

UNHCR guidance on facilitating access to assistive technology and rehabilitation

2024





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Suggested citation:

United Nations High Commissioner for Refugees (2024). UNHCR guidance on facilitating access to assistive technology and rehabilitation. Geneva, Switzerland.

Cover photo: © UNHCR | Amelio Castro, a refugee from Colombia and Paralympic fencer, trains at the Fiamme Oro fencing team gym in Tor di Quinto, Rome.

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Photo caption: © UNHCR | Yuliia, 38, and Alisa, 8, pictured in their one room accommodation at a collective centre in Dnipro. The family hails from Luhansk Oblast. Alisa and her mother lived in a specially designed home to accommodate Alisa's physical disability.

Acronyms and abbreviations

AT	Assistive technology
CRPD	Convention on the Rights of Persons with Disabilities
IASC	Inter-Agency Standing Committee
ICRC	International Committee of the Red Cross
ISPO	International Society for Prosthetics and Orthotics
MFT	Multi-Functional Team
NGO	Non-governmental organisation
OPD	Organisation of Persons with Disabilities
PHC	Primary Health Care
UHC	Universal Health Coverage
UNHCR	United Nations High Commissioner for Refugees
WASH	Water, Sanitation and Hygiene
WHO	World Health Organization

Key terms

Below is a description of the key terminology that we wish to use in this document.

Assistive Products

Any external product (including devices, equipment, instruments or software), specially produced or generally available, with the primary purpose to maintain or improve an individual's functioning and independence, and thereby promoting their well-being. Assistive products are also used to prevent impairments and secondary health conditions.¹ Hearing aids, wheelchairs, communication aids, spectacles, prostheses, pill organizers and memory aids are all examples of assistive products.² This may also include adaptations to the physical environment, for example portable ramps or grab-rails.³

Assistive Technology

Assistive technology is an umbrella term for assistive products and their related systems and services and refers to the application of organized knowledge and skills related to assistive products.⁴

Disability inclusion

Disability inclusion is achieved when persons with disabilities meaningfully participate in all their diversity, when their rights are promoted, and when disability-related concerns are addressed in compliance with the [Convention on the Rights of Persons with Disabilities](#).⁵ Efforts to achieve disability inclusion include policies and actions that promote equal access to (public) services as well as enable citizen's participation in the decision-making processes that affect their lives.

¹ WHO, [Priority Assistive Products list \(who.int\)](#), page 1

² WHO, [Assistive technology \(who.int\)](#)

³ WHO, [Global Report on Assistive Technology \(who.int\)](#)

⁴ WHO, [Assistive technology \(who.int\)](#)

⁵ United Nations Disability Inclusion Strategy website and UNDIS, [Annex I. Key concepts and definitions](#)

Impairment

Any absence, loss or significant difference of psychological, physiological, or anatomical structure or function.⁶

Persons with disabilities

Persons with disabilities include people who have long-term physical, psychosocial, intellectual or sensory impairments, which, in interaction with various barriers, hinder their participation in society on an equal basis with others.⁷ Disability does not reside in an individual, but is contextual, and is the result of interaction between societal and individual factors.⁸

Rehabilitation

A set of interventions designed to address the impact of a health condition on a person's everyday life by optimizing their functioning and reducing their experience of disability. Rehabilitation complements other health interventions, such as medical and surgical interventions, and can include equipping people with self-management strategies, providing them with assistive technology, and addressing pain or other complications.⁹

Universal health coverage (UHC)

[Universal health coverage](#) means that all people have access to the full range of quality health services they need, when and where they need them, without financial hardship. It covers the full continuum of essential health services, from health promotion to prevention, treatment, rehabilitation, and palliative care across the life course.¹⁰

⁶ Adapted from WHO, 1976, [International classification of impairments, disabilities, and handicaps : a manual of classification relating to the consequences of disease, published in accordance with resolution WHA29.35 of the Twenty-ninth World Health Assembly, May 1976 \(who.int\)](#) and [Disability and Health Overview | CDC](#)

⁷ UN, 2006, [Convention on the Rights of Persons with Disabilities](#), Purpose

⁸ UNHCR, 2019, [Need to Know Guidance: Working with Persons with Disabilities in Forced Displacement](#)

⁹ WHO, 2024, [Rehabilitation](#)

¹⁰ WHO, 2024, [Universal health coverage \(UHC\)](#)



Photo caption: © UNHCR | Abdijibar Mustafe Mahomed, 37, was displaced by recent clashes in Somalia. Forced to flee to Ethiopia along with another 100,000 refugees, he has relocated to Mirqaan settlement where he is now part of the refugee leadership helping refugees get key information on their protection, registration, among others.

1. About this guidance

1.1. For whom is this guidance?

This guidance is intended to be used by UNHCR personnel and partners including other UN agencies, governmental counterparts, and non-governmental humanitarian actors. It is meant to help them prioritise the provision of assistive technology and rehabilitation services based on evidence to maximise the impact of limited resources in the settings where UNHCR works. This guidance seeks to support predictable and collaborative programming at country and regional level, across multistakeholder efforts and through UNHCR multi-functional teams, which include professionals working in health, education, protection (including Community-Based Protection), and other sectors as relevant.

The primary focus of this guidance is on refugee response contexts, where UNHCR has a leading role in the response, conform to the [Refugee Coordination Model](#) and where UNHCR is often involved in advocating for and delivering of essential health services.

For internal displacement situations, especially where the [Cluster Approach](#) is applied, UNHCR is usually not involved in health service delivery. In such settings, the humanitarian health response is often coordinated by the World Health Organization (WHO) in support of national health authorities.¹¹ Because UNHCR has a central role in protection and camp coordination & camp management in internal displacement settings, UNHCR will work together with partners to secure equal access to assistive technology and rehabilitation for internally displaced persons, as part of a coordinated protection and solutions strategy.¹²

Where relevant, the content and evidence reflected in this document can also be used to advocate for the inclusion of stateless persons into national systems providing access to assistive technology and rehabilitation services.

1.2. Method

This document has been developed through a desk review of available evidence of effectiveness and cost-effectiveness of interventions related to rehabilitation and the provision of assistive technology, as well as through interviews with: 1) experts in humanitarian and development programming for rehabilitation and assistive technology, 2) persons with disabilities, and 3) those with experience facilitating access to assistive technology and rehabilitation in contexts where UNHCR works. A reference group of experts was formed to consider the available evidence and opinions gathered to prioritise assistive technology and rehabilitation (see acknowledgements section). Drafts of the document were shared for review and input with UNHCR Regional Bureaux and Country Offices, as well as with technical experts from WHO, UNICEF and non-governmental agencies.

¹¹ WHO (2023). [Strengthening rehabilitation in health emergency preparedness, response, and resilience: policy brief](#)

¹² UNHCR (2019). [Policy](#) in UNHCR's engagement in situations of internal displacement

1.3. Principles of intervention

The recommendations on the types of interventions proposed in this guidance are applicable to contexts with medium and low technical, financial, or supply-related resources.

Decisions about these interventions within this document have been based on:

- the potential **impact** of the intervention on **health outcomes** (enhanced functioning and autonomy, reduction of morbidity) and **protection outcomes** (enhanced participation and reduction of vulnerability to protection risks such as discrimination or abuse);
- recommendations reflected in internationally accepted **guidance** documents consulted as part of the desk review; and
- documented **evidence** on cost-effectiveness or expert opinion.

Priority was given to interventions that are cost-effective, have a high impact and consider the scarcity of resources in the places where UNHCR works. As a result, this guidance prioritises cost-effective interventions that:

- can help prevent or reduce deterioration and secondary complications such as contractures, pressure injuries, loss of function, falls and muscle deconditioning (weakness);
- help to reduce pain;
- promote dignity, optimise functioning, independence and autonomy, thereby reducing reliance on family members and other support systems; and
- enables inclusion, equal participation, and access to education, livelihoods opportunities, and other essential services.

1.4. Structure of this guidance

Chapter 2 is an introduction to assistive technology and rehabilitation services with a specific focus on displaced populations. **Chapter 3** describes the roles of various sectors in UNHCR around assistive technology and rehabilitation services. Following this, **Chapter 4** discusses the critical importance of promoting accountability of affected people and participation in decision-making. The following **Chapter 5** then zooms in on assistive technology and rehabilitation services as essential components of the health system, while the following **Chapter 6** describes the partnership engagements needed to realise access to assistive technology and rehabilitation services. In **Chapter 7**, some guidance on assessment and monitoring is provided. Procurement is described in **Chapter 8**, whereas **Chapter 9** explains the potential use of cash-based interventions in the provision of assistive technology and rehabilitation services. The last two chapters provide descriptions of priority assistive technology and rehabilitation in first months of an emergency response (**10**) and in situations that have stabilised (**11**). The document has three appendices: **Appendix A** is a detailed list of essential assistive technology that can be provided by trained non-specialists. **Appendix B** is a list of essential assistive technology that must be provided by specialist providers. **Appendix C** provides additional information on specialized rehabilitation services relevant to refugee contexts.



Photo caption: © UNHCR | Carlos Acosta, 33, a refugee who fled Venezuela with his family in 2018 after he was shot in the spine and lost the use of his legs, at a para karate training session in Quito, Ecuador. He is now a competitive athlete and has won medals, including a gold medal in a South American championship.

2. Introduction

2.1. Assistive technology and rehabilitation services

Assistive technology is an umbrella term for assistive products and their related systems and services and refers to the application of organized knowledge and skills related to assistive products. Rehabilitation services denote interventions designed to address the impact of a health condition on a person's everyday life by optimizing their functioning and reducing their experience of disability. Assistive technology and rehabilitation services overlap but are distinct. While some people will need to access both, other people will only need either one or the other. In this guidance we use the composite term 'assistive technology and rehabilitation services' where appropriate.

Assistive technology and rehabilitation services enable people to live healthier, more productive, independent, and dignified lives. By facilitating better functioning and meaningful participation, especially for groups at risk of marginalization, discrimination, and exclusion, these services contribute significantly to societal, educational, and livelihood opportunities. Therefore, the provision of assistive technology and rehabilitation services contributes to achieving the [Sustainable Development Goals](#). Put simply, access to these services can be a life changer for many people.¹³

Despite these benefits, assistive technology and rehabilitation services are often incorrectly understood as disability-specific services needed by only few people. While such services are important to achieve disability inclusion, they can benefit a diverse range of people across the life cycle, as illustrated in box 1 below.

Box 1. Target population for assistive technology, rehabilitation, and related services

Assistive technology and rehabilitation are essential health services that should be made available to all of those who require it. Those in need may include, among others:

- **Persons with disabilities.** Children and adults who have long-term sensory or motor loss, physical, hearing, visual, psychosocial, intellectual, or other impairments that prevent them, in interaction with barriers in the environment, to participate in, or having access to, programmes and services. Rehabilitation and access to assistive technology can enhance their autonomy and quality of life, as specifically outlined in the Convention on the Rights of Persons with Disabilities.¹⁴ While recognizing the importance of providing assistive devices, it is essential to understand that this alone is not sufficient for the inclusion of persons with disabilities. Individual assistance must be complemented by initiatives addressing environmental barriers and reducing stigma.¹⁵

¹³ WHO, [Global Report on Assistive Technology \(who.int\)](#)

¹⁴ UN, [Convention on the Rights of Persons with Disabilities](#), Articles 25 and 26

¹⁵ For more information on how to promote the inclusion and protection of persons with disabilities, please consult [Need to Know Guidance: Working with Persons with Disabilities in Forced Displacement](#) and [IASC Guidelines, Inclusion of Persons with Disabilities in Humanitarian Action, 2019](#)

- **People with short term impairments or injuries.** People with acute illnesses or injuries may require assistive technology and rehabilitation as part of acute care in order to prevent complications, facilitate and speed their recovery, enable greater independence during treatment and optimise their long-term outcomes. minimizing physical or functional consequences.
- **People with chronic health conditions,** including people with communicable and non-communicable diseases which can greatly limit functioning.
- **Women and girls with sexual and reproductive health related conditions,** such as obstetric fistula, incontinence, and other conditions that adversely affect their lives.
- **Older persons.** As people become older, they may experience challenges with functioning and selfcare. Assistive technology and rehabilitation interventions can promote dignity and enhance their independence and quality of life, allowing them to live dignified lives and contribute to their family and community.¹⁶
- **Other individuals who may have undergone medical procedures,** which may include transgender women and men, or intersex people.

Assistive technology and rehabilitation interventions are often cost effective and yield significant impact within a relatively short period. However, some interventions may have to be provided over a long period of time. While the need for access to these services is rising, most people who would benefit from them do not have sufficient access. Globally, one in three people are estimated to need assistive technology and rehabilitative services¹⁷ or could benefit from one or more assistive products.¹⁸ However, access to these products and services remains limited in many countries particularly for marginalized populations. Consequently, it is estimated that most people requiring assistive products, do not have access to them.¹⁹

Assistive technology should not be seen as ‘products to be dispensed’ but as a set of interventions that require assessment, fitting, education of the people who need them and their carers, as well as ongoing follow up.

Multiple barriers impede access to assistive technology and rehabilitation services, including awareness gaps, affordability issues, limited services, product quality challenges, and procurement difficulties. Workforce capacity gaps and absence of dedicated or adequate policy exacerbate these challenges. Individuals may also face barriers related to age, gender, disabilities and other diverse characteristics, living conditions, and administrative status, especially in refugee settings. To enhance access, a people-centred, rights-based approach actively involving users is crucial.²⁰

¹⁶ For more information on how to support the inclusion and protection of older persons, please consult [Working with Older Persons in Forced Displacement](#) and the [Humanitarian inclusion standards for older people and people with disabilities | Sphere](#)

¹⁷ WHO, [Rehabilitation 2030 \(who.int\)](#)

¹⁸ WHO, [Global Report on Assistive Technology \(who.int\)](#)

¹⁹ WHO, [Assistive technology \(who.int\)](#)

²⁰ WHO, [Global Report on Assistive Technology \(who.int\)](#)

2.2. Assistive technology and rehabilitation among displaced populations

Although reliable data is scarce, estimates suggest that displaced populations - compared to non-displaced populations - have a higher proportion of persons with impairments in functioning and injuries requiring assistive technology and rehabilitative health care.²¹ The increase in conflict-related health needs (such as injuries), the loss or damage of assistive devices and disrupted access to health services during humanitarian emergencies contribute to these challenges. Moreover, refugees, asylum seekers, and stateless persons encounter additional barriers in accessing assistive technology and rehabilitation services, such as lacking documentation and other administrative barriers or not having rights to access services. Consequently, they may be excluded from national and global-level initiatives aimed at improving access to these services.

The provision of assistive technology and rehabilitation services offers vital support to displaced persons with disabilities or with chronic health conditions and older displaced persons, among others, enabling them to lead healthier, more productive, and independent lives. These services can also help them access humanitarian and development assistance, and engage more effectively with their new environment.

The importance of providing assistive technology and rehabilitation services in humanitarian settings, is increasingly being recognized.²² In 2023, the World Health Assembly adopted a resolution to support Member States to systematically integrate rehabilitation and assistive technology into their emergency preparedness and response.²³ UNHCR, through its [Global Strategy for Public Health 2021-2025](#), is committed to support access to assistive technology and rehabilitation services for forcibly displaced and stateless persons.

This document aims to offer concise and clear guidance to UNHCR operations and partners in diverse contexts across the globe to help fulfil these commitments. The guidance is structured following the UNHCR's results-based management approach and [UNHCR's Programme Handbook](#).

²¹ WHO, [Strengthening rehabilitation in emergencies \(who.int\)](#) protection. See, for example, [Syrian Arab Republic: Disability Prevalence and Impact - IDP Report Series Fall 2020 - Syrian Arab Republic](#)

See for example:

- IASC (2019). [Guidelines, Inclusion of Persons with Disabilities in Humanitarian Action 9](#)
- WHO (2023) Policy Brief on [Strengthening rehabilitation in health emergency preparedness, readiness, response and resilience: policy brief](#)
- World Health Assembly (2018). [Resolution 71.8 on improving access to assistive technology](#) which calls on Member States to promote inclusion of assistive products within emergency preparedness and response

²³ 76th World Health Assembly (2023) Resolution: [Strengthening rehabilitation in health systems](#) (WHA76.6 Agenda item 13.4 30 May 2023)

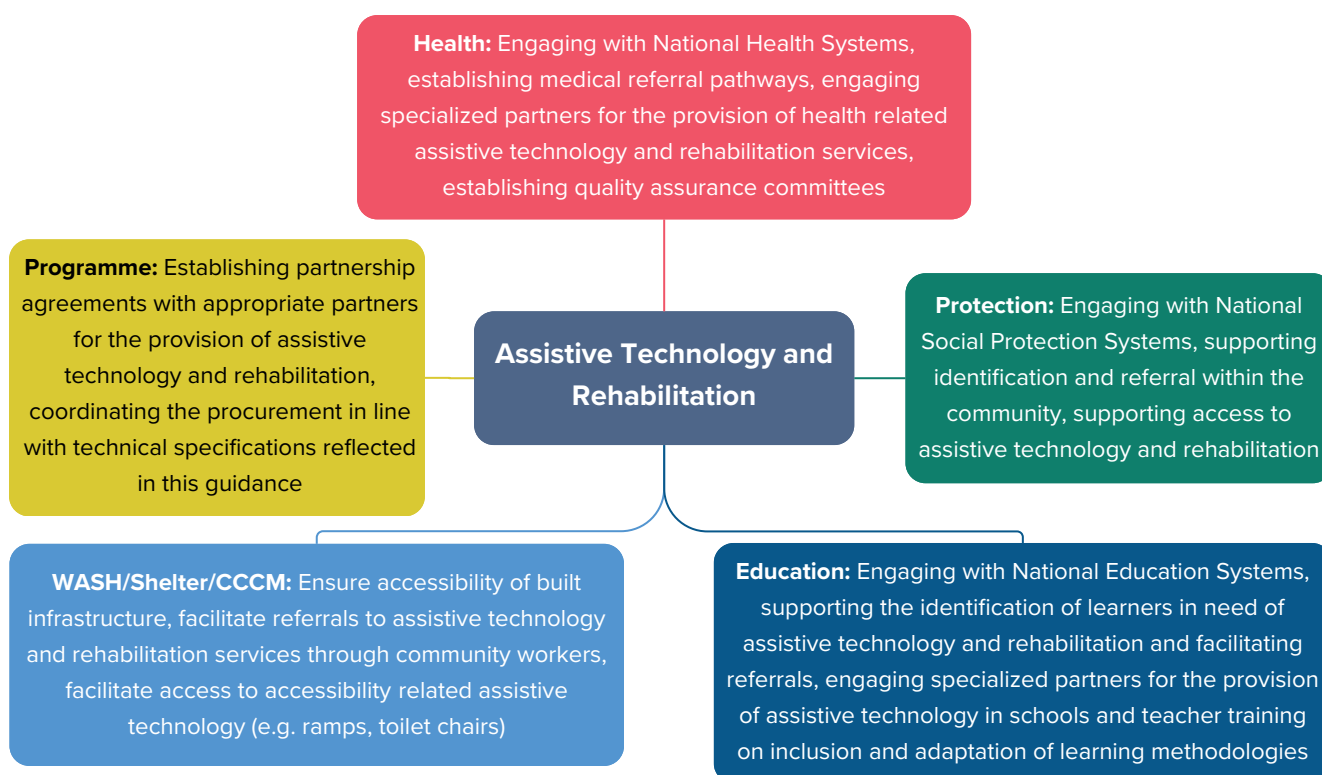
3. Establishing multi sectoral collaboration around assistive technology and rehabilitation in UNHCR

Programming around assistive technology and rehabilitation requires active involvement of multiple sectors within UNHCR, each supporting the work based on sector-specific competencies and roles. For coordinated provision of assistive technology and rehabilitation close collaboration is needed, in **Multi-Functional Teams** (MFTs), between **Public Health personnel** (as leads for health activities), **Community-Based Protection personnel** (to facilitate identification and referrals within the community and facilitate inclusion), **Education personnel** (to identify needs among learners), and others where needed.

Services for assistive technology and rehabilitation are not directly provided by UNHCR personnel but usually facilitated through **partners**. These partners can be general health partners (NGOs or governmental health services) or dedicated partners with specific expertise in this field. Hence, the engagement of **Programme personnel** is required for the identification and engagement of suitable partners and the proper utilization of the technical specifications outlined in this document when engaging in procurement processes.

Box 2 outlines suggested roles across UNHCR functions to support access to assistive technology and rehabilitation.

Box 2. UNHCR functions involved in supporting assistive technology and rehabilitation services



3.1. Health personnel

Rehabilitation and assistive technology services are often integrated into essential health services. In this regard, public health officers can promote access to these services through the following actions.

- Supporting MFT, in coordination with Programme, Supply and other relevant personnel, the selection and technical guidance of **procurement** and **partnerships** engaged for the provision of assistive technology and rehabilitation. The goal is to ensure that decisions align with national health systems and contribute to their strengthening.
- Establishing, in coordination with Protection, Education and other sectors, **referral mechanisms** from the community and primary level to secondary or tertiary levels of health care. Referral pathways must be two way – from primary care to specialised rehabilitation services, but also the other way round – from specialized services to primary care and community-based health partners – to ensure a continuity of services when a person goes back into the community after having received secondary or tertiary-level interventions.
- Establishing mechanisms for **quality assurance** for the procurement of assistive devices and for the assessment of satisfaction levels in the use of assistive technology and rehabilitation services procured through partnerships.
- Facilitating access to Mental Health and Psychosocial Support (MHPSS) for individuals receiving assistive technology and rehabilitation services, helping them in coping with major changes and supporting their journey to rebuild lives and reengage in community and family life.

3.2. Protection personnel

While in UNHCR, the provision of assistive technology and rehabilitation services has traditionally been included under services for ‘persons with specific needs’ and, therefore, implemented through Community-Based Protection, it is important to note that sustainable programming should be coordinated closely with public health personnel. With adequate training,²⁴ UNHCR Community-Based Protection teams have a key role in supporting access to these services through the following actions.

- Supporting the identification of individuals who would benefit from assistive technology and rehabilitation services within the community. Protection personnel working on Child Protection and Gender-Based Violence can also assist in the identification and referral of children and women who would benefit from these services.
- Contributing to the establishment of partnerships and referral pathways for the provision of these services through Community-Based Protection mechanisms, including community-led projects and services, referrals to health systems and to organizations providing Community-Based Rehabilitation.²⁵
- Facilitating access to national social protection services that support access to assistive technology and rehabilitation, where these are operative. This may include facilitating access to documentation, including certification of disability or other specific criteria required to access these

²⁴ For example, [WHO Training in Assistive Products](#)

²⁵ For more information on this approach, see WHO [Community-based rehabilitation: CBR guidelines \(who.int\)](#)

- Facilitating access to national social protection services that support access to assistive technology and rehabilitation, where these are operative. This may include facilitating access to documentation, including certification of disability or other specific criteria required to access these services. The goal is to integrate services for assistive technology and rehabilitation for refugees and stateless people within national structures.

3.3. Education personnel

If adequately supported, education personnel can have a key role in promoting access to assistive technology and rehabilitation services for learners.²⁶

- Providing sufficient resources and training for the **identification and referral** for learners who may benefit from the provision of assistive technology and rehabilitation services.
- Advancing **inclusive strategies** that assist children and adolescents with functional impairments in attending school and engaging in learning, by supplying specialized educational resources (like materials printed in braille and publications compatible with screen reading software) and implementing specialized training programmes for educators on adaptive teaching methodologies.
- **Promoting innovative ways of accessing assistive technology.** Strategic investment in hardware such as tablets and smartphones, alongside comprehensive teacher training in digital literacy, ensures access to diverse educational content, including supplementary resources or Open Educational Resources (OER). The increased access to smartphones makes it possible that targeted training diminishes the necessity for high-cost infrastructures, enabling both educators and learners to effectively utilize educational materials.

3.4. Settlement, Shelter, and WASH personnel

Personnel involved in Shelter, Settlement Planning, and Water, Sanitation and Hygiene (WASH) can also have an added value in ensuring equal access to the built environment and to assistive technology and rehabilitation.

- Ensuring the overall **accessibility** of the built environment, including shelters, toilets, bath facilities, water points, recreational areas, distribution points, markets, etc.²⁷
- Supporting the establishment of **referral mechanisms** for the provision of assistive technology that facilitate overcoming barriers through temporary solutions, while working towards long-term accessibility. For example, the use of portable ramps can help address physical barriers in shelters with few stairs and no ramps, and the provision of toilet chairs can facilitate access to non-accessible toilets and showers.
- Facilitating access to **incontinence products** for children and adults living with incontinence. Ensure proper management and disposal of these items. For more details on these products, please consult the technical specifications of this guidance.

²⁶ For example, establishing referrals with health systems, and ensuring training for education staff in the [WHO Training in Assistive Products](#)

²⁷ Available guidance to fulfil this responsibility includes the Global Shelter Cluster guidance [All Under One Roof | Shelter Cluster](#)

- Facilitating the identification and provision of these services through Community-Based volunteers who are adequately trained,²⁸ in coordination with health staff such as physiotherapists and occupational therapists when relevant.

3.5. Programme Officers

Through their generic role programme officers play a key role in:

- Establishing partnership agreements with appropriate partner for the provision of assistive technology and rehabilitation.
- Coordinating the procurement of Assistive Technology (see chapter 8 on procurement)
- Considering the use of cash-based interventions for Assistive Technology and Rehabilitation (See chapter 9 on cash-based interventions).

3.6. Development Officers

UNHCR Development Officers, in cooperation with UNHCR public health officers, can support engaging development actors and key national stakeholders and advocate for the inclusion of refugees into national health systems and other relevant systems through which the provision of assistive technology and rehabilitation services may take place, such as social protection systems for persons with disabilities or older persons. This often requires sustained technical engagement with governmental social protection entities to ensure forcibly displaced populations can actually benefit of the services. See forthcoming Technical guidance for UNHCR staff on how to engage with national Social Protection systems (expected in 2024). When national governments engage in global initiatives such as those of ATscale (see chapter 6), development officers can work towards explicit inclusion of refugees in such schemes.

²⁸ For example, [WHO Training in Assistive Products](#)



Photo caption: © UNHCR | Janinga, 100 years old, widow and mother of five children, displaced from Kibumba.

4. Promoting accountability to affected people and participation in decision-making

The right of refugees, asylum seekers and stateless persons to participate within decision making processes that affect their lives is affirmed by UNHCR Global Strategy for Public Health (Result 1). In line with UNHCR [Policy on Age, Gender and Diversity](#), refugees, asylum seekers and stateless persons should participate, in all their diversity, in assessment, planning, design, implementation, monitoring and evaluation of services providing assistive technology and rehabilitation ensuring that interventions are relevant, culturally appropriate, and truly meet their requirements, leading to more effective and empowering outcomes.

Moreover, representative organizations, such as Organisations of Persons with Disabilities (OPDs), associations of older people, and others as relevant, can convey the perspective, expertise, experiences and knowledge of individuals who may be users of services for the provision of assistive technology and rehabilitation, and can provide valuable information about community strengths and capacities and identify priority programming needs.

Especially for persons with disabilities, the phrase ‘nothing about us without us’ emphasises the importance of including their voices and perspectives when making decisions and planning interventions in refugee response contexts to provide assistive technology and rehabilitation services they may require. It is important therefore to involve people who are users of assistive technology and rehabilitation services and representative of the communities they belong to. They can undertake roles as front-line personnel, community mobilizers and play important roles in health service management committees. This can enhance community ownership and acceptance and facilitate identification of people who need assistive technology and rehabilitation services and increase the relevance of programming.²⁹

In line with Accountability to Affected People, feedback and response mechanisms should be integrated in the provision of assistive technology and rehabilitation services.³⁰ Considering that users of these services may have functional limitations hindering access to these mechanisms, feedback and response channels should be made accessible through a variety of communication channels, to overcome barriers to participation. It is important to consult with communities, including OPDs, to make feedback and reporting channels most appropriate.³¹ Channels to receive feedback and complaints from service users, and a way to engage and relate them with OPDs and other organizations and services are essential. Service provision should be a safe space for users, which may also facilitate disclosure of other protection issues such as gender-based violence, violence against children, discrimination, etc. Collected feedback should be used to improve programming and ensure a timely and confidential response in situations of abuse or sexual misconduct.

²⁹ In some contexts, these organizations implement activities in line with the WHO [Community-based rehabilitation: CBR guidelines](#)

³⁰ For more information on setting up feedback and response mechanisms, see [UNHCR AAP Operational Guidance](#)

³¹ See, for example, [UNHCR AAPTool CT Accessible Communication for persons with disabilities](#)



Photo caption: © UNHCR | Ukrainian refugees Oksana, 36, and her husband Valerii, 38, work at the ceramics workshop run by the Lena Grochowska Foundation in Siedlce, Poland. The couple, who are both wheelchair users, are from the Chernihiv region of Ukraine where Oksana worked as a make up artist and Valerii worked in a toy workshop and was a professional powerlifter.

5. Assistive technology and rehabilitation services within the health system

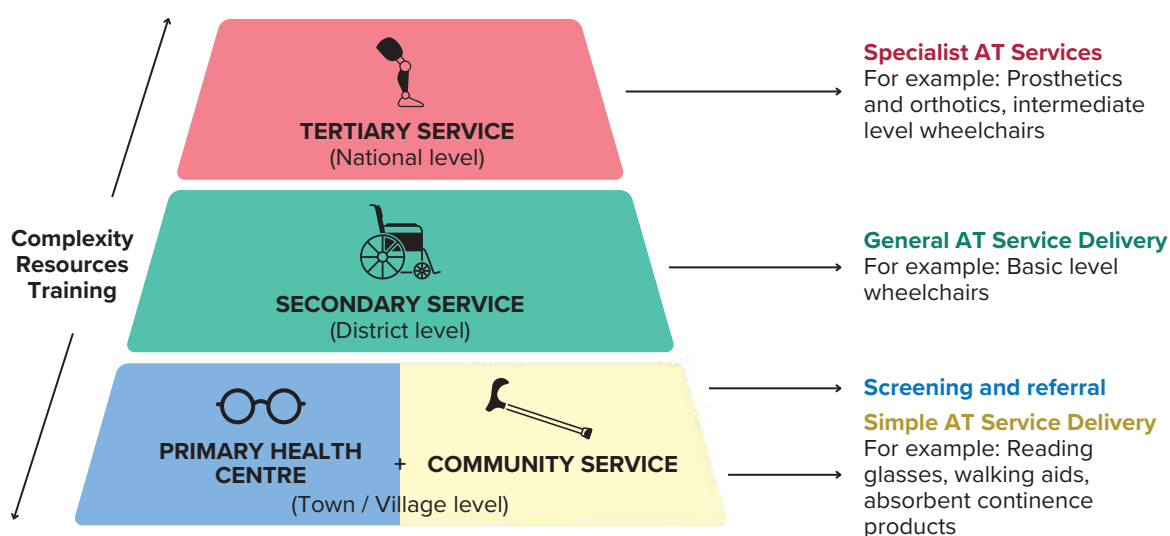
Assistive technology and rehabilitation are part of universal health coverage, and as such should be considered essential health services. The approach proposed by this guidance supports the direct provision of assistive technology and rehabilitation within primary health care and community level services complemented by strategies to facilitate access to more specialised services for people who need them. The [UNHCR Global Strategy for Public Health 2021-2025](#) outlines an approach towards integration and full inclusion of refugees, asylum seekers, returnees and stateless persons into national health systems and other local services. The primary focus of UNHCR’s public health strategy is to make primary health care services available to these populations. Additionally, UNHCR facilitates access to secondary and tertiary healthcare services where these are required.

As much as possible, services specified within this guidance should be provided at the community level and within proximity to affected populations. This can occur through assistive technology and rehabilitation service provision occurring directly through primary health care centres by existing health workers or by dedicated rehabilitation health workers,³² and through Civil Society Organizations providing Community-Based rehabilitation.

Assessment and referral from primary health care and other community level services to other parts of the healthcare system, including specialized services for assistive technology and rehabilitation (for example the provision of prosthesis), should occur in a planned and coordinated manner. See below illustrations of the various services related to assistive technology and rehabilitation within the health system.

Box 3A. Integration of assistive technology throughout the health system

Ensure access to assistive technology throughout the health system, with a focus on primary and community levels



Source: Courtesy of WHO Access to Assistive Technology Team, April 2024

³² Following the WHO [Basic rehabilitation package](#)

Box 3B. Rehabilitation in health systems**SPECIALISED, HIGH-INTENSITY REHABILITATION**

Predominantly tertiary care for people with complex rehabilitation needs during the acute and sub-acute phase of care. Commonly occurs in longer-stay rehabilitation hospitals, centres, units and departments.

REHABILITATION INTEGRATED INTO MEDICAL SPECIALTIES IN TERTIARY AND SECONDARY HEALTH CARE

For people with less complex rehabilitation needs and often for a short period during the acute and sub-acute phase of care. Commonly occurs in tertiary and secondary level hospitals and clinics.

REHABILITATION INTEGRATED INTO PRIMARY HEALTH CARE

Delivered within the context of primary health care, which includes the services and professionals that act as a first point of contact into the health system. Commonly occurs in primary health care centres, and may include community settings.

COMMUNITY-DELIVERED REHABILITATION

Predominantly secondary care delivered in community settings during the sub-acute and long-term phases of care. Commonly through multiple programmes that provide care in homes, schools, workplaces and other community settings.

INFORMAL AND SELF-DIRECTED CARE

This form of care, not rehabilitation service, occurs where no rehabilitation or health personnel are present. Commonly occurs in homes, schools, parks, health club or resorts, community centres and long-term care facilities.

Source: Rehabilitation in health systems: guide for action. Geneva: World Health Organization; 2019

5.1. Primary and community health care

The integration of assistive technology and rehabilitation services within primary and community health care involves strengthening identification of need, providing simple but appropriate assistive products and rehabilitation interventions by the workforce in the community and health care facilities, establishing referral pathways, and/or setting up outreach services from secondary and tertiary teams for rehabilitation interventions and the provision of assistive products in the community or at primary health care facilities. Community and primary health care services can also provide follow up support and do referrals when needs cannot be addressed through community or primary health services.

Depending on national policy, assistive technology and rehabilitation can be provided within the primary health care system by generalist health staff who have completed specific competency-based training (See **Box 4**) or by dedicated rehabilitation professionals³³ working within the primary health care system.

Rehabilitation services can be provided within primary health care or alongside primary health care within the community, for example in rehabilitation centres or through home-based care. Some primary health care partners will not routinely provide assistive technology or be well linked to rehabilitation service providers. Community level services for assistive technology and rehabilitation may be provided by a separate partner in close collaboration with primary health care providers. Therefore, the establishment of adequate referral pathways is crucial.

³³ WHO has developed a [Rehabilitation Competency Framework \(who.int\)](https://www.who.int/publications/m/item/rehabilitation-competency-framework) to define the competences, behaviours knowledge and skills required for rehabilitation workforce

Box 4. Task-sharing approaches within the provision of Assistive Technology and Rehabilitation

Task sharing is an approach whereby specific health tasks are redistributed within the health workforce, enabling health workers with shorter training and fewer formal qualifications to collaborate in tasks that would otherwise have been outside their purview. This approach can increase the scope of services available at primary health care level and improve access. Delegation of activities should be assigned to health workers who receive specific, competency-based training in order to safely and appropriately provide specific assistive technology or rehabilitation services. For example, the [WHO TAP \(Training on Assistive Products\)](#) and the forthcoming [basic package for rehabilitation](#) allow for competency-based training to be conducted by relevant cadres of health workers in order to safely and appropriately provide assistive products and basic rehabilitation services. At all times, local laws and regulations should be known and complied with by UNHCR and health workers of its partners. Key focal points and staff members within primary health care structures should be identified, both within management and those that will be operationally responsible. Monitoring and evaluation should include metrics for completion of competency-based training by primary health care health workers.

5.2. Linkages to referral level (secondary and tertiary level) assistive technology and rehabilitation services

Barriers preventing refugees and others in need from accessing assistive technology and rehabilitation services include a lack of resources and limited knowledge or information about services and the absence of functional referral pathways. Outcomes of mapping and a clear operational process for referral that includes UNHCR referral decision making should be shared with partnered primary health care centres. The engagement of Information Management Working Groups and the use of the [UNHCR Operational Data Portal](#) can support efforts to map and strengthen referral across services and geographical areas.

5.3. Inclusion into national systems

Many host communities have limited access to rehabilitative and assistive technology interventions. Full inclusion within national services for rehabilitation and assistive technology may therefore not always be feasible especially in the initial stages of refugee emergencies and within resource-poor settings. However, this should always be maintained as mid- and long-term goals.

When refugees, asylum seekers, returnees and stateless persons cannot access national services of sufficient quality to be effective, for example due to barriers such as geographical inaccessibility, restrictive national policies, prohibitive user-fees, insufficient service capacity or lack of availability of required assistive products, UNHCR may support the provision of supplementary services through implementing partners or operational partners to meet immediate and ongoing needs while medium-term solutions are being sought.

Therefore, UNHCR country operations should use a development approach using programmatic strategies that support existing systems and, at the same time, facilitate supplementary services through partner organisations where needed and in ways that contribute to building sustainable capacity within the existing system.

5.4. Case coordination

Case coordination or case management is a process of coordinating and overseeing the care and services provided to individuals to ensure they receive appropriate and effective assistive technology and rehabilitation. This involves close collaboration between units for health, protection and education. As assistive technology and rehabilitation services are primarily health services, case coordination should be located within the overall system for health coordination. For larger scale responses, this may require a partner with technical expertise to coordinate services for assistive technology and rehabilitation.

5.5. Preparedness

Many drivers of displacement such as conflict and disaster can create surges in need for assistive technology. In preparedness planning for refugee situations, the needs and available resources for emergency rehabilitation and assistive technology should be considered, for example through:

- Identifying data sources.
 - Secondary data sources can provide information about possible needs and existing levels of morbidity.
 - Primary data collection efforts may include short questionnaires on needs for assistive technology and rehabilitation (see Chapter 7 on Assessment and Monitoring).
- Mapping of potential primary health care partners and specialized partners, according to planning scenarios, including for provision of basic services for assistive technology and rehabilitation as well as specialized rehabilitation services including national services.
- Assessing and strengthening capacity of health personnel and potential partners. This could include capacity strengthening to screen and identify needs, to provide services and to support and supervise the response.
- Identifying supplies and potential pre-positioning. Identifying suppliers for emergency procurement of the emergency products listed in this document can take place either in country if satisfactory quality can be guaranteed, or internationally (more information in Chapter 8 on Procurement).³⁴

Outbreaks

Highly infectious disease outbreaks are more common in some refugee settings. Outbreaks place pressure on services for assistive technology and rehabilitation by disrupting access to essential services, and by creating additional needs. For example, provision of rehabilitation services and

³⁴ WHO (2023). [Policy brief: Strengthening rehabilitation in health emergency preparedness, readiness, response and resilience](#)

assistive technology can be important in the acute and long-term management of infectious diseases such as measles, polio and diphtheria, and play a role in the long-term management of viral haemorrhagic fevers. The following measures should be considered to address issues related to assistive technology and rehabilitation services during outbreaks.

- **Maintaining essential services:** In settings at risk of outbreaks, contingency plans should be drawn to ensure continued delivery of assistive technology and rehabilitation alongside other essential health services. These may include modified delivery methods.
- **Managing a surge in needs:** The provision of rehabilitation as part of acute critical illness care involves challenging decisions around risks to staff and benefits to patients and requires a high level of training and access to appropriate personal protective equipment (PPE) and other countermeasures for rehabilitation staff.

Major trauma and burns incidents

Forcibly displaced populations are often at higher risk of mass casualty incidents, including major burns incidents. Traumatic injuries and burns require significant early and ongoing rehabilitation input, and major incidents easily overwhelm already stretched local services. Preparedness planning for major incidents should look at options to include surging rehabilitation staff into identified acute and post-acute care settings, stockpiling of essential assistive technology, and ensuring referral pathways are in place for continuity of care of patients on the community level. Where it is anticipated that any surge cannot be met through locally available resources, the identification of rapidly deployable regional or international capacities such as WHO's Emergency Medical Teams with sufficient training in assistive technology and rehabilitation services could be considered.³⁵ In situations where many people require trauma surgery - for example following massive armed conflict or when a major burns incident or violence occurs in a refugee setting - assistive technology and rehabilitation should be part of acute and ongoing care.³⁶

³⁵ WHO (2016). [Emergency medical teams: minimum technical standards and recommendations for rehabilitation](#). Geneva

³⁶ WHO (2021). [Classification and minimum standards for emergency medical teams](#)



Photo caption: © UNHCR | Mohammed, a young man with an intellectual disability, smiles at the camera with his mother and younger brother.

6. Partnership engagement: Working in partnership to realise access to assistive technology and rehabilitation

Provision of assistive technology and rehabilitation to refugees requires collaborative and coordinated efforts with multiple actors. Service provision needs to be coordinated with national health systems and other UN, national and international organizations through relevant task forces or fora under Public Health or Protection working groups within the Refugee Coordination Model. Multi-sectoral task forces, for example on ageing and disability inclusion, could also help engaging with other sectors, such as Protection, Education and WASH.

UNHCR works with governments and partners to provide health services, improve local health services, and include refugees in national health systems and plans. When public health services and facilities are not available or lack adequate capacity to extend services to both refugees and host communities, the support of appropriate partners (UN, NGOs, Red Cross/Red Crescent Society and/or civil society) should be considered. Furthermore, where access to services through the national system is limited or compromised, support may be sought from specialised providers to provide essential health services including assistive technology and rehabilitation.

Partners will require the necessary capacity to deliver the specific services needed and should be selected in line with UNHCR partnership agreement guidance and procedures. Partners engaged in service delivery provision should follow [UNHCR's Code of Conduct](#) and other provisions reflected in partnership agreements, including the responsibility of ensuring quality assurance.

The following sections provide additional information on working with national UN and Civil Society partners.

6.1. Governmental services

Case coordination or case management is a process of coordinating and overseeing the care and services provided to individuals to ensure they receive appropriate and effective assistive technology and rehabilitation. This involves close collaboration between units for health, protection and education. As assistive technology and rehabilitation services are primarily health services, case coordination should be located within the overall system for health coordination. For larger scale responses, this may require a partner with technical expertise to coordinate services for assistive technology and rehabilitation.

6.2. Coordination with UN agencies

Various UN agencies are involved in work around assistive technology and rehabilitation services.

World Health Organization (WHO)

WHO promotes rehabilitation and access to assistive technology as essential health services that optimize functioning and reduce disability in individuals with health conditions in interaction with their environment. WHO has an important role in supporting the coordination and management of acute health emergencies while also supporting governments to maintain and strengthen the essential health services and systems of countries and communities in fragile, conflict-affected and vulnerable settings. UNHCR is the lead agency in refugee emergencies and collaborates closely with WHO in supporting governmental health care services.³⁷ In humanitarian emergencies where the ‘cluster system’ is activated, WHO leads the Health Cluster. The Global Health Cluster considers rehabilitation, including assistive technology, to be an essential health service in emergencies, including in situations³⁸ of displacement and complex emergencies. In situations where the cluster system is activated, the provision of assistive technology and rehabilitation services requires collaboration between the WHO-led health cluster and the UNHCR-led protection cluster and its areas of responsibility (especially of the Area of Responsibility for Mine Action and Victim Assistance).³⁹ WHO may also support the development, deployment and coordination of national or international Emergency Medical Teams which must meet standards including the provision of essential rehabilitation services and assistive technology.

UNICEF

UNICEF promotes access to assistive technology for children with disabilities and has⁴⁰ integrated assistive products within its Supply Catalogue, including hearing aids and wheelchairs, and also promotes the use of assistive technology into WASH programmes through, for example, the design of an add-on that can make latrines more accessible for persons with disabilities,⁴¹ older person, young children, and others for whom the standard latrine is not usable or comfortable.

UN Mines Action Service (UNMAS)

Providing victim assistance for survivors of explosive ordnance is a core component of mine action and is an obligation of States Parties under the Anti-personnel Mine Ban Convention. UNMAS promotes access to this type of victim assistance to meet the immediate and long-term needs of mine accident survivors, their families, mine-affected communities and persons with disabilities. Assistance includes emergency and continuing medical care; physical rehabilitation; mental health and psychosocial support, and social inclusion; and laws and public policies that promote effective treatment, care and protection for all citizens with disabilities.

³⁷ See entry on [Refugee Coordination Model](#) in UNHCR’s Emergency Handbook.

³⁸ WHO (2023). [Strengthening rehabilitation in health emergency preparedness, readiness, response and resilience: policy brief](#)

³⁹ See [Health and Protection Joint Operational Framework \(2023\)](#) by Global Protection Cluster and Global Health Cluster, which includes examples of assistive technology and rehabilitation provided in coordination between health and protection sectors in Syria and Ukraine

⁴⁰ For more information, please visit [Rehabilitation/Disabilities - All Products \(unicef.org\)](#)

⁴¹ For more information, please see [Inclusive innovation transforms a standard latrine into a disability-friendly solution | UNICEF Supply Division](#)

6.3. Global initiatives around assistive technology and rehabilitation

ATscale

[ATscale](#), the Global Partnership for Assistive Technology (hosted by United Nations Office for Project Services - UNOPS) was developed in response to the need for a new catalytic approach to transform people's lives through assistive technology. People in low- and middle-income countries, including refugees and other displaced populations, are disproportionately affected by barriers to access quality, appropriate, affordable assistive technology. ATscale envisions reaching an additional 500 million more people globally with life-changing assistive technology by 2030. The partnership seeks to harness civil society, governments, development partners, and the private sector to catalyze optimal use of resources. ATscale supports programmes in both development and humanitarian contexts through partnership agreements with implementing partners.⁴²

6.4. Specialised NGO partners

UNHCR strives, to ensure provision of a comprehensive package of primary health care services, as much as possible to be provided by one partner. Provision of assistive technology and rehabilitation services should be part of the primary health care package and include referral options to more specialized care where needed and feasible. In many situations, the capacity of primary health care providers in assistive technology and rehabilitation is limited, and therefore, where they are available, partnerships with specialised rehabilitation organisations should be considered, particularly for specialised provision such as lower limb prostheses, vision and hearing services, and in situations where there is a high prevalence of injuries amongst the population.

Specialised national associations such as physiotherapist associations, national disability or rehabilitation councils, or medical syndicates may assist in identification of partners. International and national NGOs, the local Red Cross / Red Crescent society and the International Committee of the Red Cross (ICRC) may provide such services for assistive technology and rehabilitation services to affected populations and be involved in strengthening of services through local partners. Such organisations are often well positioned to advocate for inclusion of refugees into local and national systems.

Examples of international NGOs that have considerable experience in the delivery of services for assistive technology and rehabilitation include [Humanity and Inclusion](#) (in francophone countries known as Handicap International), [HelpAge](#), [CBM Global](#) and [Momentum Wheels for Humanity](#) (MWH). In some countries, strong national NGOs are active in this field.

Services for assistive technology and rehabilitation provided by NGOs and other partners should be integrated as much as possible with those of the Ministry of Health, and where feasible, seek their accreditation by relevant authorities and in line with the national standards for the level of health care provided. When partnering with specialised partners, UNHCR should encourage and facilitate them to build capacity of primary care providers to deliver assistive technology and rehabilitation services.

⁴² For more information, please consult: WHO (2023). [Policy brief: Strengthening rehabilitation in health emergency preparedness, readiness, response and resilience](#)



Photo caption: © UNHCR | Lawli Ibrahim, 10, goes to school thanks to the Education Cannot Wait program, which provided him with a tricycle so he can reach school on his own.

7. Assessment and monitoring

7.1. Situational analysis and assessments

Planning for assistive technology and rehabilitation services in refugee settings requires reliable information. Assessments should use a participatory methodology and be people-centred and inclusive of age, gender and diversity characteristics. The assessment should not only look at ‘needs’ but also at existing capacities and support available within communities.

Questions around access to assistive technology and rehabilitation services can be included within multisectoral rapid assessments in the initial stages of an emergency.⁴³

At a population level, the WHO [rapid Assistive Technology Assessment tool](#) allows for a rapid assessment of the need and unmet need for assistive technology as well as the experience and satisfaction of accessing assistive technology from the perspective of the public.

At the individual level, suggested questions to capture need could include:

- Do you currently use any assistive product(s)?
- Which products do you use? (the [rapid Assistive Technology Assessment tool](#) includes a product list that can be supported by showcards)
- Do you think you need any assistive product(s) that you do not currently use, or you currently use but it needs to be replaced?
- Which products do you think you need? (Refer to the product list mentioned above)⁴⁴

Individual assessments can be complemented by additional assessments as the situation stabilises, including information gathered through Participatory Assessments, expert interviews and desk reviews. For example, WHO’s [Assistive Technology Capacity Assessment](#) (ATA-C) supports a situational analysis of assistive technology system preparedness, and the [Systematic Assessment of Rehabilitation Situation](#) provides a comprehensive overview of the rehabilitation situation in a country.⁴⁵

Health System Analysis

Given UNHCR’s goal to promote access for refugees, asylum seekers and stateless persons to national health systems, it is important to analyse the existing health system and its capacity for delivery of assistive technology and rehabilitation services. Such analysis should not be restricted to government systems but should include local and international non-governmental organisations (NGOs) as well as the private sector where relevant.

Leverage information gathered through a stakeholder analysis to identify potential implementing and operational partners with the capacity of being key agents of change in the provision of assistive technology and rehabilitation services. A system analysis with a focus on assistive technology and rehabilitation services can include:

⁴³ See for more information: WHO’s [Assistive Technology Assessment \(ATA\) toolkit](#)

⁴⁴ Extracted from WHO’s [rapid Assistive Technology Assessment tool](#)

⁴⁵ Additional assessments include the [WHO standards for prosthetics and orthotics assessment package: assessment guide](#). Other assessments can be found at [Advancing data collection on Assistive Technology \(who.int\)](#).

- **Available services:** including the capacity of existing services to absorb additional clients (for example considering existing waiting times) and the accessibility of services for users.
- **Community capabilities:** Presence and capacity of community-based initiatives such as civil society organizations providing [community-based rehabilitation](#) services.
- **Workforce:** Training and education level of health staff, their experience and competencies with assistive technology.
- **Infrastructure:** Physical space, for both provision of services and storage of a limited stock.
- **Equipment:** Availability of assistive devices meeting accepted standards on the local market, including logistics and supply chain analysis.
- **Financing:** Including analysis of out-of-pocket expenditure for assistive technology and rehabilitation services, and availability and access for refugees to financial support programmes to access assistive technology and rehabilitation.
- **Governance and leadership:** Mapping of responsibility for assistive technology and rehabilitation needs in the host country.
- **Information Systems:** Information systems including data collection, storage and use.

Context and population figures

Data gathered from assessments should be contextualised through cultural, economic and other social information about the affected population and used to describe the security and protection risks that could have an impact on the need for assistive technology and rehabilitation, or in accessing these services.

Disaggregation of data by age, gender and disability status⁴⁶ is important. Information about the population before displacement - such as health related demographics including age distributions, prevalence of disability and of non-communicable diseases - can help define the target population for assistive technology and rehabilitation services. Information reflected should be displacement-sensitive and consider that drivers of displacement, such as armed conflict, famine and disease outbreaks, may increase impairment and disability and can increase needs for assistive technology and rehabilitation services. Where available, data on incidence and prevalence of health conditions that are relevant to assistive technology and rehabilitation should be gathered and synthesized.

If accurate and timely data about the local situation is unavailable, the following global estimates can be used:

- ➔ [16% of the world's population currently experience disability](#). Prevalence is higher in situations of conflict and displacement and in lower-income countries, where disability and poverty routinely reinforce and perpetuate one another.
- ➔ [30% of the world's population require at least one assistive product with this increasing to 60% for those over the age of 60](#).
- ➔ [At least one in three people have a health condition that would benefit from rehabilitation](#).

⁴⁶ Following the [Washington Group Questions](#), integrated in UNHCR's Specific Needs Codes. For more information [UNHCR Specific Needs Codes – Disability Guidance | UNHCR](#)

7.2. Identification of people in need of assistive technology and rehabilitation

Primary health care facilities are the primary entry point to the health system and are an appropriate place for initial assessment of needs for assistive technology and rehabilitation services.

Strategies to raise the awareness of primary health care staff and communities about available rehabilitation and assistive technology services should be conducted to enhance identification of persons in need of these services, for example through a network of volunteer community outreach workers or through existing community structures, and by engaging organisations, such as those for persons with disabilities, or older people, to identify people in need of assistive technology or rehabilitation services.

Identification of potential needs for assistive technology and rehabilitation services can also take place during registration, including refugee registration, in call centres and community centres and during registration and follow up for the provision of services - including cash-based interventions- and enrolment in education systems. The use of UNHCR Specific Needs Codes can support in the identification and follow up of people who may benefit from accessing assistive technology and rehabilitation services, including the following profiles reflected within the standardized UNHCR Specific Needs Codes.⁴⁷

- *Child with special education needs* (CR-NE), for children with disabilities who may require rehabilitation and/or access to assistive technologies.
- *Older persons at risk* (ER), in particular Older person unable to care for self (ER-FR).
- *Disability* (DS) codes. In 2021, UNHCR integrated the [Washington Group Questions](#) into its registration system, [proGres](#), replacing the previous Specific Needs Codes for Disability to support the identification of adults and children with disabilities.⁴⁸
- *Serious medical condition* (SM) codes, including Chronic illness (SM-CI) and Other medical condition (SM-OT).

Although none of these codes should be considered detailed enough for referral to specific assistive technology and rehabilitation services, they could provide initial information for referrals and follow up through primary health care. These questions could be also complemented by detailed questions on assistive technology needs, such as questions reflected in the [rapid Assistive Technology Assessment tool \(rATA\)](#).

Collection of disaggregated data and its sharing and reporting is important to better understand the capacities and needs of persons in need of assistive technology and rehabilitation services within the population. According to the UNHCR Policy on Age, Gender and Disability and the [UNHCR Programme Handbook](#), all country operations are requested to disaggregate core impact and outcome data by age, gender, disability and other diversity considerations.⁴⁹

⁴⁷ UNHCR. [Guidance: Identification of Persons with Disabilities at Registration and other data collection efforts](#)

⁴⁸ For more information and guidance, see [UNHCR Specific Needs Codes – Disability Guidance | UNHCR](#), and [UNHCR Specific Needs Codes – Disability Interview Guide | UNHCR](#)

⁴⁹ [UNHCR Programme Handbook \(unhcr.org\)](#), Section 5.5 Identifying and using indicators

Data disaggregated by sex, age and disability, at a minimum, is essential to design and implement programming that is inclusive and to monitor inclusion within all services, including health, services for assistive technology and rehabilitation. Data should be shared and reported in ways that ensure individuals are non-identifiable and in accordance with the [General Policy on Personal Data Protection and Privacy](#). Data should be shared with relevant government departments and within humanitarian coordination mechanisms.

Data on needs and access could be also shared with development actors to support advocacy and planning efforts for the inclusion of refugees into national health systems, social protection schemes, and other forms of supporting access to assistive technology and rehabilitation services as relevant.

Adequate procedures should be in place to collect, analyse, interpret, and use reliable quantitative data on persons in need of assistive technology and rehabilitation services and their access to prioritized services. This can be done by comparing disaggregated population data (sex, age and disability) to disaggregated data of those receiving rehabilitation and assistive technology services.

7.3. Monitoring

Monitoring of the provision of assistive products delivered through primary health care should be related to the intended health outcomes (e.g. to improve mobility, to improve vision, etc.). Monitoring of referrals to rehabilitation and assistive technology services should occur along with primary underlying disability or impairment and health outcome. Quality of services should be monitored through onsite visits and qualitative information gathering from those receiving services. Use of validated outcome measures⁵⁰ is also possible for evaluating the quality and suitability of assistive technology and rehabilitation services.

Establishing quality committees integrated by health professionals, protection personnel, host communities and refugees can ensure ownership and improve the overall participation of communities in service delivery and quality assurance. Issues that could be potentially assessed by quality committees may include:

- perceived quality and appropriateness of products and services;
- accessibility of services;
- training provided on product use and maintenance; and
- impact of services and overall improvement on quality of life and participation, including improved access to community and humanitarian services.

Evaluations should also include projection of future needs to inform planning, budget allocations and advocacy.

7.4. Results framework

Results monitoring on access and impact of interventions to facilitate access to assistive technology

⁵⁰ For example, the [Quebec User Evaluation of Satisfaction with Assistive Technology \(QUEST 2.0\)](#)

and rehabilitation services can be planned in [COMPASS](#), UNHCR's Results-Based Management (RBM) approach for strategic planning, budgeting, monitoring and reporting. These interventions should be ideally planned, monitored and reported under Outcome Area 10 on 'Health Lives', while in certain circumstances they could also be included under Outcome Area 7 on 'Community Engagement and Women's Empowerment' (for community-led rehabilitation and assistive technology initiatives) or Outcome Area 11 on 'Education' (for access to assistive technology within the school environment).

Monitoring can be done through existing [good practice indicators](#) or through the development of user-defined indicators, for example:

- **% of persons with disabilities with specific needs receiving support** – This is a good practice indicator that could be used to report access to assistive technology and rehabilitation for persons with disabilities only. Where possible, specify in the narrative report the type of services received, as this indicator could also include other services such as cash-based interventions.⁵¹
- **% of older persons with specific needs receiving support** – As above, this indicator would only apply to older persons receiving access to assistive technology and rehabilitation, among other services. Where possible, specify in the narrative report the type of services received, as this indicator could also include other services such as cash-based interventions.⁵²
- **# of persons in need of assistive technology receiving services, disaggregated by sex, age and disability / # of persons in need of rehabilitation services, who receive such services disaggregated by sex, age and disability** – These proposed user-defined output indicators are more specific to monitor access to these services and would give the possibility of monitoring a wider range of persons including people with disabilities and older persons accessing these services, but also others as specified in the narrative.

Planning budget allocations and reporting expenditure against these indicators can support the country operation and UNHCR at global level to monitor and advocate for sufficient resources for these services.

7.5. Show results

- In the Annual Strategy Implementation Review, assess whether progress towards results planned to support access to assistive technology and rehabilitation services has been equitably achieved for various AGD groups among forcibly displaced and stateless persons. Use disaggregated data and qualitative inputs from consultations to consider age, gender, and other diversity elements in this review.
- Involve partners and community representatives and conduct consultations as part of a **joint Multi-Functional Team analysis** to gather perspectives on the intended and unintended impact of interventions to support access to assistive technology and rehabilitation services.

⁵¹ Additional guidance on the use of this indicator can be accessed at [GP Output - Proportion of persons with disabilities with specific needs receiving support \(unhcr.org\)](#)

⁵² Additional guidance on the use of this indicator can be accessed at [GP Output - Proportion of older persons with specific needs receiving support \(unhcr.org\)](#)

- Compile and review all **indicator data** (year end results) related to access to assistive technology and rehabilitation and review disaggregated actuals to identify if any population has been insufficiently supported.

Incorporate the findings from these analyses in relevant Outcome Areas, in line with the Results Framework, and include both qualitative data (in the narrative) and quantitative data (in indicator data), highlighting gaps and unmet needs.



Photo caption: © UNHCR | Beneficiaries of a UNHCR project that assists visually impaired women receive mobility training in Samarkhail, Jalalabad, Nangarhar Province, Afghanistan. The project also offers braille classes and future livelihoods support to a cohort who are marginalized and often subject to abuse in Afghan society.

8. Procurement

When assistive products are procured to support primary or higher levels of care, these should be:

- consistent with:
 - ➔ existing Ministry of Health specifications; and/or
 - ➔ the WHO's [Assistive product specifications and how to use them](#) specifications, also reflected in the Annexes of this guidance.
- based on the feedback and preferences of persons with and for whom UNHCR works.

Procurement should be limited to items that the national health system or selected partners can effectively and safely use through trained personnel, with sufficient capacity for maintenance and servicing them, including access to spare parts as needed. Procurement must furthermore be based on expected numbers of people needing specific assistive technology and be appropriate for the local environment. Moreover, procurement must be informed by and revised based on feedback collected from end-users with regards to quality, safety, affordability, and usability.

Local procurement is recommended in situations where the local market has products available and that meets the required specifications and quality. If this is not the case, international procurement should where possible be pursued using approved suppliers under a Long Term Agreement with UNICEF and/or WHO.⁵³ For example, the [UNICEF Supply Catalogue](#) provides high quality products in line with WHO specifications. See also WHO document on 'Assistive product specifications and how to use them' (2021).⁵⁴

Within the emergency phase, procurement of emergency kits of directly imported assistive products may be required in order to provide timely assistance. For more information about procurement see [Essential Medicines and Medical Supplies Guidance](#) (UNHCR, 2023). When the situation stabilizes, a transition to local procurement may be considered if quality criteria can be met.

8.1. Donations

Donations of assistive technology may be considered if they are compliant with the UNHCR [Administrative Instruction on the acceptance and formalization of donor contributions \(cash or in-kind donations\)](#) and its Annex 6 Technical Guidance on accepting donations of specific items. It is imperative that any donations meet national or WHO specifications. Concerns include undermining of local supply chains, uncertain local capacity for maintenance and repairs, the high risk of accepting low quality / not appropriate or adapted to the user or the setting and costs of transportation among others.

⁵³ To improve access to assistive technology for everyone, everywhere, on 28 July 2020, WHO and UNICEF signed a Joint Action Plan on Assistive Technology and included provision of assistive products under the Strategic Collaboration Framework between The World Health Organization and the United Nations Children's Fund to bring a catalytic impact and provide quality assistive products to the 900 million people that are lacking it. [First ever global guide for assistive technology to improve the life of millions \(who.int\)](#)

⁵⁴ WHO (2021). [Assistive product specifications and how to use them](#). Geneva: WHO. It contains 26 assistive product specifications (APS)

Used and refurbished assistive devices must not be accepted due to safety and hygiene concerns. It should be especially noted that for eyeglasses, the International Agency for the Prevention of Blindness (IAPB), an umbrella organization for the eye sector, recommends that recycled or previously used eyeglasses should not be accepted for various reasons including a lack of cost effectiveness, concerns over quality of vision, a lack of choice and probable problems with disposal of unusable stock.



Photo caption: © UNHCR | UNHCR visits the city of Canoas to support the management of the temporary shelters. More than 6,300 people have been temporarily sheltered in the Ulbra University gymnasiums in Canoas.

9. Using cash-based interventions for assistive technology and rehabilitation

UNHCR considers cash a modality of assistance to support forcibly displaced and stateless people to meet their basic socio-economic needs, but also as a way to advance protection and solutions strategies. Cash-based assistance is often delivered alongside other in-kind assistance and other services, including in conjunction with referral mechanisms to specialized protection services, such as case management.

Supporting access to assistive devices and rehabilitation services through cash-based interventions is a viable modality when these services are available locally and not provided free of charge by national health systems, subsidized by national social protection systems, or local or international civil society organizations.

National systems can facilitate refugees' access to these services by ensuring equal access to healthcare systems and social protection schemes that specifically address assistive technologies. Additionally, they can support access through emergency social welfare interventions. For example, by dedicating specific emergency programmes to subsidize the costs of assistive technology and health-related costs (including rehabilitation) for refugees.

In such scenarios, UNHCR's role would involve facilitating refugees' access to these national programmes through advocacy and by offering information and potential assistance, if required, during the enrolment process.

Where these programmes lack sufficient national coverage or refugees face administrative barriers hindering equal access, UNHCR may provide temporary cash assistance to facilitate access to these services. The aim would be, however, to address administrative barriers and transition beneficiaries to national assistance as soon as possible.

In these contexts, UNHCR operations may consider the following issues and recommendations in the use of cash to facilitate access to assistive technologies and rehabilitation services:

- Supporting access to assistive technology and rehabilitation through cash-based interventions can be structured under various modalities, including restricted cash, unrestricted cash, and, in more personalized instances, cash for protection.
- Conduct a contextual, considering the availability of assistive technology and trained providers in the market, and the ability of persons with disabilities and others in need of assistive technology to access the market and secure such services.
- Acknowledge that households with members requiring assistive technology and rehabilitation services may face additional – and sometimes, ongoing – expenses. This would include, for example, one-off costs of devices such as wheelchairs or spectacles, but also ongoing expenses

such as costs for incontinence materials. These costs can impose additional financial burdens that should be factored in when determining the value and distribution schedule of cash transfers.

- Providing the same standard amount of cash assistance to all households may inadvertently force those requiring assistive technology or rehabilitation services to make difficult choices, potentially sacrificing their health and well-being by deprioritizing these essential expenses or reducing expenditures on other basic needs.
- It is, therefore, recommended to tailor cash transfer programmes to account for the additional financial demands faced by households in need of assistive technology or rehabilitation services. This may involve providing supplementary funds or adjusting the distribution schedule to ensure that these households receive adequate support without compromising their access to basic services. This additional funding would be intended to help cover the extra costs associated with assistive technology and rehabilitation services, alleviate the financial strain on affected households and ensure that individuals can access the necessary assistance without facing undue financial hardship.
- Individuals in need of assistive technologies and rehabilitation services due to recent injuries, such as those sustained in conflict-related incidents, would usually access these services through health interventions. When this access is facilitated via cash-based interventions, the resulting outcomes should be, therefore, categorized as health outcomes.
- Individuals with permanent impairments who require assistive technologies due to losing their devices while fleeing conflict could regain access through cash-based interventions. In such instances, the outcomes could be viewed as protection outcomes, as access to these devices is commonly supported through social protection systems in countries to promote equality and prevent discrimination.
- Access to these services could also be sustained through ‘emergency cash-based interventions’, sometimes qualified under the ‘cash for protection’ where cash is used to address an immediate protection shock or a sudden situation that can cause severe harm.
- Emergency cash is generally delivered directly by UNHCR or through partners as a one-off support and is often used as a measure of last resort when specialized services are not readily available, and no other actor can offer alternative assistance. It requires well defined eligibility criteria that ensures that cash has potential benefits to address the sudden shock and integrated in the established Standard Operating Procedures of the operation.
- These interventions may also require an individualized assessment and follow-up through case management assistance to ensure an adequate impact of cash combined with other interventions to ensure equality and non-discrimination in accessing other required services and within the community.⁵⁵

⁵⁵ For more information, please consult [Cash-based interventions | UNHCR](#) and [Cash AND protection and Cash FOR Protection – A UNHCR Perspective](#) (internal document)



Photo caption: © UNHCR | UNHCR staff speak to Fatmeh during a visit to her in her house in Deir ez Zor city.

10. Service delivery – Emergency response

Assistive technology and rehabilitation services must be made available as soon as possible in any emergency. There are two primary objectives that should be prioritized in emergency response:

1. Addressing the potential increase in acute and post-acute needs arising from the causes of displacement, such as the increased needs of people with injuries resulting from conflict.
2. Preventing the worsening of impairments and restoring the functionality and independence of individuals with pre-existing needs, including persons with disabilities, older persons, and persons with chronic health conditions.

This can be done through non-specialized services in primary care and on community level (see **10.1**) and through secondary and tertiary health care (see **10.2**).

10.1. Providing assistive technology and rehabilitation through primary care and community level services

The existing workforce at primary and community level can expand their scope of practice to include provision of assistive technology and basic rehabilitation interventions in emergency settings. This requires task-sharing approaches (see **Box 4** on page 16). WHO's packages for Training in Assistive Products and Basic Rehabilitation have been designed with this in mind.

Several essential assistive technology and rehabilitation services can be provided by:

- including essential rehabilitation and assistive technology services as part of primary health care; or
- supporting community-level rehabilitation and assistive technology services that are linked to primary health care.

This requires efforts to strengthen assistive technology and rehabilitation services inside primary health care facilities and in the community. In all cases, assistive technology and rehabilitation services should work for both people attending a primary health care facility and for those at home. Basic interventions should be made available for a wide range of health conditions to protect people from harm and improve outcomes. These interventions include:

- patient and caregiver education and advice;
- positioning and postural management;
- exercise therapy and prescription to improve or maintain strength, range of movement, function or fitness and prevent complications;
- training of activities of daily living;
- basic environment modifications and adjustments to improve accessibility to physical spaces and information;

- non-pharmacological pain management; and
- provision of essential assistive technology.

Box 5 lists essential assistive technology that can be used by trained non-specialists and that should be made available in all contexts, as soon as possible within maximum three months. When appropriately provided, these products, can help maintain a minimum level of health, dignity and well-being. These products can be provided by a variety of responders such as health workers in primary health care facilities, community health workers and other humanitarian workers. These providers must have received basic training through the [WHO TAP portal](#) and should be supervised. Ideally these should be available as close as possible to the population without need for onward referral, hence direct provision through supported primary health care facilities is preferred.

Box 5. Ten priority assistive products for forcibly displaced persons⁵⁶

1. Crutches, elbow
2. Crutches, axila
3. Walking Stick/Canes
4. Walking Frames
5. Pressure relief cushions
6. Wheelchair, with comfort cushion manual assistant controlled
7. Wheelchair, with comfort cushion manual for active use
8. Catheter kits (3-month supply per kit, including products needed for continence management using intermittent, indwelling or external catheters)
9. Toilet and shower chairs, static
10. Absorbent continence products, single use or re-usable (3-month supply)

Source: WHO, [AT6 and AT10: Facilitating rapid access to essential assistive technology in emergencies](#). See also [Assistive technology in emergencies \(who.int\)](#).

For descriptions of these products, discussion, links to product specifications and training resources see **Appendix A**.

10.2. Assistive technology and rehabilitation as a component of secondary or tertiary care

In emergencies driven by conflict, individuals may arrive to neighbouring countries with injuries that require specialised medical and surgical management, including acute and ongoing rehabilitation. Standards on meeting the needs of those with injuries, including the provision of rehabilitation, are clearly established by the [Sphere Humanitarian Standards \(standard 2.4\)](#) and [IASC \(Injury – page 130\)](#). These standards can serve as a reference for developing emergency strategic plans and establishing criteria for partner engagement compliance.

⁵⁶ This box contains the materials listed in WHO's AT10 list with priority assistive products for internally displaced people and refugees. In context of high levels of trauma see also the AT6 list with priority assistive products for emergency trauma response.

Many individuals requiring medical secondary or tertiary care will have acute and ongoing rehabilitation needs. In emergencies, such services are often lacking, which requires strengthening their capacity for rehabilitation, including in the provision of inpatient rehabilitation and essential assistive technology. Critical service gaps may be managed through surge capacity, including from WHO's Emergency Medical Teams providing rehabilitation in line with established [minimum standards](#). The expanded [Minimum technical standards and recommendations for rehabilitation in emergency medical teams](#) can also be used as a basis to establish a minimum level of safe service delivery in surgical facilities. When treatment is provided in national centres steps should be taken to promote that patients can access required rehabilitation follow up at the treating hospital, or when this is not possible, that a clear referral mechanism is developed between the treating hospital and primary care or community level rehabilitation services.

Some people may require referral for more specialized rehabilitation and assistive technology services, such as intensive post-acute spinal cord injury rehabilitation, prosthetic and orthotic fitting or review, specialized wheelchair services, or paediatric rehabilitation services. These are considered below under comprehensive response but, where they already exist, access to such services should be facilitated in the emergency phase.



Photo caption: © UNHCR | Kidane Beshe, a former teacher, is among the thousand displaced from refugee camps in the Tigray region

11. Service delivery: Comprehensive response

The comprehensive response should be implemented as soon as the situation stabilises and ideally no longer than after three months.

11.1. Additional assistive technology delivered through primary health care

When a situation stabilizes, additional priority assistive technology should be made available including for people who have visual, hearing and communication impairments (see **Box 6**). These products should preferably be provided in primary health care facilities and through community health care given the increased coverage made possible by the proximity to those in need. For descriptions of these products, discussion, links to product specifications and training resources see **Appendix A**.

Box 6. Additional assistive technology that can be delivered through primary health care by staff with appropriate training

1. White canes
2. Magnifiers
3. Communication books/boards/cards⁵⁷
4. Bed pans and urinals
5. Rollators⁵⁸
6. Reading glasses
7. Hearing aids for mild to moderate hearing loss

11.2. Assistive technology and rehabilitation by specialist providers and services

Some assistive technology and rehabilitation services can be provided by non-specialists or as an integrated component of inpatient medical care. Other services must be delivered by professionals in assistive technology and rehabilitation with specific competencies and qualifications. Such specialized assistance is typically delivered through referral to specialized services such as:

- prosthetic and orthotic services;
- eye care and low vision services;
- ear and hearing care services;⁵⁹
- centres for physical rehabilitation, including paediatric and neurological rehabilitation;

⁵⁷ Technology through mobile devices such as smart phones and tablets is replacing developing and traditional communication books/boards/cards can be supplemented or replaced by communication apps and augmentative alternative communication devices

⁵⁸ Rollators are walking frames that have wheels which facilitate easier movement over smooth ground, which may render them unsuitable for terrains that make the wheels inoperable. They should only be procured for settings where the environment would be suitable for their use

⁵⁹ For example, see [WHO Primary ear and hearing care training manual](#)

- nursing and rehabilitation services for incontinence and wound management;
- developmental delay carer education;⁶⁰
- clubfoot services;⁶¹
- speech therapy and other services for persons with communication impairments; and
- services for treatment of burn injuries.

Preferably, people should be referred to such services after assessment by primary health care staff. Service provision may be facilitated through outreach teams and are ideally provided close to the target population. More details about these services are available in **Appendix C**, along with standards which should be met, the range of health conditions they are indicated for, best practice working modalities and suggested implementation strategies.

In addition to the ten priority assistive products of the AT 10 (**Box 5**), there are important other assistive technologies that should be made available when a refugee situation stabilizes. See **Box 7**. This list may be modified based on the level of services available to the host community within the national system and based on the available resources. For descriptions of these products, and links to product specifications and training resources see **Appendix B**.

Box 7. Assistive technology to be provided by qualified providers

1. Orthoses Lower Limb⁶²
2. Prostheses Lower Limb
3. Wheelchairs with postural support
4. Pressure Relief Mattress
5. Spectacles for refractive error (+filters and protection)
6. Hearing Aids for severe to profound hearing loss
7. Clubfoot braces (within clubfoot service below)
8. Upper Limb Orthoses⁶³

Certain assistive technologies would typically **not** be prioritized in the places UNHCR works, based on reviews of evidence of effectiveness and cost effectiveness and consultations with experts about the ability to safely deliver these services. These are listed in **Box 8**. This list has been developed through reviews of the evidence of effectiveness and cost effectiveness and consultations with experts about the ability to safely deliver these services in the places UNHCR works.

⁶⁰ For example, see [Ubuntu \(ubuntu-hub.org\)](http://ubuntu-hub.org) and [Getting to know cerebral palsy - CBM \(cbmuk.org.uk\)](http://cbmuk.org.uk)

⁶¹ For example, see [Global Clubfoot Initiative – Publicising Clubfoot Treatment Worldwide](#)

⁶² This may include therapeutic footwear and offloading. This can be important when individuals have active diabetic foot ulceration or are at high risk of developing one. Footwear can prevent amputation. More information can be found in the [ICRC's Management of Diabetic Foot Implementation Plan](#). However, these devices may have a relatively low level of compliance and require concurrent medical and nursing care for successful use

⁶³ See ICRC (n.d.). [Manufacturing guidelines: Upper limb Orthoses](#)

Box 8. Interventions not to be prioritised

<p>Cochlear implants</p>	<p>Cochlear implants are surgically implanted electronic devices which are themselves expensive and require significant specialized therapy to learn or relearn the sense of hearing.</p>
<p>Spinal orthoses</p>	<p>Spinal Orthoses (unless delivered as part of specialized medical care for example as part of fracture management treatment) have not been prioritized, including use of soft binders to manage back pain, because of poor evidence of effectiveness. Bracing of idiopathic scoliosis is a specialization within orthotic service provision which is often executed with poor quality unless delivered as part of specialized medical care with x-ray verification of fit.</p>
<p>Prosthetic eyes and facial prostheses</p>	<p>Prosthetic eyes and facial prostheses have not been prioritized due to the highly specialized fittings required that are often high cost, require regular review, adjustment and replacement (especially for children) with a significant abandonment rate.</p>
<p>Upper Limb prostheses</p>	<p>Upper limb prostheses including cosmetic or myoelectric are used to replace a missing or absent upper limb but have a high rate of abandonment given the challenges with replacing the function and look of an upper limb. Myoelectric prostheses in particular are high-cost devices which require extensive training and regular replacement. Affordable functional additions like hooks or soft sleeves⁶⁴ may be exceptions where there is sufficient technical support available for fitting.</p>
<p>Motorized wheelchairs</p>	<p>Motorized wheelchairs including add-ons have not been prioritized because of high cost and challenges including of physical space within shelters, typical terrain and problems with adequate charging.</p>
<p>Electric powered surgical beds</p>	<p>Electric powered surgical beds have not been prioritized due to challenges of 24-hour electricity supply and high cost.</p>
<p>Electric powered pressure mattresses</p>	<p>Electric powered pressure mattresses have not been prioritized due to challenges of 24 hours electricity supply and high cost compared to non-electrical alternatives which have been prioritized.</p>
<p>Wearable Amplification and Personal Sound Amplification (PSAPs)</p>	<p>Wearable Amplification and Personal Sound Amplification (PSAPs) are appropriate for mild hearing loss only and are hence not prioritized by UNHCR who will target moderate or higher hearing loss.</p>

⁶⁴ For example, [Adult & Children Prosthetics | Koalaa \(yourkoalaa.com\)](https://www.koalaa.com)

Appendix A. Assistive technology that can be provided by trained non-specialists (in alphabetical order)

Absorbent continence products



Description: Body-worn absorbent products (single-use) move moisture away from the skin and absorb and contain moderate or heavy urine loss or faeces. They are intended to protect the user's skin, clothes and nearby environment, thereby preserving the user's dignity, comfort and quality of life, and if applicable, that of their caregiver(s), to promote social inclusion.⁶⁵ More information can be found on page 27 of the [WHO Assistive product specifications and how to use them](#) document.

Training: Health staff that have undergone the [WHO TAP Training](#) can provide absorbent continence products. The training details selecting the correct type and education that should be given to users.

Prioritisation: Any person with incontinence or mobility limitations that prevent independent toileting needs to see a health professional who can assess the cause and help plan treatment and/or management. Particularly for people who are not able to control bowel or bladder function, incontinence products are needed.

Other Considerations: Challenges with toileting and incontinence can have a profound impact on an individual and yet are often overlooked and undiscussed due to stigma and a lack of awareness. Individual assessment is important wherever available and encouragement of safe and appropriate solutions that have been developed by people and their carers (e.g. bed pans, urinals for night-time toileting). Also important are skin protection and infection control (especially in the case of pressure wounds). Washable continence products are increasingly becoming available and may be indicated where washing facilities are available and supply chain / disposal of single-use products is problematic.

This [web page](#) from Leeds University contains useful additional information.

⁶⁵ More information can be found on pages 27-31 of WHO [Assistive product specifications and how to use them \(who.int\)](#)

Bed pans & urinals



Description: Bed pans and urinals are products that help a person toilet while in bed and can be useful at night-time or for those that are unable to mobilize or communicate a need to mobilize with assistance.

Training: Health staff that have undergone the [WHO TAP Training](#) can provide absorbent continence products. The training details selecting the correct type and education that should be given to users.

Prioritisation: All people with incontinence and / or mobility limitation which prevents access to latrines or commode should have bed pans/urinals available to them. For someone who is not able to control bowel or bladder function, catheters or incontinence products are likely to be needed.

Other Considerations: Bed pans and urinals can be fashioned from locally available products which should be safe to use and facilitate dignity.

Communication books/boards/cards



Description: Communication boards and books enable the user to communicate using symbols, words, pictures or objects. The user looks at, points to, or otherwise selects items on the communication board or book. The communication board or book adds to or replaces spoken communication.

Training: Health staff that have undergone the new version of the [WHO TAP Training](#) (expected to be available late 2024) can provide communication boards and books.

Prioritisation: Communication boards and books are intended for use by children and adults with limited or no spoken communication, such as due to a neurological problem, hearing loss or intellectual disability, among others.

Other Considerations: Communication boards and books can be produced in a local language or customised for individuals with symbols available such as [Global Symbols](#).

Crutches (elbow and axilla)



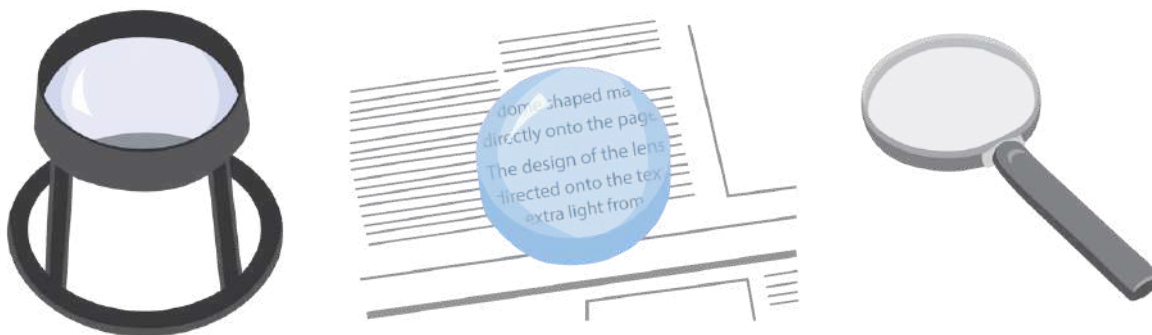
Description: Crutches are walking aids with elbow, underarm or forearm support and a single shaft fitted with a tip (ferrule). Pairs of crutches are intended for use by children and adults to support balance or weightbearing through the leg(s). More information can be found on page 44 of the [WHO Assistive product specifications and how to use them](#) document.

Training: Any health staff that have undergone the [WHO TAP Training](#) can provide crutches. The training details selecting the correct mobility device, screening for contraindications, adjusting it to the correct height and education that should be given to users.

Prioritisation: Crutches are low cost and have potential high impact. They are appropriate for mobilization when a person cannot weight bear on a single limb, or when there is reduced weight bear on both limbs or where offloading of a limb is required during walking and where they can increase function due to a lack of strength, limitations to balance and pain.

Other Considerations: Axilla (underarm) crutches although still common in many parts of the world should only be provided when specifically requested by users for short term use as they have potential to cause damage to the nerves of the arm. Hence elbow (or forearm) crutches are preferred.

Magnifiers



Description: Optical magnifiers can produce enlarged images of close objects and print. They are intended for use when vision cannot be fully corrected with spectacles or other treatments.

Training: Provided by trained personnel as an adjunct to or for use with spectacles. [WHO TAP training on Vision assistive products and Magnifiers and Telescopes](#).

Prioritisation: School age children, adults with low vision and older persons.

Other Considerations: A low-cost intervention that can have high impact for those with moderate to severe vision impairment.

⁶⁶ More information about optical magnifiers can be found on page 73-79 of the [WHO Assistive product specifications and how to use them](#)

Rollators



Description: Rollators are walking aids that can be moved by pushing or pulling. They are intended for use by children and adults to support balance or weightbearing through the leg(s). More information can be found on pages 90 to 94 of the [WHO Assistive product specifications and how to use them](#) document.

Training: Any health staff that have undergone the [WHO TAP Training](#) can provide a walking frame. The training details selecting the correct mobility device, screening for contraindications, adjusting the product and education that should be given to users.

Prioritisation: Rollators are low cost and have potential high impact. They are appropriate for mobilization when a person cannot weight bear on a single limb or where offloading of a limb is required during walking and where they can increase function due to a lack of strength, limitations to balance and pain.

Other Considerations: Rollators for outdoor use can be used also in places with uneven ground.

Toilet and shower chairs



Description: Static chair with backrest that can be placed over toilet or used away from toilet with removable collection bucket. It may have armrests.

Training: Any health staff that have undergone the [WHO TAP Training](#) can provide a toilet and shower chair. The training details selecting the correct size and education that should be given to users.

Prioritisation: Any person that is unable to toilet or shower with safety or dignity.

Other Considerations: Toileting is a pressing concern for people with mobility and/or continence constraints who may not be able to access a standard toilet or shower. Provision of a toilet chair can allow toileting in private and showering with increased dignity and safety. A non-wheeled version is recommended when mobility is provided by other means such as a wheelchair or alternative mobility devices.

Walking frames



Description: Walking frames are walking aids with four shafts, which are lifted by the user. They are intended for use by children and adults to support balance or weightbearing through the legs. More information can be found on page 108 of the [WHO Assistive product specifications and how to use them](#).

Training: Any health staff that have undergone the [WHO TAP Training](#) can provide a walking frame. The training details selecting the correct mobility device, screening for contraindications, adjusting the product and education that should be given to users.

Prioritisation: Walking frames are low cost and have potential high impact. They are appropriate for mobilization when a person cannot weight bear on a single limb or where offloading of a limb is required during walking and where they can increase function due to a lack of strength, limitations to balance and pain.

Other Considerations: Although walking frames with two small castor wheels replacing the front two tips are common in some parts of the world, they are often not appropriate in places where there is uneven ground.

Walking stick/canes



Description: Walking stick/canes are walking aids with a handgrip and single height-adjustable shaft with a tip (ferrules) to provide grip to the ground. Walking sticks are intended for use by children and adults to support balance or weightbearing through the leg(s). More information can be found on page 112 of the [WHO Assistive product specifications and how to use them](#) document.

Training: Any health staff that have undergone the [WHO TAP Training](#) can provide walking sticks. Although a simple device the training details selecting the correct mobility device, screening for contraindications, adjusting it to the correct height and education that should be given to users.

Prioritisation: For those at risk of falls, where (1) offloading of a limb is required during walking and/or (2) they can increase function due to a lack of strength, limitations to balance and pain.

Other Considerations: Walking sticks should be made widely available to those in need given their low cost and potential high impact.

Wheelchair manual for active use with pressure relief cushion



Description: Wheelchair with folding or rigid frame, three or four wheels with large rear wheels, seat and backrest, armrests and footrests. Overall length and wheelbase are similar to or shorter than temporary ('transport') wheelchairs with large rear wheels. Rear wheels and front castors appropriate for urban indoor and outdoor use. Adjustability of back rest height, back rest angle and back rest contouring is important to provide appropriate support and pressure. Footrests should have adjustable height and ability to fold away or be removed. These wheelchairs can be assistant-controlled or self-propelled by hand or foot. A tray table may be a useful addition for children in schools and other educational environments, although it should never be used as a restraint.

Pressure relief cushions (or comfort cushions if appropriate) should be selected or be adjustable to meet the pressure requirements of the individual. They provide postural support, redistribute pressure to protect skin and soft tissue, improve sitting comfort, and reduce the heat and moisture generated when the user is sitting on the cushion. All wheelchairs should be provided with an appropriate cushion.⁶⁷

Training: Any health staff that have undergone appropriate training can provide an active user wheelchair with a pressure relief cushion. The [WHO wheelchair service training package – basic level](#) covers this type of wheelchair. In emergency situations, where there may not be time for staff to take this comprehensive training, the [TAP wheelchairs in emergencies module](#) provides some essential information on selection, fitting, user training and follow up. Any person receiving a wheelchair in an emergency situation, should be followed up as soon as possible by a provider who is fully trained.

Prioritisation: Wheelchairs for long term use for people that cannot otherwise mobilize and use these chairs to either self-propel or are attendant-propelled. These chairs should also be considered for those who can mobilize only very short distances due to fatigue, pain or balance concerns and this situation is likely to persist long term.

Other Considerations: A wheelchair should be selected which matches both the user's needs and their environment (e.g. rough terrain).

⁶⁷ More information about manual active use wheelchairs can be found on page 134, 138 and 140 of the [WHO Assistive product specifications and how to use them](#). Information on pressure relief cushions for long term use can be found on page 116.

Wheelchair - temporary with comfort cushion



Description: Wheelchairs fitted with an appropriate cushion provide wheeled mobility with a seating system to limit areas of high pressure and rely on an assistant to move around. These wheelchairs are intended for short-duration transport and should not be provided for daily use to those with mobility impairments. More information can be found in the [WHO Assistive product specifications and how to use them](#) on page 132 (Transport Wheelchair) and page 118 (Comfort Cushion).

Training: Any health personnel who has undergone appropriate training can provide a wheelchair-transport with comfort cushion. The WHO 2012 [Wheelchair service training package – basic level](#) covers this type of wheelchair. In emergency situations, where staff may not have time to take this comprehensive training, the [TAP wheelchairs in emergencies module](#) provides some essential information on selection, fitting, user training and follow up. Any person receiving a wheelchair in an emergency situation, should be followed up as soon as possible by a provider who is fully trained.

Prioritisation: Temporary wheelchairs should only be used for transport of those with short term mobility constraints (such as post surgically). It is to be used mostly indoors and for people who do not require posture support or pressure relief.

Other Considerations: The wheelchair (temporary) with comfort cushion is not appropriate for long term use and has limited adjustability, manoeuvrability, and ability to protect against harmful pressures for those with sensation loss. Caution should be practiced when temporary wheelchairs are provided to prevent inappropriate long-term use. Wheelchairs should be selected that are appropriate for the environment with adequate width of the wheels particularly important.

White canes



Description: White canes are long rod-like devices intended for use by children and adults with blindness or low vision. They give the user information about the environment they are moving through, such as obstacles in their path, stairs they are coming to, curb edges they are approaching, and many other aspects of their environment that must be dealt with. The tip should have a 360 ° turn roller or marshmallow-style nylon tip 2–3 cm thick.⁶⁸ The body of the white cane is covered with reflective tape to make the user visible.

Training: White canes should be provided by appropriately trained staff, who can teach the person how to use it safely and effectively.

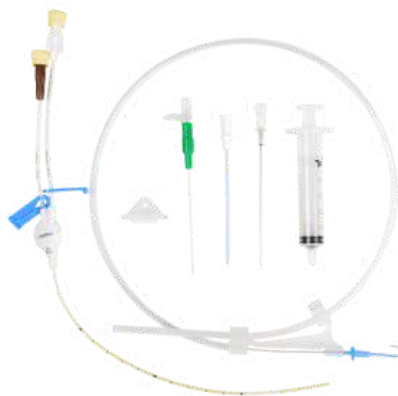
Prioritisation: People with blindness or low vision.

Other Considerations: Not to be confused with walking canes which offer support, this product provides information about the environment to the user. White canes are used by persons who can walk independently with ease. Persons using these devices may have dual sensory loss (including hearing impairments), and for those, some canes can have alternating colours, for example, of white and red, indicating both vision and hearing loss.

⁶⁸ More information about white canes can be found on page 151 of the [WHO Assistive product specifications and how to use them](#)

Appendix B. Assistive technology that must be provided by specialist providers (in alphabetical order)

Catheter kits



Description: A urinary catheter is a tube placed in the body to drain and collect urine from the bladder. Catheter types vary and the type should be medically recommended for the individual.

Training: These kits have been designed to ensure people with neurological disorders who already use catheters have a supply of them in an emergency situation. It is therefore assumed that the person has already received training in the use of the catheter.

Prioritisation: All people in need of catheterization following a medical assessment should be provided with catheter kits as needed.

Discussion: Best practice is for single use catheters. Poor cleaning techniques can increase the chances of contamination and infection. However, infection risk with re-usable catheters does not increase when good hygiene techniques are used. This access to clean water and soap and proper training for the user and support persons to ensure adequate use and avoid infections.

The World Health Organization team for Access to Assistive Technology (ATA) has developed information leaflets for catheter use. Contact them for further information: assistivetech@who.int

Clubfoot braces (as part of clubfoot service)



Description: A clubfoot brace with two boots attached to a bar, which hold the feet in abduction (apart), dorsiflexion (up) and external rotation (rotated outward). The boots should have a heel cup or well-rounded heel counter and can have an inspection hole at the rear to ensure the foot is flat on the bottom of the boot. They are also known as foot abduction brace/orthosis.⁶⁹

Training: Clubfoot braces are usually applied by trained orthotists, nurses, orthopaedic technicians or physiotherapists within a dedicated clubfoot service that uses the Ponseti approach.

Prioritisation: Babies with clubfoot that go through the Ponseti protocol for treatment of clubfoot in infancy should wear a clubfoot brace for 23 hours a day for 3 months. Thereafter they should wear it for 4-5 years while sleeping.

Discussion: Clubfoot braces should be available for all children that have undergone the Ponseti protocol for management of clubfoot and should not be provided as a standalone treatment. The Ponseti treatment for clubfoot is a minimally invasive approach that involves serial manipulations, casting, an Achilles' tendon release, and bracing to correct the deformity. The process begins with the serial manipulation of the foot, which is then placed in a series of plaster casts, changed weekly, to maintain the correction and stretch tight structures. After the casting phase, a foot abduction brace is used to maintain the corrected position and prevent relapse. A clubfoot brace is a critical element to maintain correction of corrected feet. Ideally the clubfoot brace should be available through the treating dedicated clubfoot clinic to allow follow-up. Different sizes of braces are required because the brace is changed as the child's foot grows. In cases where follow up by the treating clinic is not possible follow up should be arranged by telehealth to a dedicated clubfoot clinic.

⁶⁹ More information about clubfoot braces can be found on page 38 of the [WHO Assistive product specifications and how to use them document](#) or from the [Global Clubfoot Initiative](#)

Hearing aids



Description: A hearing aid typically incorporates microphone(s), receiver, amplification unit and power supply and works with an ear coupling system such as tubing (standard or slim) and an ear-mould or ear insert. It is powered by conventional or rechargeable batteries inside the device. Hearing aids vary in power and pattern of amplification depending on the degree, configuration and type of hearing loss.

Training: Training in line with national standards.

Prioritisation: Children and adults who experience varying degrees of hearing loss.

Other Considerations: Should be provided by qualified staff as hearing impairment can have multiple causes including disease that should not be treated by amplification of sound. After receiving the hearing aids, follow up is required to ensure that the device adjusted properly.

Lying support and postural positioning tools



Description: Lying support and postural positioning tools such as cushions, wedges and bolsters can prevent and accommodate contractures and reduce pressure in lying positions.

Training: Such positioning should be managed by a qualified rehabilitation professional.

Prioritisation: For those with contractures, prominences and other deformities requiring specific pressure and postural management.

Other Considerations: A skilled rehabilitation worker (generally physiotherapist or occupational therapist) needs to assess for and provide appropriate lying support and postural positioning tools to avoid deterioration of position. Carers must be adequately trained to use these correctly.

Orthoses lower limb



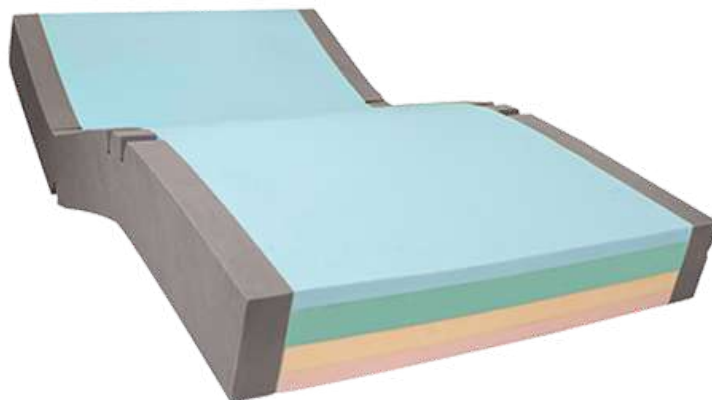
Description: Lower limb orthoses are externally worn assistive products, which are often but not always custom made, which modify the neuro-muscular-skeletal system. Lower limb orthoses can control and influence joint movement to prevent deformity progressing and to improve mobility and function.

Training: Orthotists should ideally be trained according the standards described by the International Society for Prosthetics and Orthotics (ISPO) See the [ISPO website](#) for detailed information. If fully trained staff are not available, then efforts should be made to ensure the quality of the provider by other means.

Prioritisation: People with chronic long-term neuro-muscular-skeletal conditions, injuries and deformities (e.g. stroke, cerebral palsy, polio and other muscle weakness). Those that have been previous users of an orthosis may need replacements when a device breaks and cannot be repaired.

Other Considerations: Not everyone with lower limb deformity will benefit from an orthosis, but an appropriate well-fitting device can improve function, reduce pain and prevent progression of deformity. The cosmetic aspects of an orthosis should be considered before it is prescribed as some will reject the orthosis for this reason. Other mobility assistive devices might also be prescribed in conjunction, in order to aid functioning.

Pressure relief mattress



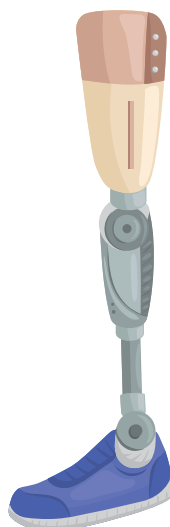
Description: A high quality nonelectric pressure relieving mattress with zones of foam with different densities (soft on top, graduating to firmer below) that is waterproof to better manage possible incontinence.

Training: Pressure mattresses are provided by trained rehabilitation staff.

Prioritisation: For those at high risk of – or experiencing – pressure sores due to sensation loss, inability to reposition or lack of ability to communicate need to change position.

Other Considerations: Lying pressure management assessment should consider factors such as the ability to feel harmful pressure (sensation), the ability to move and alter position in bed to change pressure distributions and the ability to communicate the need to be moved if needed. Prevention of pressure sores is critical for people with spinal cord injuries and others in need of pressure management.

Prosthesis lower limb



Description: A lower limb prosthesis is a replacement device for an amputated (or missing) foot or leg. Prostheses should be functional to allow walking and standing as well as cosmetically acceptable in terms of shape and colour.

Training: Prosthetists should be trained according to the standards described by ISPO. See the [ISPO website](#) for detailed information. If fully trained staff are not available, then efforts should be made to ensure the quality of the provider by other means.

Prioritisation: People with newly amputated limbs should be considered for referral for assessment. Ideally people with one amputation can stand on their remaining limb for 10 mins. Long delays in fitting after amputation will lead to less successful outcomes. A prosthesis for purely cosmetic reasons should not be prioritised.

Discussion: Prosthetic limbs will need regular review and adjustment to maintain an adequate fit and often other mobility solutions are needed in addition to the prosthesis (e.g. crutches, wheelchairs). Design and componentry that is low cost, durable and adjustable should be encouraged.

After receiving the prosthetic device, users need to go for several days gait training for improving mobility. Prior and during this period, users might benefit from other assistive products to aid in functioning and recovery.

Spectacles (+filters and protection)



Description: Devices which offer distance and near vision correction and protection of the eyes through filters. Frames and lenses which are durable, offer some adjustability and are scratch resistant.⁷⁰

Training: In compliance with national standards which may or may not allow premade reading glasses to be sold without eye examinations. See [WHO TAP training on Vision assistive products and Reading glasses](#).

Prioritisation: Vision below 6/9 should result in subsidized provision of spectacles. Adults with presbyopia (age-related loss of near vision) needing plus powered lenses for near vision tasks like reading and sewing (these can be provided by non-specialists).

Other Considerations: Screening for low vision in school age children and older persons with availability of screening to others through advertisement.

⁷⁰ More information about spectacles can be found on page 87-89 of [WHO Assistive product specifications and how to use them](#)

Orthoses upper limb



Description: Upper limb orthoses provide support or limit movement to part of the upper limb to prevent deformity or increase function. They can be worn for short periods after injury or form part of longer-term treatment plans.

Training: Simple upper limb orthoses can be provided by health professionals while custom made devices should be provided by specially trained occupational therapists, physiotherapists or orthotists.

Prioritisation: Upper limb orthoses should be made available as part of the comprehensive response for people with upper limb impairments.

Discussion: Upper limb orthoses are low risk if provided by appropriately trained staff.

Wheelchair manual for active use with postural support



Description: Wheelchair with folding or rigid frame, three or four wheels, push-handles, rigid seat and backrest, armrests or tray table, and footrests. Range of integrated or included postural support devices and posture support cushion. Large-range adjustable recline and large-range adjustable and variable (dynamic) tilt. Rear wheels and front castors appropriate for indoor and outdoor mixed terrain. A tray table may be a useful addition for children in schools and other educational environments.⁷¹

Training: Wheelchairs with postural support should be provided by someone that has completed the WHO Wheelchair Service Training Package – Intermediate Level and is able to assess for individual postural support needs perform the required modifications.

Prioritisation: For those that cannot otherwise mobilise and who require postural support.

Discussion: A plan to adequately train staff to assess and appropriately adjust wheelchairs may be required given the need for skilled fitting of people with long term needs. Tray tables can be useful for children as school desks can be a challenge, but tray tables should not be used as a restraint. Selection of wheelchairs that are appropriate for the environment of use is critical, including for use over rough terrain. Follow up should be prioritised for growing children as their measurements rapidly change and frequent adjustment might be required.

⁷¹ More information about wheelchairs with postural support can be found on page 142 of [WHO Assistive product specifications and how to use them](#)

Appendix C. Specialised rehabilitation services (comprehensive response)

This appendix contains some information about specialized services that may be relevant in refugee contexts.

Centre-based rehabilitation (physical therapy / occupational therapy)

Centre based rehabilitation provides opportunities for focused one on one or group rehabilitation by physiotherapists, occupational therapists and /or speech therapists in a dedicated rehabilitation space that can be stand alone or connected to another health facility. Centre-based rehabilitation should adhere to minimum technical standards and recommendations detailed by WHO.⁷²

In rehabilitation centres, a range of essential equipment and consumables should be made available to support patients' recovery and functional independence. This includes items such as assistive products specified in this guidance and, in addition, therapeutic exercise equipment such as resistance bands, balance boards, and exercise balls to support motor skill development. Functional training tools like stairs, ramps, and parallel bars will also support rehabilitation of activities of daily living. Moreover, adaptable furniture and ergonomic accessories ensure a conducive environment for therapy sessions. Lastly, items for assessment and monitoring, such as goniometers, dynamometers, and body composition analyzers, will support tracking progress and adjusting treatment plans accordingly. The [Minimum technical standards and recommendations for rehabilitation in emergency medical teams](#) provide suggested lists of equipment and consumables in section 3.4.

Physiotherapists should ideally be trained by schools accredited by [World Physiotherapy](#) while occupational therapists should be trained by [World Federation of Occupational Therapists approved education programmes](#).

Clubfoot services (CTEV)

Congenital talipes equinovarus (CTEV), commonly known as 'clubfoot' is a congenital condition, affecting around 1 in 800 births. Screening for clubfoot should occur within primary health care. Most cases of clubfoot can be successfully treated with the Ponseti method, a low-cost and minimally invasive treatment protocol. Left untreated, including in situations of forced displacement, clubfoot typically leads to lifelong impairment where the feet are rigid and turned inward and down. Children born with clubfoot should, ideally as soon as possible after birth and within the first year of life, visit dedicated local clubfoot services that utilise the Ponseti approach. Treatment for club foot involves serial casting, surgical cutting of a tendon (tenotomy), and wearing of a foot abduction brace for several years. In infants, the brace-wear protocol is for 23 hours per day for the first three months, and later only at night during sleep until the child is four to five years old. This requires involvement of multiple professions including physiotherapists, orthopaedic surgeon and orthotists. When clubfoot is detected in a child older than one year a review by the clubfoot service should be done to choose the best management. The corrective treatment and bracing may need to be personalised. If the Ponseti

⁷² WHO, [Minimum technical standards and recommendations for rehabilitation in emergency medical teams \(who.int\)](#)

protocol is not applied as an infant, prolonged treatment and /or surgery will likely be required later in life that often results in a rigid and less functional foot than can otherwise be achieved.

If there are no services that use the Ponseti approach, the [Global Clubfoot Initiative](#) (GCI) is a key contact for advice about local partners as well as training and education for providers. Assistance of local partners to develop club foot services should follow the approach of [RunFree 2023](#) and the CGI. Availability of the foot abduction brace (see list of priority devices) should ideally be coordinated by the club foot service to ensure quality and adequate follow-up.

Developmental delay carer education (Ubuntu and other similar initiatives)

The [Ubuntu](#) programme aims to build confidence, competence and resilience in parents and caregivers of children with developmental delay, regardless of the cause. The programme does this through education, advice, peer support and empowerment. The package can be provided in settings where other services are lacking but can also run in parallel to existing formal services. The twelve-week Ubuntu programme is co-facilitated by a healthcare worker and a caregiver of a child with a disability. The co-facilitating parent should previously have been a participant in the programme. Healthcare workers, such as nurses, physiotherapists or community health workers, who facilitate the programmes should have completed a Training of Trainers. The module on feeding should be facilitated by a health professional with adequate experience.

Eight modules provide practical support on building understanding, providing care and the health aspects of developmental delay. Additional modules focus on human rights, self-advocacy and community participation. Ideally the programme should be run in a safe, child friendly space no more than one hour from where participants live.

While primarily associated with health conditions such as cerebral palsy, the programme has been adapted for children affected by the Zika virus. There is a version for younger children (under two years of age).

Hearing rehabilitation

In humanitarian settings, there is often limited awareness and identification of hearing impairment. Acoustic trauma is common in those that have experienced conflict. Poor sanitation can increase disease that impacts hearing. Refugees and other displaced people with previous hearing impairments can face additional challenges due to accents, dialects, and languages (including sign language). People with hearing impairment may also encounter safety concerns and have increased risk of exploitation and abuse.

Primary health facilities should have the ability to screen for hearing impairment, e.g. with a simple screening app like [hearWHO](#), the Hearing Screening App and refer to hearing centres (or visiting

hearing services). Hearing centre services should include diagnosis and hearing aid provision if appropriate. For more detailed assessment in people with complicated conditions, referral to an audiologist / otolaryngologist is needed.

Pre-programmed hearing aids require less training but still require services for successful use (education, problem solving etc.). Pre-programmed hearing aids are available from the [UNICEF Supply Catalogue](#). Wearable Amplification and Personal Sound Amplification (PSAPs) are appropriate for mild hearing loss only and should generally not be prioritized over interventions that target moderate or higher hearing loss

Prosthetic and orthotic services

Prosthetic and Orthotic services are provided by specialists who ideally have been trained by [ISPO accredited institutes](#). Key partners who operate such services include the International Committee of the Red Cross (ICRC) or NGOs like Humanity and Inclusion. In some settings, local partners can be found. Provision of a prosthesis or orthosis should be embedded in multidisciplinary care within a rehabilitation service.

Services for people with communication difficulties

[Total Communication](#) is a strategy that can assist with children and adults and can be employed by skilled rehabilitation workers. It involves using all available modalities to achieve communication for an individual and can be employed by family and carers as well as treating rehabilitation workers.

Smart phones often have various inbuilt tools that can assist with communication including magnifiers, photography, text to speech, speech to text, variable volumes of playback language translation apps, and others. Individuals can be encouraged to use the capabilities of their existing smart phones to improve communication. Communication boards can be also locally produced, using locally relevant words and pictograms to ensure basic communication. The use of these boards has also proven efficient to facilitate communication in emergency rooms and for persons with respiratory diseases where respiratory gear can prevent oral communication.



Photo caption: a communication board including illustrations and key words to facilitate information and communication, respectively.

Source: UNICEF [Health and HIV/AIDS: Including children with disabilities in humanitarian action \(unicef.org\)](#)

Strategies for persons with feeding difficulties

Development and humanitarian professionals should plan for adequate nutritional needs of Injured persons, persons with disabilities, older persons and other individuals who require daily care support are more likely to experience food insecurity. These profiles and their families or adequately overcome possible discrimination affecting food access. Some key aspects to consider include physical access to food, specific nutritional risks including difficulties chewing and swallowing (leading to reduced food intake and risk of choking), inappropriate positioning when feeding (lying on back increases risk of aspiration of fluids and choking), reduced mobility affecting access to food and sunlight (affecting Vitamin D status), and constipation. Involvement of health staff is important to plan individual assistance for those with extra or specific nutritional needs. Provision of assistive technology can be considered on a case-by-case basis, including implements to support feeding, such as adapted cutlery and cups, manual food processors, etc.⁷³ Food assistance and rations may need to be adapted for those who require a modified consistency such as smooth pureed food that is easier to swallow. Rehabilitation practices can provide additional skills for carers and support in gaining independence and autonomy of persons with feeding difficulties.

Vision services

Poor vision is usually a hidden impairment with substantial individual, physical, social and psychological impacts. It is therefore important to identify those that would benefit from assistive devices and rehabilitation. See [WHO TAP training module on vision](#). This requires general eye examination and targeted screening for the detection of congenital and/or acquired eye conditions of school age children and older persons. Those with presenting distance vision at screening below 6/12 should be referred for an eye examination by an optometrist, orthoptist, or ophthalmologist. Presenting distance vision below 6/9 should result in spectacles (or magnifiers) being made available. Referral for cataract surgery should be considered as because of its relatively low cost and high impact.

Local laws and regulations must be followed. Some countries allow off the shelf provision of reading glasses while other countries have tight control over who can do assess for and provision of spectacles.

Spectacles consist of lenses and frames. They are widely available, though often at significant price mark ups, especially for branded frames. Service provision at scale can reduce the per unit price dramatically. Access to such services may be improved by facilitating visiting services to places where refugees live, including settlement or camps.

Magnifiers can be useful assistive products for those with low vision, to allow reading and other activities that require near vision. Monocular and binoculars also can be used by those with low vision for distance activities including reading of the board at school. For higher powered devices, specialist input would be required, usually by local low vision services.

⁷³ [WHO's online Training in Assistive Products \(TAP\)](#) includes a basic level module on the safe use of modified eating equipment.

Smart phone cameras on own devices can be useful as magnifying tools (either with live image at near or distance or after taking a picture and zooming in). Accessibility settings can be adjusted for ease of use for persons with vision impairments. Smart phone torches can be useful to enhance contrast in the environment or on text in reading materials for persons with vision impairment.

White canes can be provided with little or no training for those with moderate vision impairment. Severe vision impairment requires structured mobility rehabilitation. Devices described in other parts of this guidance should be used to aid screening and assessment such as communication boards for non-verbal persons or those with learning difficulties. Correction of refractive errors through the provision of spectacles and magnifiers has significant effect on quality of life at relatively low cost. Other priority interventions can be found in the [WHO Package of Eyecare Interventions](#).

Wheelchair services

For complex fitting of wheelchairs (beyond basic transport wheelchairs) specialist providers should be engaged. Such providers should have completed the [WHO Basic](#) or [Intermediate Wheelchair](#) training or the local equivalent. Correct fitting will prevent secondary complications and optimise function and independence for the user. Correct use of the wheelchair usually requires a period of training.

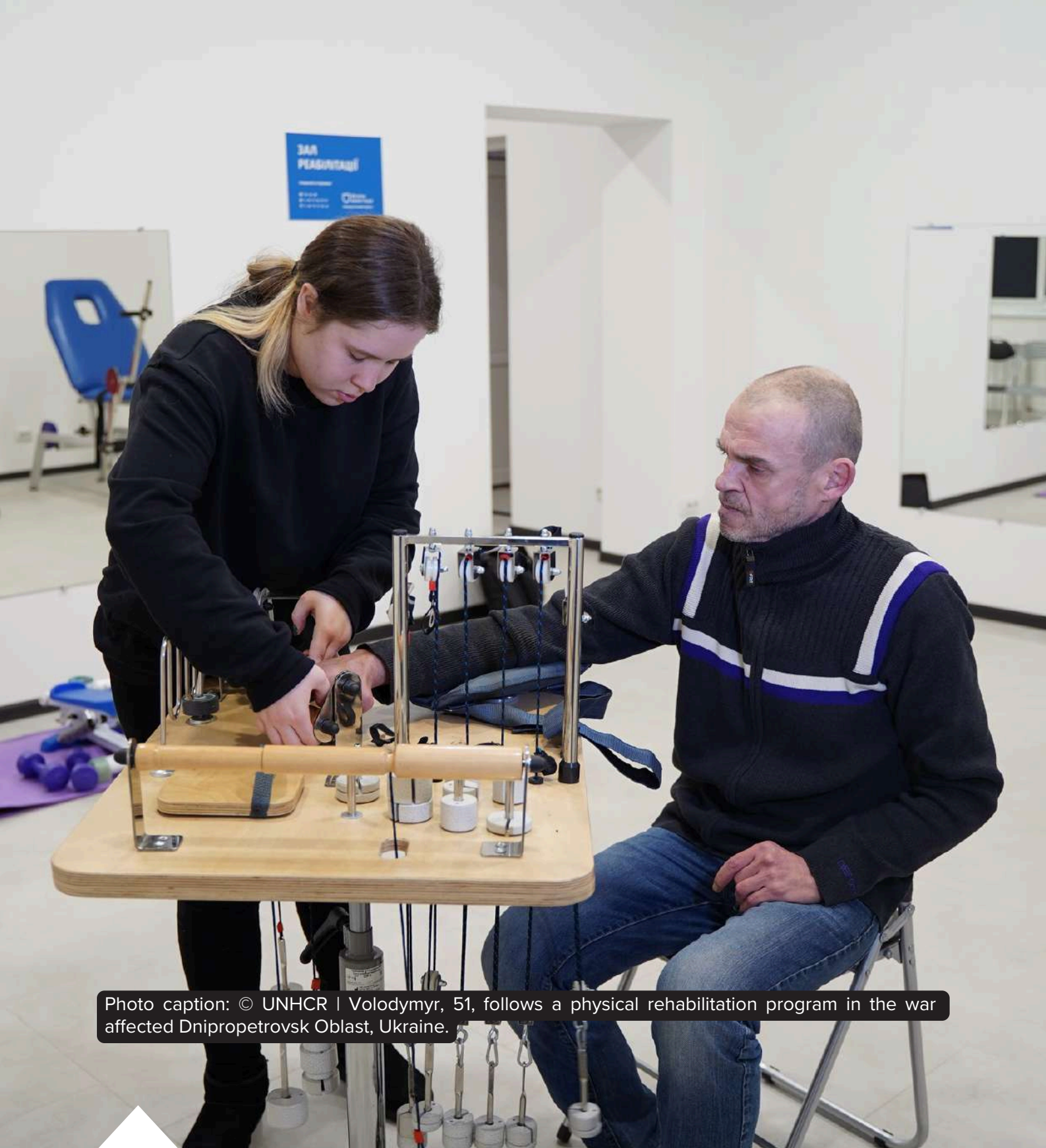


Photo caption: © UNHCR | Volodymyr, 51, follows a physical rehabilitation program in the war affected Dnipropetrovsk Oblast, Ukraine.