there should be a rehabilitation hospital in each district, starting with one district rehabilitation hospital per province.

Estimates given in the annexure are for district rehabilitation hospitals and not for the Rheumatology & Rehabilitation Hospital Ragama.

Hospitals with rehabilitation departments: There are, at present, rehabilitation departments in tertiary level hospitals and some secondary level hospitals (district and base hospitals). Future expansion of rehabilitation departments will depend on availability of consultants in rheumatology and medical rehabilitation and rehabilitation physicians.

Hospitals with rehabilitation facilities: At present some secondary level hospitals (district and base hospitals type A and B) have rehabilitation services. In future services will be available at all secondary level hospitals.

9.1 Equipment requirements:

Equipment requirements in all rehabilitation facilities will depend on in-ward and outpatient load and number of therapists. Information on the range of equipment most commonly used is in Annexures I, II and III.

9.1.1 Physiotherapy: see Annexure I

9.1.2 Occupational therapy: see Annexure II

9.1.3 Speech and language therapy: see Annexure III

9.2 Human resource requirements:

Guidelines for human resource requirements for physiotherapy, occupational therapy and speech and language therapy are beyond the scope of this document. The Ministry of Health will hold discussions on cadre requirements for these therapists with stakeholders and take their viewpoints into consideration when making recommendations on these.

9.3 Space requirements:

Space requirements in hospitals recommended for physiotherapy, occupational therapy and speech and language therapy services (in sq.ft.) are indicated in Table 9.3.

Table 9.3: Space requirements in hospitals recommended for physiotherapy, occupational therapy and speech and language therapy services (in sq.ft.)			
	Rehabilitation hospitals	Hospitals with rehabilitation departments	Hospitals with rehabilitation services
Physiotherapy	1500	2000	1500
Occupational therapy	1000	1200	1000
Speech and language therapy	600	800	600

Space requirements will depend on average in-patient and outpatient load and number of therapists. The estimations above have taken into consideration also space required for assessment and treatment, departmental administration, storage of equipment and patient waiting area.

10 Prosthetic and orthotic (P & O) services:

The Ministry at present runs 15 P & O centres (or orthopaedic workshops) located in hospitals across the country (*Table 10.1 A*). Many however have low production because of inadequate staff and machinery³⁸. Suggestions have been made in the guidelines to develop these further so that they may contribute to meeting the country's requirements. The basis for suggestions in guidelines accepted and used globally³⁹. The global guidelines categorize workshops as 4 levels.

The 4 levels relate to function and output as follows:

- **Level I+ workshop:** equipped and staffed for the production of all types of P&O appliances including for example, arm prostheses, hip disarticulation and other complicated appliances. Targets a population of 10 million.
- **Level I workshop:** equipped and staffed for the production and fitting of orthoses and prostheses.
- **Level II workshop:** equipped and staffed for the production and fitting of orthoses (sometimes prostheses) using thermoplastic technology. (*not recommended for Sri Lanka, see below*)
- **Level III workshop:** a workshop with basic equipment. This workshop should be considered as an antenna/extension of workshop level I. This is where repairs can be carried out as well as taking measurements and fitting of appliances (most of the production will take place at level I and II).

The global guidelines recommend establishing Level I workshops instead of Level II workshops, especially where geographical distances are not very great. This is because a Level I workshop can serve a population which is 5 to 10 times larger than a Level II workshop, while cost is just 1.5–2.5 times higher in terms of initial investment and running costs. Level II workshops are only established when the quantity of work cannot be managed by just the Level I workshops. Since this will not be so in Sri Lanka, Level II workshops are not recommended.

Table 10.1 indicates how existing P & O centres (orthopaedic workshops) may be developed and recommends where new centres may be located to fill gaps.

When the 15 existing centers listed in Table 10.1 are developed the Ministry of Health Indigenous Medicine may be meeting a high percentage of needs for prostheses and orthoses. However maldistribution of centres may call for new centres to be established. New centres at the Anuradhapura Teaching hospital for the North-central province and at the Ratnapura General Hospital for Sabaragamuwa could be justified. Also because of the present maldistribution, Level III centres could be justified at Hambantota, Ampara and Puttalam. Developing this network of centres will meet the country's needs well into the future. Establishing P & O centres in other hospitals is therefore not recommended.

See Table 10.1. and Fig. 10.1

Table 10.1: Development of P & O Centre Network					
A: Existing P & O centres and proposed levels of functioning					
	Hospital	Province	Proposed development level		
1	National Hospital of Sri Lanka	Western		Level I	
2	Sri Lanka School of P & O, Rheumatology & Rehabilitation Hospital, Ragama	Western	Level I +	Because of proximity and for other reasons, it is recommended that the SLSPO centre and RRH centre are merged as a Level i+ Centre	
3	Rheumatology & Rehabilitation Hospital, Ragama	Western			
4	Colombo South Teaching Hospital	Western			Level III
5	Lady Ridgeway Hospital for Children	Western		Level I	
6	Teaching Hospital, Jaffna	Northern		Level I	
7	Killinochchi District General Hospital	Northern		Level I	
8	Vavuniya District General Hospital	Northern		Level I	
9	Mannar District General Hospital*	Northern			Level III
10	Trincomalee General Hospital	Eastern		Level I	
11	Batticaloa Teaching Hospital	Eastern		Level I	
12	Karapitiya Teaching Hospital	Southern		Level I	
13	Badulla General Hospital	Uva		Level I	
14	Kandy Teaching Hospital	Central		Level I	
15	Kurunegala Teaching Hospital	North-western		Level I	
B: New Centres Recommended					
16	Anuradhapura Teaching Hospital	North-central	Level I +		
17	Ratnapura General Hospital	Sabaragamuwa		Level I	
C: New Centres to be considered					
18	Hambantota District General Hospital	Southern			Level III
19	Ampara District General Hospital	Eastern			Level III
20	Puttalam Base Bospital	North-western			Level III

* = situated within the hospital but run by an NGO which plans to move out

Sri Lanka School for prosthetics and orthotics and SLSPO centre: It appears that efficiency and production output of the centre are reduced because of the dependency on students for its day-to-day running. In order to increase both efficiency and output it is recommended that the school and centre be managed as two separate units, with each having its own personnel within the rehabilitation hospital Ragama. This would also facilitate a merger between the two P & O centres at the hospital, increasing effectiveness while reducing costs.

Networking between P & O centres: To be of greater benefit to patients and to enable them to access prosthetics and orthotics as close as possible to their place of residence, a “P & O Centre Network” is called for. A focal person will be selected at each centre to take responsibility for networking.

Wheelchair production and services: The feasibility of producing wheelchairs and other assistive devices not at present made in Sri Lanka will be investigated.

The MDRT described in these guidelines also takes responsibility for the provision of wheelchair services within their role.

Technical personnel in P & O centres (orthopaedic workshops)

Fabrication of suitable devices requires well-trained personnel. Prior to 2008 orthopaedic technicians together with artificial limb makers and surgical appliance makers (later called as a group “Bench Technicians”) and shoemakers, made devices at the centres. A new cadre was introduced in 2008 and called Prosthetists and Orthotists (P&Os). Bench technicians have now been grouped together as “Orthopaedic Aides”.

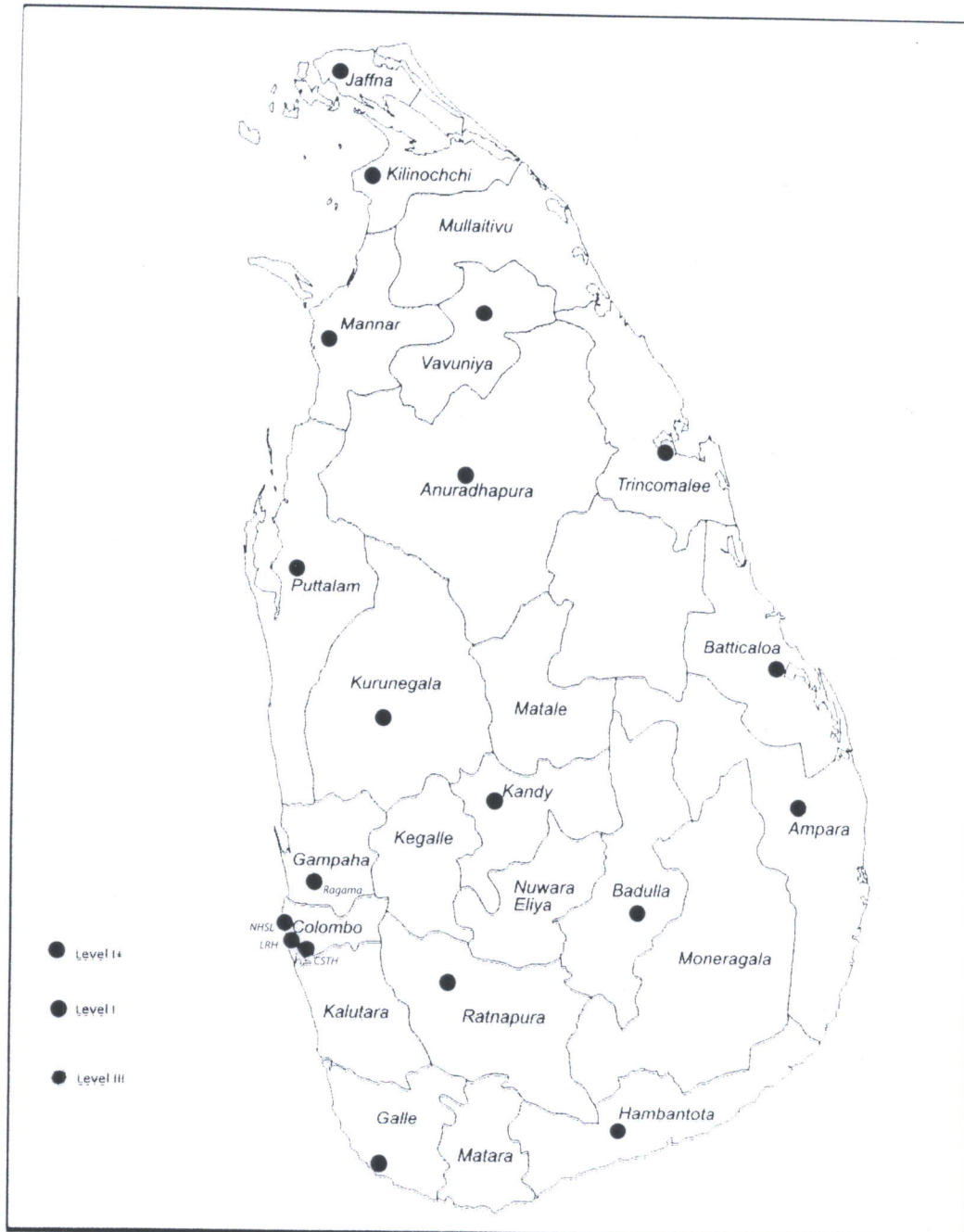
The following personnel are required to carry out tasks in Orthopaedic Workshops;

- Managers
- P & O technicians Category I as tutors for the School and one for each Level I + centre
- P & O technicians Category II for all centres
- Orthopaedic aides includes bench technicians (previously designated artificial limb makers and surgical appliance makers)
- shoemakers

Cadre recommendations for P & O personnel are beyond the scope of these Guidelines. As with other rehabilitation cadres, the Ministry of Health & Indigenous Medicine will hold discussions with stakeholders and take their viewpoints into considering when making recommendations on cadre requirements.

See Annexure IV for equipment and machinery and space requirements for P & O centres.

Fig. 10.1: Location of P & O centres with proposed levels of functioning



11. Rehabilitation information management:

The Directorate of Youth, Elderly and Persons with Disabilities (YED) is currently taking steps to set up processes for rehabilitation information management. Two main processes are being put in place as data development strategies. One starting with Patient Assessment Records and the second with Disability Notification Registers. While patient assessment records will be the data source for monitoring and later evaluation of effectiveness and impact from the perspective of patients, the disability notification register will enable detailed analysis of various aspects of patient load, of value particularly for administration. While both will enable identification of service usage and outcome measures, the latter will enable analysis of efficiency, relevance and adequacy.

11.1 Patient Assessment Records:

These are being developed based on disability information requirements and will be used with both inpatients and outpatients. As well as initial assessment they will include record of treatment given, time spent, progress made, major challenges and results. This data set when validated will be used as the basis for collecting quarterly hospital statistics to be reported to YED. Suitable software will be developed at YED for collation, storage and analysis of data. The strategy will ensure that reliable, consistent data will be obtained with minimal load on the health and disability service sectors.

11.2 Disability Notification Registers (DNR):

The use of disability notification registers (DNRs) involves proximal health institutions delivering rehabilitation services on the one hand, and hospitals closer to the patient's home, community rehabilitation teams and primary health care teams on the other.

Record-keeping in hospital: The hospital director's office at each hospital with rehabilitation services will maintain a DNR. When a patient is discharged from rehabilitation, the inter-disciplinary team member allocated responsibility for that patient's discharge plans will notify the hospital director of the patient's discharge on prepared forms. YED will prepare these forms which will include information such as name, age, sex, national identification number, bed-head ticket number, diagnosis, date of discharge, from where discharged (ward or outpatient information), to where discharged (place of intended residence) and include the medical officer of health (MOH) area and divisional secretariat (DS) area. Registers will be tabulated and maintained to record this information in the office of the hospital director.

Dissemination of information by hospital: The hospital director will have prepared forms to disseminate this information. For each patient a form will be prepared in triplicate with one being dispatched to the relevant hospital closer to the patient's home, or to the

medical officer of health area of patients intended residence; the second to the social service officer in the Divisional Secretariat of that area; and the third to YED. This enables follow-up by both the health and social service sectors and makes possible for YED data storage and periodic analysis.

11.3 Monitoring and Evaluation (M & E):

Data obtained from the management information maintained by YED will be used for quarterly monitoring of rehabilitation services and later evaluation. Monitoring will also be carried out by YED through field visits. Feedback obtained will be disseminated to stakeholders.

11.3.1 Developing recording and reporting formats:

Table 11.3.1 suggests performance indicators that may be used for the development of a recording, reporting, monitoring and evaluation system for rehabilitation services excluding P & O centres, while Table 11.3.2 suggests those that may be used for P & O centres.

Indicators from Table 11.3.1 will be selected in the first instance for each level of health services (hospital, primary health care and community) according to its relevance. Suitable formats will be prepared and provided by YED for record-keeping and for quarterly reporting.

Hospitals and the primary health care and community rehabilitation teams will maintain records of information indicated in the Tables to enable such reports to be made.

Table 11.3.1: Suggested indicators for the development of a recording, reporting, monitoring and evaluation system for rehabilitation services excluding P & O centres													
	Rehabilitation Service Component	No of patients treated						Total No. of visits made /sessions					
		adults			children			adults			children		
		Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
1	Rehabilitation Clinic												
2	Rehabilitation Outpatients												
3	In-ward patients												
4	Physiotherapy												
5	Occupational Therapy												
6	Speech and Language Therapy												
7	Social Work												
8	Psychological Support												
9	Total												

Table 11.3.2: Suggested indicators for the development of a recording, reporting, monitoring and evaluation system for P & O centres*

* = for list of devices see section 10

	Type of device by category	Number produced								
		adults			children			adults		
		Total	Male	Female	Total	Male	Female	Total	Male	Female
1	Prostheses									
2	Orthoses									
3	Other Mobility devices									
4	Seating, positioning and corrective devices									
5	Other devices									
6	Total									

Similarly YED will prepare formats for record-keeping and reporting for P & O centres – refer Table 12.3.2. Each P & O centre will maintain registers recording devices produced and patients served to enable them to make necessary reports.

When quarterly monitoring has been carried out YED will inform hospitals, the primary health care/community rehabilitation teams and P & O centres of findings together with suggestions and recommendations if any.

11.4 Data and research:

Lack of data and research has been a severe constraint to the development of rehabilitation services. Situational analyses need to be done to inform policy and plans. As well as research carried by the health sector, partnerships between the health sector and universities and research institutions are to be promoted in rehabilitation service related research. Such studies may be used to obtain better evidence and knowledge of, for example, met and unmet needs; costs; barriers to obtaining services; responsiveness of health and rehabilitation personnel to people with disabilities; type and quality of services provided and costs and benefits related to their impact on enhancing the quality of life and well-being of people with disabilities and their families⁴⁰.

To promote and facilitate research the Directorate of Youth, Elderly and persons with Disabilities (YED) will organize a Disability Research Forum on an annual basis.

Rehabilitation-related research needs to ensure involvement of people with disabilities to add to relevance. Their participation is to be promoted in planning and carrying out studies as well as in population samples as consumers of services and as Rights-holders⁴¹.

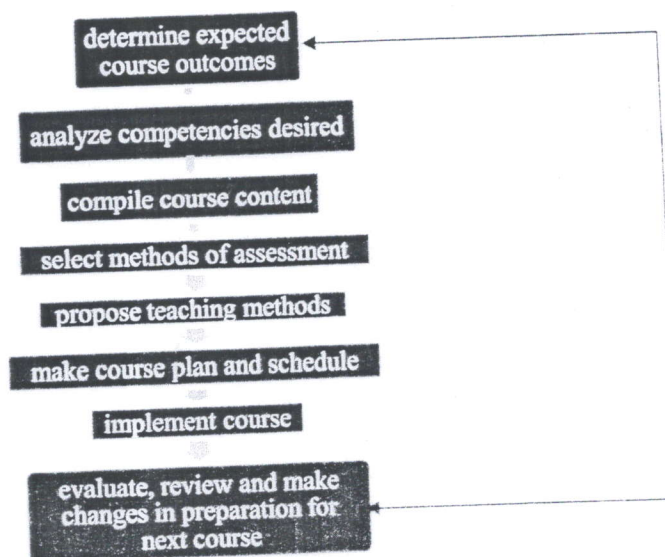
12. Capacity building of personnel implementing National Guidelines:

Personnel named in these National Guidelines and in particular members of inter-disciplinary teams (IDRTs) and community rehabilitation teams (CRTs) will participate in educational programmes to strengthen their capacities for the implementation of the Guidelines, and aims particular at team building. Based on the desired outcomes of capacity building and the competencies required to bring about out those outcomes, a modular “positive inter-dependence in education” strategy will be used to develop required educational courses.

12.1 Approach to course planning

The positive inter-dependence in education strategy calls first for determining the behaviours that will be required of participants at the end of the course. These will be expected course outcomes. Next an analysis of the competencies required of participants to bring about these outcomes in terms of knowledge, skills and attitudes is made. Required competencies of patients will decide course content and teaching method leading to assessment of the degree to which participants have acquired course learning. The course is carried out, reviewed and changes are made in preparation for the next course.

Fig. 12.1 Approach to course planning



12.2 Course plan:

The course plan is described in Table 12.2.

Table 12.2: Course Planning		
(1)	Expected course outcomes; <i>participants will have the ability to</i>	- work within a team, encouraging and facilitating teammate's efforts to complete a task or to achieve an objective - contribute to developing team cohesiveness in a culture of mutual respect for each other as professionals and as individuals - participate in distributing roles, tasks and resources in a way that sharing is - necessary in order to achieve a goal - recognize that roles of all team members are complementary and contribute to bringing maximum benefit to patients
(2)	Desired competencies: <i>participants will have these core competencies in terms of knowledge, skills and attitudes for effective performance of their role</i>	• Recognition, respect and development of patient and family's contribution as core team members • Contribution to developing mechanisms that enable communication, collaboration, coordination, cohesiveness and problem-solving together by team members • Versatility and flexibility to individualize own professional service and interventions to suit each patient within the context of team work • Demonstrate collective responsibility and accountability as team members • Commitment to develop evidence-based practice and life-long learning that will be of maximum benefit to patients • Enhance capacity of team to give of their best to patients
(3)	Course content	Structured in five modules described in Table 12.3
(4)	Assessment plan	Methods that call for the practical application of participants learning and not of theoretical study alone
(5)	Teaching methods	Learner-centred, group focused and participatory methods that recognize entry-behaviours, knowledge and experience of participants
(6)	Course length	20 hours
(7)	No. of participants	22 – 25 maximum
(8)	Participants	Members of inter-disciplinary and community rehabilitation teams - IDRTs and CRTs and other key personnel. This includes central and provincial Ministry of Health and Indigenous Medicine hospital administrators and other staff; medical specialists; medical officers; people with disabilities; physiotherapists; occupational therapists; speech and language therapists; prosthetists and orthotists; nurses; social service officers; psychologists; and disability and community representatives among others
(9)	Award	"Certificate in Implementing National Guidelines for Rehabilitation Services in Sri Lanka"

12.3 Course implementation:

The course will be implemented in 5 modules described in Table 12.3

Table 12.3: Course content	
<i>Name of Module</i>	<i>Suggested Content</i>
Module One: Team role and tasks 3 hours	Course introduction
	Current trends in disability and rehabilitation including rights-based approach applied to team roles and tasks;
	Multidisciplinary and inter-disciplinary teams;
	How do inter-disciplinary teams best function? facilitators and barriers
Module Two Roles and tasks of individual members 3 hours	Demonstration and discussion of tasks and contribution of each team member (role play);
Module Three National health and disability policies, strategies and plans 3 hours	Disability and rehabilitation components in National Health Policy, Health Development Master Plan 2007- 2016, National Health Development Plan 2013 – 2017 –critical review, suggestions for change
	National Policy on Disability and the National Plan of Action for Disability – role of central and provincial ministries, IDRT and CRT in implementing health and rehabilitation components
Module Four 3 hours National Guidelines for Rehabilitation Services in Sri Lanka	Challenges and how they may be faced
Module Five: Assessment of participant's learning and course evaluation 8 hours	• Course portfolio containing at least two case studies with description and analysis of Team Work in Rehabilitation • Review of excerpts of a reflective work diary with self-assessment of competencies and identification of own development needs • Course evaluation by participants and resource persons

13 Partners in rehabilitation service development:

Whilst the Ministry of Health & Indigenous Medicine has the responsibility for delivering a quality rehabilitation service to people with disabilities, it holds the view that developing such a service needs to be a cooperative effort. To this end it will coordinate its work with that of all relevant state sector institutions. Support will be obtained for instance, from the Ministry of Education to ensure continuity of education for children with disabilities and from the Ministry of Vocational Training and Skills Development for youth and young adults with disabilities who will be required to spend long periods for rehabilitation in health institutions.

At the same time the Ministry of Health & Indigenous Medicine looks forward to developing appropriate partnerships with the corporate sector, national and international non-governmental organizations, bi-lateral and multilateral aid partners and UN agencies through which their support may be harnessed to benefit all those children and adults with disabilities whose quality of life would be improved through adequate availability of accessible and accountable rehabilitation services.

Annexure I: Physiotherapy equipment requirements

The equipment listed below is that which is required for providing adequate and effective physiotherapy and may be procured over a period of time in line with needs and priorities, patient load and number of physiotherapists.

Physiotherapy equipment requirements				
		Rehabilitation hospitals (districts)	Hospitals with rehabilitation departments	Hospitals with rehabilitation services
Exercise equipment				
1	Height-adjustable parallel bars	√	√	√
2	Wall bars	√	√	√
3	Exercise Cage	√	√	-
4	Suspension Therapy apparatus; springs	√	√	√
5	Quadriceps bench	√	√	-
6	Tilting bed	√	√	-
7	Pulley and Rope System for ROM exercises	√	√	√
8	Pulley and weight system for strengthening exercises;	√	√	√
9	Up and Down Training Steps	√	√	√
10	Standing Table and Frame	√	√	-
11	Mirror	√	√	√
12	Pelvic and Cervical Traction Bed	-	√	√
13	Cervical traction apparatus	√	√	√
14	Static Cycle	√	√	√
15	Shoulder wheel	√	√	√
16	Wrist Roller	-	√	-
17	Balance Board	√	√	√
18	Medicine balls	-	√	-
19	Wheelchair and transfer board	√	√	√
20	Height-adjustable Walker (Frame)	√	√	√
21	Selection of height-adjustable walking aids: axillary and elbow crutches, Quadruped, Tripod, walking sticks	√	√	√
22	Small equipment: Goniometer, Timer with Clock; Tape measure; wedge; ambulation belt, basins (Mettle)	√	√	√
23	Exercise straps;	√	√	√
Heat and cold therapy				
24	Infra-red lamp	√	√	√
25	Hot and Cold Packs	√	√	√
26	Paraffin Wax bath (large)	-	√	-
27	Paraffin Wax Bath (small)	√	-	√
28	Baker	-	√	-
29	Small Fridge/Freezer (for making cold packs, ice)	√	√	√
30	Heating Unit	-	√	-
31	Electric Kettle	√	√	√
Electrotherapy				
32	Muscle Stimulators	√	√	
33	TENS apparatus	√	√	
34	Ultrasound Therapy Unit	√	√	
35	Short-wave Diathermy	√	√	
36	Interferential Therapy Unit	√	√	
37	Laser Therapy Unit	-	√	-

Chest physiotherapy				
38	Couch with adjustments necessary for postural drainage	-	√	√
39	Lung function machines, Spiro meter, Peak flow meters	-	√	√
Paediatric physiotherapy				
40	Gait Trainers	√	√	√
41	Selection of height-adjustable walking aids	√	√	√
42	Height-adjustable parallel bars	√	√	√
43	Standing Frame and Table	√	√	√
44	Climbing frame	√	√	√
45	Up and Down Training Steps	√	√	√
46	Tilting bed	√	√	√
47	Mirrors	√	√	√
48	Swings	√	√	√
49	Hubbard (Walking) Tank	-	√	-
50	Therapy Rolls	√	√	√
51	Gym balls	√	√	√
52	Range of suspension therapy apparatus, springs, pulleys	√	√	√
53	Exercise Balls of various sizes	√	√	√
54	Selection of toys	√	√	√
55	Wedges	√	√	√
56	Rocking Horse	√	√	√
57	Balance board	√	√	√
58	Children's Exercise Bicycle	√	√	√
59	Range of paediatric furniture	√	√	√
60	Infra-red lamp	-	√	-
61	Stimulators	√	√	√

Annexure II: Occupational therapy equipment requirements

The equipment listed below is that which is required for providing adequate and effective occupational therapy and may be procured over a period of time in line with needs and priorities, patient load and number of occupational therapists.

Occupational therapy equipment requirements				
		Rehabilitation hospitals (districts)	Hospitals with rehabilitation departments	Hospitals with rehabilitation services
Assessment equipment				
1	Roder manipulative aptitude test	√	√	-
2	Depth perception pegboard test	√	√	√
3	O'connor finger dexterity test	√	√	√
4	Rivermead perceptual assessment battery	√	√	-
5	Sensory stimulation activities kit	√	√	-
6	Assessment Kit Kings in Case	-	√	-
7	Minnesota Manual Dexterity Test	√	√	-
8	Box & Block Test	√	√	√
9	Lotca 11 Battery Set	√	√	-
10	Groove Peg Board	√	√	√
Activity Equipment				
11	Upper extremity work station	√	√	√
12	Hand, wrist and forearm table	√	√	√
13	Limb balancer	√	√	√
14	Tilt table with working tray	√	√	-
15	Adaptive devices for ADL	√	√	√
16	Strengthening balls	√	√	√
17	Handziser	√	√	√
18	Span game	√	√	√
19	Solitaire game large and small	√	√	-
20	Single curved shoulder arch	-	√	√
21	Double curved shoulder arch	√	√	√
22	Functional forearm elevator(Rolyan)	√	√	-
23	Hand exerciser -Rolyan	√	√	√
24	Hand master plus	-	√	-
25	Finger platter		-	-
26	Cando hand exerciser web	√	√	√
27	Mini massager	√	√	-
28	Rolyan vertical ring tree	√	√	-
29	Jux - A- cisor arm exerciser	√	√	-
30	Rolyan pronation/supination wheel	√	√	√
31	Rolyan multi functional work station	√	√	-
32	Rolyan ball hand piece accessory	√	√	√
33	Arm skate Rolyan Forearm-Based Skate Board	√	√	√
34	Arm skate Rolyan Ball And Hand Piece	√	√	√
35	Arm skate Rolyan Ball And Hand Piece and accessory right	√	√	√
36	Arm skate Rolyan Ball And Hand Piece accessory left	√	√	√
37	E-Z Exer board	√	√	-
38	Hand CPM Unit Maestra Portable	√	√	√
39	Hand Exerciser Tactile Form Balls	√	√	-
40	Pen Contour Rheumatic Grahamizer 11 uppre extremity exercise	√	√	√

41	Grahamizer 1 multi use exercise	√	√	√
42	Depth perception peg board set	√	√	√
43	Easy grip peg board	-	√	-
44	Posture mirrors	√	√	-
45	Dominos shape colours & numbers	√	√	√
46	Jell ball hand exerciser	√	√	-
Splinting				
47	Splinting bath with and accessories needed for splinting	√	√	-
48	Heater gun	√	√	-
49	Splint pattern maker	√	√	-
50	Tool and Accessories Neoprene Sealing Iron	√	√	-
51	Deluxe Revolving Hole Punch	√	√	-
52	Forma splinting bath	√	√	-
Paediatric Occupational Therapy -ADL				
53	Thumble form TADPOLE paediatric positioner	√	√	√
54	Paediatric toilet trainer seat	√	√	√
55	Thumble form thee- in-one Tristander	√	√	√
56	Thumble form DELUXE Vestibulator II System	√	√	√
57	Range of feeding cups	√	√	√
58	"Grippit , pencil grip (writing aids"	√	√	√
59	Ring pen	√	√	√
60	Dressing Cube	√	√	√
61	Range of activity boards	√	√	√
62	Range of ball sets	√	-	-
63	Tactile activity kit	√	√	√
64	Hugs vertical standers	√	-	-
65	Range of exercise balls	√	√	√
66	Gymnic classic	√	√	√
67	Thumble form TORTOISE Shell therapy system	√	√	√
68	Thumble form wedges	√	-	-
69	Sensory balance beams	√	-	√
70	Complex form board	√	√	√
71	Binilo medium (complete)	√	-	-
72	Scooter Board	√	-	-
73	Rainbow barrel	√	-	-
74	Range of peg board with pegs	√	√	-
75	Sensory motor kit	√	√	√
76	Cognitive set	√	√	√
77	Sensory cushion Ball	√	-	-
78	Textured stacking cones	√	√	√
79	Selection of toys	√	√	√
80	Grip improving equipment	√	√	√
81	Jux-A-cisor arm exerciser	√	-	-
82	Pipe tree	√	-	-
83	Pronation / supination wheel	√	√	√
84	Wobblets	√	√	√
85	Standing frame	√	√	√
86	Limb balancer	√	√	-
87	Water play bath	√	-	-
88	Shoulder arc (small)	√	√	√

Annexure III: Speech and language therapy equipment requirement

This list recommended is for providing adequate and effective speech and language therapy in Hospitals with Rehabilitation Departments at the tertiary level. Whilst the same equipment is used for delivering an effective service at any level, the range and quantity required at other types of hospitals would depend on the patient load and number of speech and language therapists. The equipment may be procured over a period of time in line with needs and priorities.

Speech and language therapy equipment requirements		
Assessment		
<i>Although these assessment tools are for English, they can be used in translation and modified for our languages</i>		
1	Dysathria Profile	Essential
2	Psycholinguistic Assessment of Language Processing in Aphasia (PALPA)	
3	Pyramids And Palm Trees	
4	Test For Reception Of Grammar (TROG)	
5	Edinburgh Functional Communication	Highly Recommended
6	Derbyshire Language Scheme -	Recommended
7	Informal assessment in Tamil-	Highly Recommended
8	Western Aphasia Battery	Recommended
9	Right Hemisphere Language Battery	Recommended
Equipment		
10	Spoon; Tongue depressor; Gloves; Tissue	
11	Voice recorder	
12	Torch- for oral motor examination	
13	Fogged mirror	
14	Modified utensil for feeding	
15	Indirect Laryngoscope	
16	Video recorder	
17	Mirror (Small-up to chest level)	
18	TV	
19	Computer	
20	Special chair/ feeding chairs	
21	Dysphagia Laryngeal Mirrors	
22	Digital Sound Level Meter	
23	Stethoscope (Neo natal and adult)	
24	Fiber optic endoscopic evaluation (FEES)	
25	Fiberoptic Laryngalscope	
26	Videofluoroscope	
Materials		
27	Selection of Colour Cards: Animals and Birds; Emotions; Everyday Objects; Food; Prepositions; Sport, and Leisure; Transport, Vehicles; What's Wrong; Fruits; Story sequencing cards; Numbers; Daily routine; Abstract Pictures; Line drawings of Pictures;	Essential
28	Photos of Categories: Animals, Birds, Emotions, Everybody Objects, Food, Prepositions, Sport Leisure, Transport Vehicles, Fruits, Numbers, Household Items, Function Words. Daily Routines	Essential
29	Source For Oral Facial Exercises	
30	Talking Mat	
31	Dysarthria Sourcebook Exercises To Photocopy	Highly Recommended
32	Semantic Links; Semantic Topics	
33	Boardmaker with PCS Addendum	
34	Dominoes	Recommended
Toys and other materials:		

35	Selection of Toys; Soft toys; Bubbles; Bean bags; Building Blocks; Balloons; Finger puppets; Shapes; Clay; Familiar objects: cup, spoon; Balls-different sizes if possible;	Highly Recommended
36	Story Books-Tamil, Sinhala; Alphabet and letters; Puzzles; Picture descriptions: cards/ sheets-daily living etc.; Colours- water colours, pastel etc.; Newspapers/ Magazines; Reinforcement: stars/ stickers/ smiley faces etc.	
37	Sensory play toys: textural blocks, ball, light producing toys, music emitting toys, shining sheets etc.;	
38	Musical toys- Xylophone, rattle, squeaky toy, drum(similar pairs if possible)	
39	Pretend play: tea sets, dolls (culturally-appropriate toys); Cars; Toy objects; Miniatures of objects; Anticipatory toys: Bubbles, simple switch toys	

Annexure IV: Prosthetic and orthotic centres – requirements of machinery and tools

This is a list of requirements of machinery and tools
and for space Level I prosthetic and orthotic centre.
Items from this list may be selected for Level III workshops depending on what
tasks will be carried out in the workshop
Similarly more machinery and tools will be required for Level I+ workshops
depending on what devices will be produced at the centre.

Item	
1	Air compressor unit
2	Angle Grinder
3	Band saw
4	Belt sander with accessories
5	Bench Grinder 150mm
6	Bench Grinder 200mm
7	Blow gun
8	Diamond grinding wheel dresser
9	Drill column type
10	Drill for bench
1	Dust Aspirator
12	Hand drilling machine
13	Hand drilling-screwing machine
14	Jig saw
15	Oscillating Saw
16	Oven CR5000G with spares
17	Pneumatic grinder
18	Pneumatic Welding Gun CR6000
19	Sewing Machine Singer 188u (Heavy Duty)
20	Vacuum pump CR1000
21	Welding Electric Machine
22	Welding Iron 150W
23	Welding Mirror 280mm
24	Battery charger for CRM 153
25	GLOVE, heat protection, isothermal, pair
26	BELT SANDER, 2 speeds, w. long con. axis, stand (WITHOUT TOOL KIT)
27	ORBITAL SANDER; disk diam. 350mm + long axis, 380V, 1.27kW / 1.7kW
28	BELT SANDER, maintenance kit, spare parts, 2 years
29	Oven CR5000G, incl. spare parts for about 2 years 220-380Volts/4'600Watts
30	(oven CR5000) Kit for oven, CR5000G
31	(vacuum pump CR1000) TUBE, enveloping suction (1 big)
32	Welding "hot-jet" & kit, 220V / 1500W
33	Oscillating electrical saw Fein 220Volts/180W 1 Fixing screw CRM 110 and 1 fixing washer CRM 111 included, 220V/180W
34	(oscillating saw) Spare Blade 160 Teeth only for metals (steel, brass, alum)
35	DRILL, bench type, quick chuck 3 to 16mm CM2
36	Hand drilling machine with percussion, 220V / 750 W
37	(drilling machine) VICE for column drilling machine
38	PNEUMATIC CHIPPING HAMMER + set of 5 chisels of various forms
39	CONICAL SANDING ARBOR, diam. 24/36 mm, L = 60 mm
40	DEBURRING TOOL, changeable blade, plastic handle
41	DRAW KNIFE, 250mm, 2 wood handle
42	SPARE BLADE, type A, aluminum + steel, for deburring tool
43	PENCIL, blue, indelible, for marking on moist surface
44	PIPE CUTTER, heavy duty, for steel pipes 1/8" to 2"
45	SANDING CONE, for article CRM 480, Grit 150

46	SANDING CONE, for article CRM 480, Grit 50
47	SANDING drum with conical hole, dim. 72 x 5 x 200 mm
48	SANDING SLEEVE, for article CRM 483, Grit 50
49	SANDING SLEEVE, for article CRM 483, Grit 80
50	SCISSOR, trimming scissor, "tailor", L = 250mm
51	Direct reading caliper, for medico-lateral-antero-post measure
52	Goniometer
53	Tool for measuring inside contour 24-66 cm
54	Tran femoral Measuring Gauge ML (ICS)
55	Bolts for orthotics adult drop lock, L= 20mm
56	Bolts for orthotics child drop lock, L= 16mm
57	SPIRAL HELICAL CUTTER, HSS, diam. 27mm
58	welding "MIRROR" diam. 280mm, 220V / 900W
59	SET OF PUNCHERS, 15 pieces
60	Nut for the free motion ankle joint adult, brass, diam 24mm x M6
61	Nut for the free motion ankle joint child, brass, diam 19mm x M6
62	Rubber brass adult diam int. 7,3mm ext. 2,5mm (h) 0,5mm
63	Rubber brass child diam int. 7,3mm ext. 2,00mm (h) 0,5mm
64	High speed stapler
65	Gig saw
66	Hand Drilling Machine
67	Sewing Machine
68	Spatula
69	Surform (Ronud.half round/flat)
70	Plaster mixing bowl
71	Set of Allen keys, spanners, screw drivers
72	Shouldering Iron

Space requirement for Level I P & O centre	1600 sq.ft
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- ¹⁵ administrative functions usually include planning, organizing, staffing, directing, controlling and budgeting. Administration must integrate leadership and vision, to organize the people and resources, in order to achieve common goals and objectives for the organization. <http://www.differencebetween.info/difference-between-management-and-administration>
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- ²¹ Association of Rehabilitation Nurses. <http://www.rehabnurse.org/pubs/role/Role-Rehab-Staff-Nurse.html>
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- ²³ American Psychological Association. <https://www.apa.org/pi/disability/resources/assessment-disabilities.aspx>
- ²⁴ Multi-disciplinary approach; utilizes the skills and experience of individuals from different disciplines, with each discipline approaching the patient from their own perspective. Rebecca Jessup, Interdisciplinary vs. multidisciplinary care: do we know the difference? http://www.publish.csiro.au/?act=view_file&file_id=AH070330.pdf
- ²⁵ Inter-disciplinary approach: integrate separate disciplines into a single collaborative team. That is, short and long-term management goals are set and plans are made by the team together with the patient. A common understanding and holistic view of all aspects of the patient's care ensues, with the patient being part of the decision making process. Rebecca Jessup, Interdisciplinary vs. multidisciplinary care: do we know the difference? http://www.publish.csiro.au/?act=view_file&file_id=AH070330.pdf
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