

# WHEELCHAIR

## SERVICE TRAINING PACKAGE

For Managers



Reference Manual and Workbook



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**Reference Manual and Workbook**

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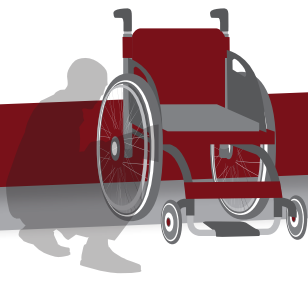
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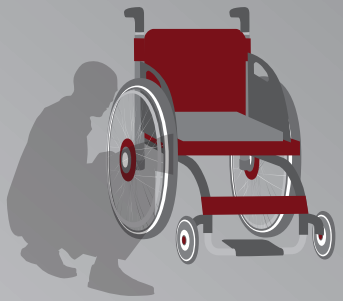
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## Terminology

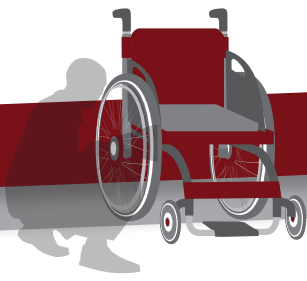
The following terms used throughout the training package are defined below.

<b>Appropriate wheelchair</b>	A wheelchair that meets the user's needs and environmental conditions; provides proper fit and postural support; is safe and durable; is available in the country; and can be obtained and maintained and services sustained in the country at the most economical and affordable price.
<b>Manual wheelchair</b>	A wheelchair that is propelled by the user or pushed by another person.
<b>Postural support device (PSD)</b>	A physical device that provides additional postural support.
<b>Wheelchair</b>	A device providing wheeled mobility and seating support for a person who has difficulty in walking or moving around.
<b>Wheelchair modification</b>	A change made to a wheelchair.
<b>Wheelchair provision</b>	An overall term for wheelchair design, production, supply and service delivery.
<b>Wheelchair service</b>	That part of wheelchair provision concerned with ensuring that each user receives an appropriate wheelchair.
<b>Wheelchair service personnel</b>	Persons skilled in the provision of an appropriate wheelchair.
<b>Wheelchair user</b>	A person who has difficulty in walking or moving around and uses a wheelchair for mobility.



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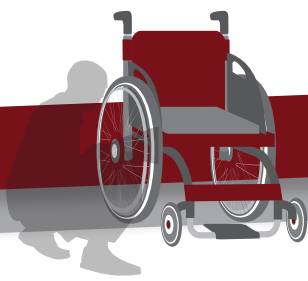
## About the Wheelchair Service Training Package for Managers

### Introduction

Following the release in 2008 of the **Guidelines on the provision of manual wheelchairs in less resourced settings**(1), in 2012 the first package within a range of **Wheelchair Service Training Packages (WSTP)** was released: **the Wheelchair Service Training Package – Basic Level (WSTPb)**(2) This was followed in 2013 by the release of the **Wheelchair Service Training Package – Intermediate Level (WSTPi)**(3). The World Health Organization (WHO) in partnership with the United States Agency for International Development (USAID) has now developed the third part of the WSTP consisting of two sub-packages: **the Wheelchair Service Training Package for Managers (WSTPm)** and **the Wheelchair Service Training Package for Stakeholders (WSTPs)**. This third part of the WHO WSTP is designed to support managers to effectively support appropriate wheelchair provision; and to raise awareness among stakeholders and promote their involvement in establishing appropriate wheelchair provision in their country/region.

The wheelchair is one of the most commonly used assistive devices for enabling personal mobility. For people who have difficulty in walking or moving around, a wheelchair is an essential tool for their mobility, empowerment, dignity and overall well-being. Mobility opens up opportunities for wheelchair users to be independent and to access health care, education, work and employment, and also assists wheelchair users to participate in social and cultural activities. However, WHO estimates that more than 70 million people need a wheelchair and only 5–15% have access to one. In addition, training opportunities for personnel to gain the knowledge and skills needed to effectively deliver a wheelchair are limited.

The importance of mobility is reflected in the United Nations Convention on the Rights of Persons with Disabilities (CRPD)(4), which advocates for “effective measures to ensure personal mobility with the greatest possible independence for persons with disabilities”. To ensure effective personal mobility, wheelchair users need a wheelchair that fits correctly and meets their specific needs; especially lifestyle and environment. This requires an approach responsive to individual needs.



An effective way of meeting the individual needs of wheelchair users is the provision of wheelchairs through a well organized wheelchair provision system that is responsive to the expectations of the users, respects their dignity and is delivered by well trained personnel.

## Target audience

This training package is for all personnel responsible for implementing, managing, and evaluating rehabilitation services, including wheelchair services or wheelchair provision.

Previous experience in wheelchair service management is not necessarily required; however, the workshop has been designed assuming that participants will begin the workshop with general management skills.

## Purpose

The purpose of the overall training package is to create awareness and develop the skills and knowledge of all personnel involved in wheelchair service delivery. WHO realizes that trained personnel alone cannot ensure appropriate wheelchair provision in the country or carry out their responsibilities as outlined in the *Wheelchair Guidelines*, unless and until there is a higher level of involvement to establish or improve wheelchair provision within the country.

This Wheelchair Service Training Package for Managers (WSTPm) provides an overview of the rehabilitation/wheelchair service manager's role in engaging people and leading the implementation of the eight steps of wheelchair service delivery and the issues related to it. This includes the human and physical resources required to provide a wheelchair service; including planning, organizing, staffing, directing, costing/funding, monitoring, and evaluation.

The training package can be delivered in 13–14 hours, although this period may be extended or reduced according to the specific needs and resources available. Delivery of this training package will help the managers to:

- better plan wheelchair provision;
- increase the quality of wheelchair service delivery;
- improve staff retention;
- increase the number of wheelchair users who receive a wheelchair that meets their needs; and
- increase the sustainability of wheelchair provision.



## Scope

The training package includes:

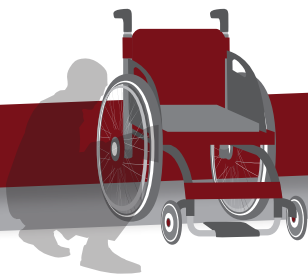
- an overview of the key steps of wheelchair service delivery described in the WHO wheelchair service training packages;
- core knowledge required for wheelchair service delivery:
  - starting a wheelchair service;
  - running a wheelchair service; and,
  - making wheelchair provision sustainable.

## How to use the Reference Manual and Workbook

This Reference Manual gives a summary of the knowledge provided in the Wheelchair Service Training Package for Managers (WSTPm). Participants may use the Reference Manual and Workbook after the training programme to remind themselves of the key points taught in each session during the training. The manual is divided into three sections:

- A. Core knowledge
- B. Starting a wheelchair service and
- C. Running a wheelchair service.

The Reference Manual also includes a workbook, the purpose of which is to develop the skills and knowledge of personnel involved in wheelchair service delivery. The workbook contains exercises that will help to test and develop participants' knowledge and skills. The workbook contains material from lectures, slide presentations and the reference manual; and it is intended that the participants will keep their copy of the Reference Manual and Workbook for future reference, if needed.



## A. Core knowledge

### A.1: What is appropriate wheelchair provision?

Wheelchair provision is an overall term for the design, production, supply and service delivery of wheelchairs. Wheelchairs are one of the most commonly used assistive devices, providing wheeled mobility for people with a mobility disability.

Mobility is an important step towards inclusion. When a person receives an appropriate wheelchair through a service, opportunities for social life, work and education open up. In addition, other family members are freed up to participate in the community and employment.(5)

It is not only individuals and their families who benefit from enhanced mobility. Local and broader economies benefit from having more contributing members. Also, people who have an appropriate wheelchair are less likely to have secondary health complications (for example, pressure sores) and are therefore less likely to need health services.

There is an urgent need for change in order to see more people accessing appropriate wheelchair provision.

### How many people need wheelchairs?

WHO estimates that 1% of any population need a wheelchair. This means that globally more than 70 million people need a wheelchair. This statistic can be a starting point when working out how many people need a wheelchair in each country, district or town. This means that managers do not need to wait for detailed surveys to be carried out in order to begin planning wheelchair provision.

	<b>Population</b>	<b>%</b>	<b>Approximate number of people who need a wheelchair</b>
World population	7 000 000 000	1%	70 000 000
Brazil	203 657 000	1%	2 036 570
China	1 401 587 000	1%	14 015 870
Egypt	84 706 000	1%	847 060
India	1 282 390 000	1%	12 823 900
Nigeria	183 523 000	1%	1 835 230
Russia	142 098 000	1%	1 420 980

## **Conventions, strategies and policies in support of wheelchair provision**

Many people who need wheelchairs still do not have an appropriate wheelchair. Strong advocacy is needed to increase access to appropriate wheelchairs. Managers can use global, regional and national policies to help advocate for the right to mobility on behalf of people with a mobility impairment.

The table below gives examples of conventions, strategies, policies and guidelines that can be advocacy tools for managers.

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<b>International policy</b>	<b>Regional example: the Incheon Strategy</b>	<b>National policies and guidelines</b>
<p>The highest level policy instrument is the United Nations Convention on the Rights of Persons with Disabilities (CRPD).</p> <p>Article 20 of the CRPD says that all people have a right to personal mobility.</p> <p>Other articles of the CRPD reinforce the importance and relevance of appropriate wheelchair provision. These include:</p> <p>A: 19 – Living independently and being included in the community</p> <p>A: 24 – Education</p> <p>A: 25 – Health</p> <p>A: 26 – Rehabilitation</p> <p>A: 27 – Work and employment</p> <p>A: 30 – Participation in cultural life, recreation, leisure and sport.</p>	<p>In 2012, the Incheon Strategy to “Make the Right Real”; for persons with disabilities in Asia and the Pacific was adopted.</p> <p>The strategy has 10 goals.</p> <p>Goal 3 is to enhance access to the physical environment, public transportation, knowledge, information and communication.</p> <p>During the drafting of the strategy, a strong case was made that this goal could not be achieved without access to appropriate assistive devices, including wheelchairs.</p> <p>Therefore, Goal 3 includes a target to halve the proportion of persons with disabilities who need but do not have appropriate assistive devices or products.</p> <p>The governments who have signed Incheon are now committed to develop national plans in order to fulfil this obligation. The Incheon Strategy example shows how international and regional policy can support and encourage the development of national policy.</p>	<p>National planning, policies and guidelines can help to increase the effectiveness and sustainability of wheelchair provision.</p> <p>(6) The development of national policies and guidelines requires collaboration among all stakeholders including people with disabilities, governmental and nongovernmental service providers. The CRPD and relevant regional strategies can support national planning, policy and guideline development.</p> <p>National guidelines can help to define how assistive devices, including mobility devices, should be provided. For example, National Guidelines on the Provision of Assistive Devices were published in South Africa in 2003, providing minimum standards for service steps, training of staff, setting up and management of waiting lists, budgets and provision of repair and maintenance services.</p>

## A.2: Service delivery

Wheelchair services play an important role in wheelchair provision. Wheelchair services work with wheelchair users to find the most suitable wheelchair (from those available) for that user.

### Basic and intermediate level wheelchair services

Every well fitting wheelchair provides the user with some postural support. The backrest, cushion, footrests and armrests provide postural support when adjusted to suit the wheelchair user's size. However, many children and adults need additional postural support in their wheelchair. This means that there needs to be different levels of service delivery.

**A basic level wheelchair service** works with wheelchair users who are able to sit upright without additional postural support.

**An intermediate level wheelchair service** works with wheelchair users who need additional postural support to be able to sit upright comfortably.

It is important for managers of a wheelchair service to define whether their service is at the "basic" level or "intermediate" level. This is because an intermediate service requires: personnel with a higher level of training; a larger range of wheelchairs; more materials and equipment.

#### Meeting mobility and postural support needs appropriately



Clara lives in East Timor. She works in her family's shop, which is at the front of their house. Clara has polio, and needs a wheelchair to move inside the house, to work in the shop, and to move around her village. She can sit upright without any extra support, and uses a manual wheelchair, which has been adjusted and fitted to suit her.

**Clara is an example of someone who can be provided with a wheelchair through a *basic level* service.**

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Ishade is 8 years old and lives in Sri Lanka. She has cerebral palsy. For Ishade, this means she has trouble controlling her arms, legs, head and neck. She cannot sit upright without support. Ishade needs extra postural support in her wheelchair.

**Ishade is an example of someone who should be provided with a wheelchair through an intermediate level service.**

## The eight steps of wheelchair service delivery

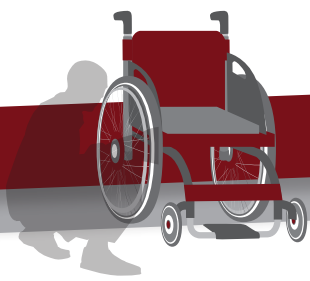
Step	Summary	
<b>1. Referral and appointment</b>	The way that wheelchair users are referred will vary. Users may refer themselves or be referred through networks made up of governmental or nongovernmental health and rehabilitation workers or volunteers working at community, district or regional level. Some wheelchair services may need to actively identify potential users if they are not already receiving any social or health care services or participating in school, work or community activities.	
<b>2. Assessment</b>	Each user needs an individual assessment. This includes gathering information about the wheelchair user's lifestyle, the work they do, where they live, and their physical condition.	
<b>3. Prescription (selection)</b>	Using the information from the assessment, a wheelchair prescription is developed together with the user, family member or caregiver. The prescription details the selected wheelchair type, size, special features and modifications. Also detailed is the training the user will need to use and maintain the wheelchair well.	
<b>4. Funding and ordering</b>	A funding source is identified and the wheelchair is ordered from stock held by the service or from the supplier.	
<b>5. Product preparation</b>	Trained personnel prepare the wheelchair for the initial fitting. Depending on the product and service facilities, this may include assembly, and possible modification, of products supplied by manufacturers or production of products in the service workshop.	

<b>6. Fitting</b>	The user tries the wheelchair. Final adjustments are made to ensure the wheelchair is correctly assembled and set up. If modifications or postural support components are required, additional fittings may be necessary.	
<b>7. User training</b>	The user and caregivers are taught how to safely and effectively use and maintain the wheelchair.	
<b>8. Follow-up, maintenance and repair</b>	Follow-up appointments are an opportunity to check wheelchair fit and provide further training and support. The timing depends on the needs of the user and the other services that are available to them. The service may also offer maintenance and repairs for technical problems that cannot be easily solved in the community.	

## Service delivery models

All wheelchair services should follow the eight steps of wheelchair service delivery. However, there are different ways of delivering the eight service steps, described as service models. A combination of different service delivery models may make up an overall national service. The most appropriate service delivery model/s will depend on the context, and should be decided in consultation with all related stakeholders.

The table below shows some examples of the different models of service delivery.



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### Centre-based service



*Dedicated assessment area*

In a centre-based service, wheelchair users travel to a permanent facility, where trained personnel are available to provide a service.

As a permanent facility, the service may have dedicated personnel and areas for wheelchair service delivery.

Centre-based services can be efficient for personnel; however, it can be difficult for wheelchair users who live any distance from the service to get there.



*Dedicated wheelchair mobility skills area*

### Integrated service



*Wheelchair service integrated with a community health clinic*

Most centre-based services are also “integrated services”. This means that a wheelchair service is integrated with activities of another service or services. For example, wheelchair service delivery could be integrated with a prosthetics/orthotics service, physiotherapy department or health clinic. In this context, if personnel are fulfilling a range of duties as well as wheelchair service delivery, it is important to ensure personnel have sufficient time to carry out all of the activities required of them.

Facilities may be shared, or dedicated space provided. Administration, financial and management functions may be shared.



In this context one area of a workshop is dedicated to wheelchair preparation



## Outreach service



*Outreach locations can vary. Examples include community health clinics, town halls, village meeting places, and the wheelchair user's home*

In an outreach wheelchair service, personnel from a centre or integrated service either travel to wheelchair users' homes or to a central location in another district/region – to meet wheelchair users from that district/region to carry out service delivery.

Outreach service models are usually carried out in partnership with an organization/s in the outreach district/region.

Good coordination with the local organization/s is important. Some training of local personnel or volunteers can help to increase the success of outreach service delivery and increase community-level support.

The advantage for wheelchair users is that the distance they need to travel is less.



Outreach personnel need to be flexible, carrying essential equipment with them

## Mobile service



*Example of a dedicated vehicle for a mobile wheelchair service*

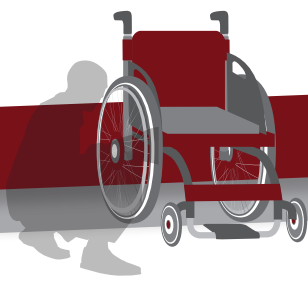
A mobile service is another form of outreach; however in this situation, personnel have a dedicated vehicle that is used to carry the wheelchairs and the tools and equipment needed.

Personnel are able to set up in a wider range of locations, and in this way may be able to reach more wheelchair users.

The ability to carry more tools, equipment, materials and spare parts increases the opportunity to carry out repairs on the spot, and the potential to manage some intermediate level service delivery.



With the use of a dedicated vehicle, personnel are able to pack more of the equipment and tools they need

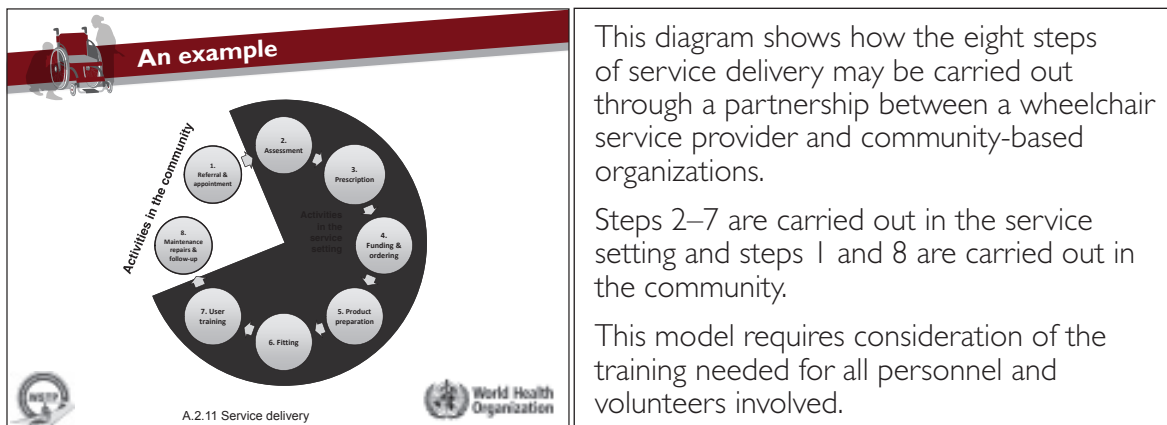


### Collaborative service delivery

Not all of the eight steps in wheelchair service delivery need to be carried out by the same organization. Collaboration between a network of organizations can help to increase the efficiency of the service and also increase access to the full eight steps by wheelchair users.

**Step one (referral and appointment)** necessarily requires collaboration and cooperation among organizations and individuals that make up a referral network for the wheelchair service.

**Step seven (user training) and step eight (maintenance, repairs and follow-up)** can often be provided by a collaborating partner. For example, a network of community-based organizations, or disabled people’s organizations may carry out these steps in the community.

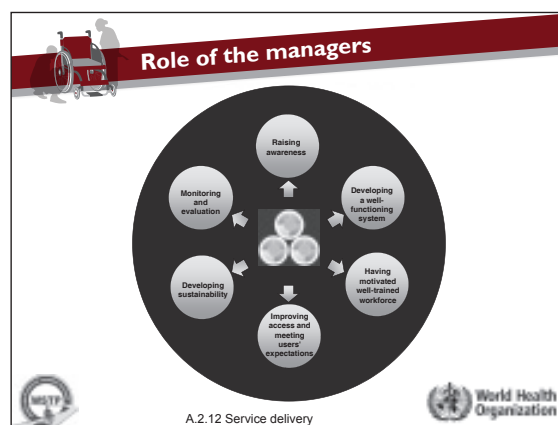


### The manager’s role in wheelchair service delivery

The manager of a wheelchair service is responsible for supporting personnel to deliver the eight steps of service delivery and coordinating the user’s (and their carer/family member’s) progress through those steps.

The manager also has broader roles, which are important for supporting service delivery. These roles include:

- raising awareness of appropriate wheelchair provision;
- improving accessibility;
- increasing training opportunities for wheelchair service delivery personnel;
- developing sustainability – so that wheelchair service delivery is consistently maintained;
- influencing national policy on appropriate wheelchair provision;
- improving the range of wheelchairs available.



## Active involvement of wheelchair users in service delivery

Actively involving wheelchair users in every aspect of wheelchair service delivery will help to improve the outcome for wheelchair users. Some suggested strategies for managers to ensure that wheelchair users are involved in their wheelchair service are to:(7)

- ensure personnel involve wheelchair users as members of the service delivery team in all steps leading to the provision of their wheelchair;
- establish a system within the service to regularly collect feedback from users about their opinion of the service and how it may be improved;
- where possible, recruit wheelchair users as members of the service delivery team. This may mean advertising new positions through the disability sector, and ensuring that all areas of the wheelchair service are wheelchair accessible.

### Wheelchair users on the team in Romania

An NGO wheelchair service in Romania has actively recruited wheelchair users to their wheelchair service delivery teams. Wheelchair users fulfil different roles on the team, depending on their skills. This NGO has seen a huge positive impact through having wheelchair users as wheelchair service personnel. Every member of the team is more aware of the needs of wheelchair users through their daily interaction as colleagues; wheelchair user clients often feel more comfortable sharing their experiences with the wheelchair user member of the team, and the wheelchair user is a role model for others.

### **A.3 Managers who lead change**

Introducing or improving wheelchair service delivery often requires changes within an organization. However, leading change can be difficult. Part of the role of a wheelchair service manager is leading change and some key activities to achieve this are:

- helping to create a shared vision of appropriate wheelchair provision;
- communicating the importance of appropriate wheelchair provision to all related stakeholders including policy-makers, other service providers and potential donors;
- aligning the right personnel and resources;
- motivating, engaging and committing personnel.

#### **Create a shared vision of appropriate wheelchair provision**

Creating a shared vision among all stakeholders about the improvement of wheelchair provision within the country can help to inspire all of the people who need to work together to bring about change. The vision should give a picture of the desired future. For example:

*‘A world in which wheelchair users are included and fully participate in all aspects of life’.*

It is important to enthusiastically share the positive vision so that all staff are sensitized and committed to improve the quality of life of people with disabilities.



## Communicate the importance of appropriate wheelchair provision

To continue to inspire personnel and other stakeholders, managers need to consistently communicate the importance of appropriate wheelchair provision. Managers need to make it clear that introducing or improving wheelchair service delivery is a priority, and that it is urgent. A sense of urgency means that there is a need that cannot be avoided or delayed. People follow their supervisor's priorities; therefore, a manager's actions must create the sense of urgency.

### How to communicate the importance and urgency of appropriate wheelchair provision

- Talk about the global and national unmet need for appropriate wheelchairs; the right to personal mobility; and the benefits to individuals, community and society of appropriate wheelchair provision.
- Discuss progress towards introducing or improving wheelchair service delivery at regular staff meetings.
- Share positive stories of success, for example at staff meetings, and with posters on the service walls.

## Align personnel and resources



Wheelchair services need trained personnel, facilities and resources. All members of the wheelchair service team should:

- be working together in the same direction;
- feel supported with the resources they need to do their job;
- be recognized for their contributions.

**How to align personnel and resources**

- Identify facilities that can be used for wheelchair service delivery.
- Prioritize wheelchair service delivery when allocating personnel time, facilities, equipment and funding.
- Use the shared vision, and the benefits of appropriate wheelchair provision to remind personnel why the service is providing wheelchairs.
- Recognize and reward the good work of personnel on wheelchair service delivery.
- Facilitate personnel to work together as a team.

**Motivate, engage, and commit personnel**

Managers can help to motivate, engage and commit personnel by:

- **Including personnel in planning and implementation** – so that they can contribute their experience and skills; and to help them better understand what the change will involve and their roles in implementing change.
- **Overcoming obstacles together** – so that personnel have a better understanding of the causes of problems and how to solve them.
- **Creating short-term goals and recognizing achievement of those goals** – so that personnel have a sense that their efforts are having an impact and are appreciated.
- **Integrating changes into the organization's systems and culture.** For example, create a culture of celebrating success and encourage people to share successes and positive stories during meetings and breaks. Also, ensure that successful changes are maintained by writing new responsibilities into individual job descriptions and updating organizational policies.



## B: Starting a wheelchair service

### B.1 Accessing services

#### *What is meant by an “equitable service”?*

An “equitable service” is a service that works to make sure that every wheelchair user has an equal opportunity to receive a wheelchair. This includes:

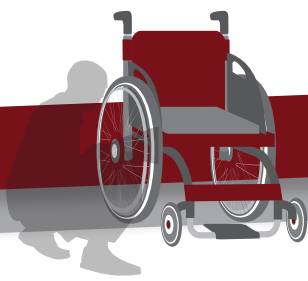
- men, women, boys and girls
- young, middle-aged and elderly people
- people who live close by and people who live further away – for example in rural areas
- people who come from different ethnic or socioeconomic backgrounds.



Equitable services recognize that all people – regardless of their disability, age, gender, religion, wealth, language and ethnic group have an equal right to services.

An equitable wheelchair service is not the same as providing an equal number of wheelchairs to users from different groups (for example, an equal number of wheelchairs to men and women). This is because the needs of different groups may vary.

**Remember:** Accessing a service does not just mean “getting to the service”. It means being able to find out about the service, get to the service or have the service come to them.




There are some groups of people who may find it hard to access services. Some examples are listed below:

- women and girls;
- people who live a long way from the services/people living in rural areas;
- people who are poor;
- children;
- people from different religious or socioeconomic groups;
- elderly people;
- specific groups – for example people with HIV or leprosy may face discrimination.

Managers need to be aware of the different groups in their context who are less likely to be able to access services.

### Referral and appointment

Referral and appointment is the first step in wheelchair service delivery.

Step	Summary	
1. Referral and appointment	The way that wheelchair users are referred will vary. Users may refer themselves or be referred through networks made up of governmental or nongovernmental health and rehabilitation workers or volunteers working at community, district or regional level. Some wheelchair services may need to actively identify potential users if they are not already receiving any social or health care services or participating in school, work or community activities.	

Effective referral requires good links between a wheelchair service and the community; as it is people in the community who will identify and refer wheelchair users to your service. Different individuals and organizations that are likely to identify wheelchair users and refer them to your wheelchair service are:



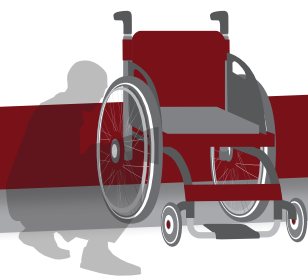
- local hospitals;
- community health centres;
- community-based rehabilitation networks;
- village/council/church leaders;
- disabled people's organizations;
- other wheelchair users;
- doctors/nurses.

### **What can managers do to build a referral network?**

- Identify the referral sources (individuals and organizations) in your area.
- Discuss with wheelchair service staff what information referral sources need to be able to identify wheelchair users who need a wheelchair, and how to refer them to the service.
- Prepare (or support personnel to prepare) handouts/brochures that provide the information referral sources need.
- Visit (or support personnel to visit) potential referral individuals or organizations to talk about the wheelchair service.
- Hold an open day at the wheelchair service for wheelchair users and referral sources.
- Run referral network training for referral sources.
- Consider developing a referral form that referral sources can complete. Ensure that any forms are simple; ensure your service responds to the referral (by providing the wheelchair user referred with an appointment); and give positive feedback to referral sources that use the form.

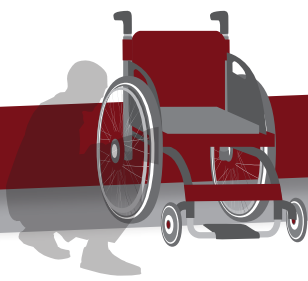
## **Increasing equitable access to services**

Managers play an important role in helping to increase equitable access to services. The following table provides some suggestions for how to increase access for different groups.

**WHEELCHAIR****SERVICE TRAINING PACKAGE**

<b>What can managers do to increase equitable access to services?</b>	
<b>For women and girls</b>	<ul style="list-style-type: none"> <li>• Make sure information about the service is available in different ways – for example through the radio, simple text brochures/posters, and visual images.</li> <li>• Make sure that women are pictured in publicity about the service as well as men.</li> <li>• Identify women wheelchair user role models who can speak about the importance of wheelchairs for women publicly and in the community.</li> <li>• Speak to community leaders about how wheelchairs are equally important to women, children and men.</li> <li>• Support and encourage women's participation in all levels of wheelchair services, including management and leadership positions.</li> <li>• Provide disabled people's organizations with information about the wheelchair service and emphasize that women and men both need wheelchairs for mobility.</li> <li>• When talking about the wheelchair service always say that the service is for men, women and children – not just for "people".</li> </ul>
<b>For children</b>	<ul style="list-style-type: none"> <li>• Make sure that information about the service is available at places that parents of a child with a disability may visit – for example, community health clinics, rehabilitation services, market places, community centres, churches, mosques, and temples.</li> <li>• When talking about the wheelchair service always say that the service is for men, women and children – not just for "people".</li> <li>• Provide education and information about the service to people who may treat children with a disability – for example doctors, nurses, community health workers.</li> <li>• Make sure that children are pictured in publicity about the service as well as adults.</li> <li>• Explain the benefits of providing wheelchairs to children at an early age whenever talking about the service. Also explain the benefits for the families/carers of children that the provision of a wheelchair provides.</li> </ul>
<b>For people who are poor</b>	<ul style="list-style-type: none"> <li>• Make sure that services are as cost effective as possible.</li> <li>• Identify ways to provide financial support for wheelchair users who are unable to pay for transport to wheelchair services, or are unable to pay for their wheelchair (if there is a charge). For example, establish a wheelchair fund.</li> </ul>
<b>For people who are elderly</b>	<ul style="list-style-type: none"> <li>• When talking about the wheelchair service always say that the service is for all people – including elderly people.</li> <li>• Include pictures of elderly people using wheelchairs in publicity about the service.</li> <li>• Explain the benefits of a wheelchair for elderly people, and for their families, when talking about the wheelchair service.</li> </ul>



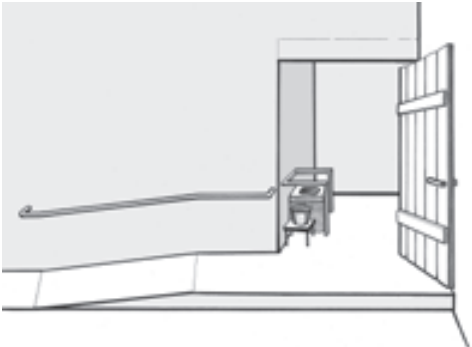
<p><b>For people who live a long way from the services/people living in rural areas</b></p>	<ul style="list-style-type: none"> <li>• Make sure that information about the service is available in rural locations – for example rural health clinics, market places, community centres, churches, mosques, and temples.</li> <li>• Provide information about the service to people who work with people living in rural areas – for example community-based rehabilitation workers.</li> <li>• Identify ways to assist rural wheelchair users with transport if the service does not offer outreach. For example – financial assistance with transport, working with other organizations that can help to transport people to the service.</li> <li>• Find out if it is possible to offer accommodation for wheelchair users visiting the service from rural locations.</li> <li>• Provide outreach services to rural areas.</li> <li>• Train people working in rural areas (for example community health workers) how to support wheelchair users in the community; how to carry out follow-up; and how to help with simple wheelchair maintenance and repairs.</li> <li>• Ensure wheelchairs are available that can be used effectively in rural areas over rough terrain, and provide information on how to make simple adaptations (for example, ramps or smoothing pathways) to make it easier to use a wheelchair in rural areas.</li> </ul>
<p><b>For different ethnic or socioeconomic groups</b></p>	<ul style="list-style-type: none"> <li>• When talking about the wheelchair service always say that the service is for all people – regardless of ethnicity or socioeconomic background.</li> <li>• Include pictures of people from the different ethnic and religious groups in the area served by the service in all publicity about the service.</li> <li>• Where possible, employ staff from different ethnic and socioeconomic groups in the service.</li> </ul>



### B.2 Facilities and equipment

Wheelchair service delivery can be carried out in many locations. However, wherever the service is carried out, some facilities and equipment are needed. Basic level services need less space and equipment than intermediate level services.

#### Facilities and equipment for all wheelchair services (basic and intermediate)

An area for reception and waiting	
<p><b>What space is needed?</b></p> <p>An area for registration and where wheelchair users and their families can wait together is needed.</p> <p>When it is likely that people will have travelled some distance to get to the service, think about where they will be able to get refreshments. In the illustration on the right, a local trader runs a stall outside a local health clinic.</p>	
<p>A quiet area where wheelchair users may lie down while waiting can be very useful. This is particularly important for:</p> <ul style="list-style-type: none"><li>• people who are weak and frail and need to rest during the appointment;</li><li>• children who are tired;</li><li>• anyone identified with a pressure sore in a weight-bearing area of their body.</li></ul>	
<p>An <b>accessible</b> toilet should be close by to the reception and waiting area, as well as near the assessment and fitting area.</p> <p>For more information, refer to the Additional Resources for Managers Manual on the Pen Drive.</p>	

**Recommended equipment:**

Equipment for registration includes: table/desk, chair, telephone, and a place to securely store and file paperwork.

It is helpful to have posters, leaflets, and video resources available in the waiting area. If a service sees a high proportion of children it is helpful to have some simple toys available while they are waiting.

**An office area for personnel****What space is needed?**

Personnel need a space where they can work and meet together; write notes and safely store records.

**An area to carry out assessment and fitting****What space is needed?**

A relatively quiet and private space is needed where wheelchair users can be assessed by personnel, and where wheelchair fitting can be carried out.

The space needs to be wheelchair accessible, allow enough room for family members to be present, and there should be sufficient light.

It is helpful to identify one clear accessible wall to use as a backdrop for assessment and also photos.

In a centre-based service, suggested dimensions for this space are as follows (varies depending on the workload):

- Basic level clinical area: 3 m × 2.5 m.
- Intermediate level clinical area: 4 m × 3.5 m.

Sometimes the clinical area is in someone's home. The emphasis then is on being flexible and adaptable and bringing essential equipment with you.



**An area to carry out assessment and fitting****Equipment:**

- Privacy screens – if more than one client is seen at a time, curtains or screens divide the area for privacy.
- Assessment bench or bed – a firm, stable structure at wheelchair height for the wheelchair user to sit on during assessment. The top surface should have some cushioning to protect the skin, for example EVA or a piece of exercise mat or yoga mat. Position the bed so that the assessor can work with the user from in front or behind.
- Foot blocks – a set of foot supports of different sizes to support the user's feet correctly.
- For more information, refer to the Additional Resources for Managers Manual on the Pen Drive.
- Camera – helpful for recording key stages in the assessment and fitting process (with the wheelchair user's signed permission).
- Tape measure or calipers.

**An area for wheelchair preparation, maintenance and repair****What space is needed?**

A "technical" area is needed for:

- assembly, repair and maintenance of wheelchairs
- fabrication of modifications where necessary.

The space needs to be well lit, ventilated, waterproof and a good temperature for working.

Security is important for hand and power tools. Ideally they should be stored in a lockable metal cabinet.



In a permanent/centre-based service, the technical area should be divided as follows:

- A “clean” area for final assembly of components and product adjustment, and for completing safe and ready checks. Floor space and bench space is needed for this area.
- A “fabrication” area is needed for making modifications and repairs including foam shaping and gluing, general drilling, sanding, filing and painting. Floor space and bench space is needed for this area.

Not all technical work needs to be carried out in the services own technical area. For example, a wheelchair service may outsource some technical aspects, such as sewing of upholstery (to a local tailor) and welding (to a local metal workshop).

### **Equipment:**

- Enough cupboards, shelves and tool boards to keep the area tidy and optimize floor space.
- Tools for assembly and adjustment of wheelchairs and fabricating modifications.
- A materials list for modifications.
- At least one workbench for each technician. It is recommended that at least one workbench is adjustable in height if a wheelchair user is part of the team. The bench should be positioned so that there is space in front or behind for work to be carried out at floor level.

For more information on tools, materials and equipment needs refer to the Additional Resources for Managers Manual on the Pen Drive.

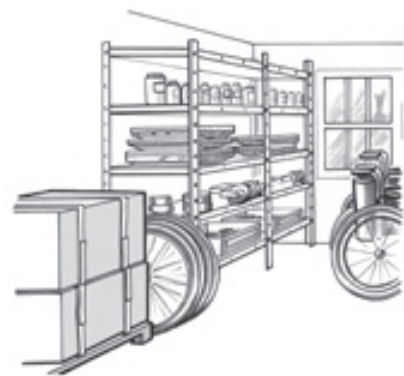
*(Note: The facilities and equipment needed for a wheelchair manufacturing workshop are much more extensive, and are beyond the scope of this manual).*

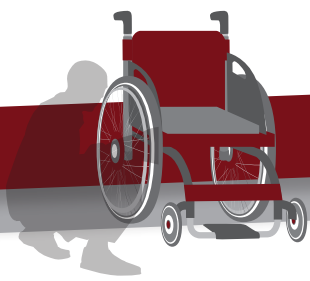
## **An area for storage**

### **What space is needed?**

A secure storage area for wheelchairs, spare parts and materials is needed. The area should be close to the technical area, secure, waterproof, and free from animals/pests. A metal grille over a window gives added security.

If a dedicated room is not possible, set up a dedicated area within a room. In this instance, additional consideration should be given to security.





### Setting up a storage area:

The following suggestions may help in setting up an organized storage area.

- Shelving and racks help to maximize space.
- A walkway between shelving, racks, boxes and assembled wheelchairs improves access and efficiency. The walkway should be kept clear.
- Arrange items by type and size. Having the same items together makes it easier to count for stock control and reordering.
- Small items, such as screws, nuts, washers may be kept in small boxes, one for each article and size. Mark the name of the item on the front of the box.
- Boxes and materials should not be placed directly on the floor or against an external wall as they can easily be damaged by moisture. Pallets are useful to raise items off the floor.
- If there is a window, a grille can be added to improve security.

### An area for user training

#### What space is needed?

A user training area is required for teaching:

- transfers and health education
- wheelchair handling, care and maintenance
- mobility skills.

**Transfers and health education** can be taught in a clinical area, client's home or outreach setting.

#### Equipment:

- Basic equipment such as a bed to practise transfers is helpful.



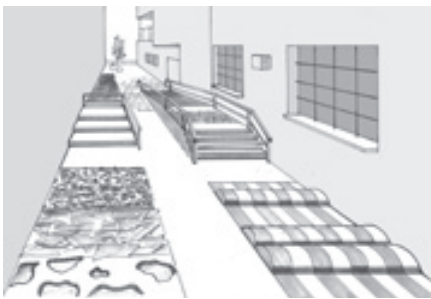


**Wheelchair handing, care and maintenance** can be taught in the clean area of a workshop, or in any other suitable location.

#### Equipment:

- Basic wheelchair maintenance equipment is needed.





<p><b>Mobility skills</b> are commonly taught outside, however inside is also fine.</p> <p>A purpose-built outdoor mobility skills area can simulate the different surfaces that wheelchair users will need to be able to traverse in their daily life – such as rough ground, soft ground, drains, speed bumps, kerbs, steps, and stairs.</p> <p>In an integrated service – the mobility skills area may be used by people with other mobility impairments. For example, people learning to use a prosthetic limb, or regaining walking skills after an injury.</p>	
<p>Where there is no space for a dedicated mobility skills area – identify existing spaces that can be safely used for mobility skills training.</p> <p>Avoid areas where there are a lot of people coming and going; and aim to find a range of different obstacles.</p>	
<p>Portable mobility skills training equipment can be fabricated, and set up wherever a wheelchair service is being delivered.</p> <p>The illustration on the right shows portable mobility skills equipment set up under a shade shelter.</p> <p>For more information, refer to the Additional Resources for Managers Manual on the Pen Drive.</p>	

## Additional facilities and equipment for intermediate level services

Providing an intermediate level wheelchair service requires some additional space and equipment. The additional requirements that managers need to consider are discussed below.

# WHEELCHAIR

## SERVICE TRAINING PACKAGE

### Assessment and fitting area

For an intermediate service, an assessment bed is needed for the wheelchair user to lie down during the assessment.

For more information, refer to the Additional Resources for Managers Manual on the Pen Drive.

A specialized assessment box can be very helpful for intermediate level services. An assessment box provides adjustable foot support and good access to provide support during hand simulation.

For more information, refer to the Additional Resources for Managers Manual on the Pen Drive.

- Firm foam blocks for temporary supports need to be on hand during assessment and fitting. Also a wipe-clean mat for floor work as well as cushions.
- A full-length mirror can be very helpful for both the wheelchair user and service personnel to observe posture and alignment from different angles.
- Toys and pictures on the walls encourage a more child-friendly environment.



### Storage

At intermediate level, there is a greater need for storage of the materials required for modifications and for postural support components. Materials include sheets of foam which need to be stored flat and kept dry. More storage space and storage racks are therefore needed.

### Wheelchair preparation, maintenance and repair area

A clean area and an industrial sewing machine enable the service to upholster modified or fabricated postural support components and straps. Without this space and equipment, the service will need to outsource such tasks.



## Workspace organization

When the facilities and equipment are in place, a manager should allocate responsibility for the organization of each facility by applying the following four steps:

1. Remove clutter: eliminate all unnecessary tools, parts, equipment, out-of-date paperwork.
2. Identify regularly used items: tools, parts, instructions and paperwork. Regularly used items should be arranged so they are easiest and quickest to locate.
3. System and responsibility: have a system for each workspace and someone responsible for implementing the system.
4. Monitor: the system to make sure the change sticks.

## B.3: Range of appropriate wheelchairs

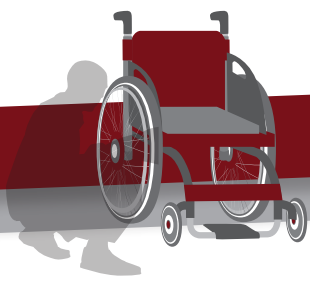
### *What is meant by an appropriate wheelchair and cushion?*

The needs of each wheelchair user will vary. However, they all need an **appropriate** wheelchair and cushion. The WHO Guidelines on the provision of manual wheelchairs in less resourced settings define an appropriate wheelchair as follows:

- meets the user's needs and environmental conditions;
- provides proper fit and postural support;
- is safe and durable;
- is available in the country and;
- can be obtained and maintained and services sustained in the country at the most economical and affordable price.



To meet the needs of the wheelchair users accessing a wheelchair service, services need a supply of at least a few different types of wheelchairs and wheelchair cushions. The type of cushion best suited to the user will depend on their needs.



However, any person at risk of developing a pressure sore needs a pressure relief cushion along with training in its use.

### **Cost of not having the right equipment in combination with user training**

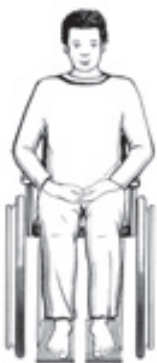
Average life expectancy in well-resourced countries is approximately 38 years post-injury for people injured between the ages of 25 and 34 years(8). In contrast, a study carried out in Bangladesh found the median life expectancy following spinal cord injury to be 5.36 years, with 56.4% of people dying within five years of their injury(9). Of the people within the study, 80% died at home, and of those who died at home, one third had pressure sores at the time of death.

In a rehabilitation hospital in Sri Lanka, a hospital cost survey was carried out on the spinal injuries unit in 1999. At that time, it took an estimated six weeks to heal a superficial pressure sore at a cost of \$ 286. A deep pressure sore required approximately one year to heal and cost an estimated \$ 2483. The same survey demonstrated that the introduction of the right wheelchair, cushion and mattress and adequate patient education could reduce the incidence of pressure sores during hospital stays by 70% and expenditure on dressings by nearly 60%.

A hospital programme in Sao Paulo Brazil introduced a service with a focus on education to reduce secondary complications for people with spinal-cord injury. The incidence of pressure sores reduced by 23%(10).

## **Selecting a range of appropriate wheelchairs and cushions**

### ***Providing proper fit and support***



Wheelchair users need wheelchairs that fit their size. The wrong sized wheelchair can be uncomfortable, will not provide good postural support, and may cause the wheelchair user harm. This means that a wheelchair service will need a supply of different sized wheelchairs, or wheelchairs that can be adjusted in size.

Most wheelchair users spend many hours a day sitting. This means that their wheelchair is not just a mobility aid. It also helps to support them to sit upright comfortably. People also have different postural support needs and therefore require wheelchairs with different types of support.



People with basic level posture support needs require the support of a well fitting wheelchair.



People with intermediate level posture support needs require a well fitting wheelchair with extra support. Extra support can be provided by adding extra posture supports to the wheelchair, or by providing a dedicated supportive seat.

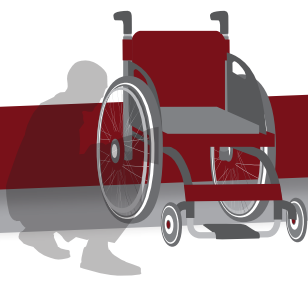
### **The cost of not providing the right size, or the right support**

Staff at the Western Cape Rehabilitation Centre in South Africa documented the complications observed in a group of children at schools and care centres who needed postural support but did not have it within their wheelchairs. Among them, 21% of the children developed additional postural complications. The cost of these complications for the children and their families and services were:

- increased complications and more time attending appointments;
- poorer health;
- poorer posture and discomfort;
- lower sitting tolerance (sitting less time in comfort);
- decreased participation in educational programmes;
- decreased quality of life.

### **Meeting the user's needs and environment**

An appropriate wheelchair should make it easier for a wheelchair user to carry out the things they need to do. Wheelchair users need to be able to get in and out of their wheelchair, to push their wheelchair, to fold the wheelchair for transport and storage and carry out their daily activities. The right type of wheelchair and the correct features on the wheelchair can make doing these things easier for the wheelchair user.



Wheelchair users also need a wheelchair that will work well for them in their environment. Different wheelchairs are suited to different environments. For example, some wheelchairs are better for use indoors, others are better for use outdoors and over rough terrain.

### **Abandoned equipment: is something better than nothing?**

When equipment does not meet the needs of the user – it is often abandoned.

This illustration tells a common story. This wheelchair user has three donated wheelchairs – however none meet his needs, and he cannot leave his house. The first two wheelchairs are no longer usable as they are broken and there are no spare parts available. The third is new; however, it is a poor quality wheelchair, which feels wobbly and unstable when used outside, so the wheelchair user feels unsafe.



## **Safety and durability**

Wheelchair users want safe and durable products, which can be repaired at an affordable cost. Wheelchair services also benefit from ensuring that the wheelchairs they provide are safe, durable and can be repaired locally. This can help to reduce the cost of replacing wheelchairs and make the work of wheelchair maintenance easier.

Many wheelchair users in less resourced settings use their wheelchair to travel over rough terrain, and may have to expose their wheelchair to rain, sand and mud. This means that their wheelchairs need to be strong and made to last in these conditions. Poor quality wheelchairs will break down quickly (for example in 1–6 months); however well designed wheelchairs that are well maintained can last for 3–5 years. This is much better value for money.

## Some common problems with poor quality wheelchairs include:

- poor quality seat and backrest upholstery tears or sags;
- castor wheels (axles, tyres, bearings, castor forks) break down;
- rear wheels (wheel axle, push ring, spokes, bearings, tyres) break or wear out;
- brakes become rusted and do not work;
- footrests break;
- cushions are either not provided, or are of a poor quality and quickly break down;
- removable parts get lost.



## The manager's role

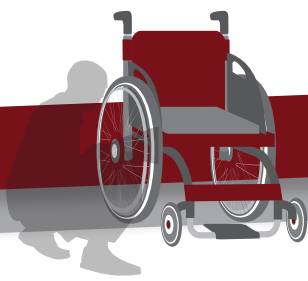
Wheelchair service managers play an important role in procuring or receiving donated wheelchairs. For more information, refer to the Additional Resources for Managers Manual on the Pen Drive.

Their role is to ensure that:

- The service has a choice of wheelchairs and cushions – to be able to meet (as much as possible) the different needs of wheelchair users. This includes considering the different size range, postural support, environment and lifestyle needs.
- Wheelchairs selected will be durable – particularly when used in rough and harsh environments.
- Wheelchairs can be repaired locally. This may include ensuring that spare parts are procured (or provided with a donation), or that spare parts can easily be purchased locally.

Actively seeking feedback from wheelchair users about the products being provided by the wheelchair service is important. Managers and service personnel can speak to wheelchair users through home visits, group meetings, or via disabled people's organizations.

When introducing a new type of wheelchair or cushion for the first time, a wheelchair service may choose to run a product trial with a group of wheelchair users who try out the new product over a period of time and provide feedback. Feedback may be gathered via individual interviews or through focus groups.




### How can managers ensure wheelchairs they procure or receive are durable and can be repaired?

Managers can ask questions of suppliers (or donors) to find out more about the wheelchairs. For example, managers can ask:

- Has the wheelchair passed any certified standards (for example: performance tests and quality assurance tests set by a professional body)? If yes, what were the results?
- Does the supplier recommend a particular lifespan for the wheelchair?
- Does the supplier have a system for reporting faults?
- Who else buys and uses the wheelchairs? It is possible for the manager to get in touch with other services that provide the wheelchair to find out more about its performance?
- What tools are required to assemble and/or adjust the wheelchair?
- Are there spare parts available? Do these parts need to be purchased overseas, or are some of the spare parts that may be needed readily available in your country?
- Has the wheelchair been tried in the country, and if so what feedback/results were there?
- If the frame breaks – can this be repaired locally?
- Does the wheelchair come with a maintenance guide?

## Wheelchair maintenance, repairs and follow-up

Step eight in wheelchair service delivery is follow-up, maintenance and repair.

Follow-up, maintenance and repair	Follow-up appointments are an opportunity to check wheelchair fit and provide further training and support. The timing depends on the needs of the user and the other services that are available to them. The service may also offer maintenance and repairs for technical problems that cannot be easily solved in the community.	
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An important part of this step is teaching wheelchair users and their families how to maintain their wheelchair. Regular maintenance, carried out at home, can help to ensure that wheelchairs last longer, and there is less need for major repairs.



Wheelchair services may also train collaborating partners to provide maintenance and repair services, and identify resources in the community (for example, bicycle repair shops) where wheelchair maintenance and repair can be carried out.

## **B.4 Align personnel**

### **Roles in a wheelchair service**

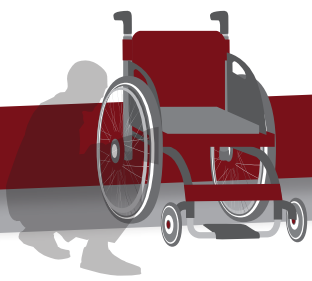
Wheelchair service delivery is often provided by a group of people working as a team. Different members of the team fulfil different roles – such as clinical, technical, training, administration and management.

Different individuals may fulfil one or more roles. For example, a person carrying out a clinical role may also play a role in managing the service. In some situations, personnel from different organizations may work together to fulfil the different roles.

The table below shows how personnel fulfilling different roles cover the different activities involved in wheelchair service delivery.

**WHEELCHAIR**

## SERVICE TRAINING PACKAGE



	<b>Clinical</b>	<b>Technical</b>	<b>Training for wheelchair users</b>	<b>Administration</b>	<b>Management</b>
<b>Service management and development</b>					
Promoting the service	✓	✓	✓	✓	✓
Sourcing funding					✓
Developing referral sources	✓	✓	✓		✓
Liaising with other organizations	✓	✓	✓	✓	✓
Service evaluation	✓	✓	✓	✓	✓
<b>Key steps in service delivery</b>					
1. Referral and appointment	✓	✓		✓	✓
2. Assessment	✓	✓		✓	
3. Prescription	✓	✓		✓	
4. Funding and ordering	✓	✓		✓	✓
5. Product preparation		✓			
6. Fitting	✓	✓			
7. User training	✓	✓	✓		
8. Follow-up, maintenance and repair	✓	✓	✓		
<b>Training and professional development</b>					
Training referral network personnel	✓	✓	✓		
Training network personnel	✓	✓	✓		
Training service delivery personnel	✓	✓	✓		

## Training

The service roles can be delivered by people with different educational and professional backgrounds as long as the appropriate training has been given. It is important that personnel fulfilling the clinical, technical and training roles have received training.

- Clinical and technical personnel providing a basic level service should be trained to the competencies outlined in the WHO Wheelchair Service Training Package – Basic Level.
- Clinical and technical personnel providing an intermediate level service should be trained to the competencies outlined in the WHO Wheelchair Service Training Package – Intermediate Level.

**Remember:** When providing personnel with skills training, it is a good idea to train at least two people at one time. If only one person is trained, the service is very vulnerable – if he or she leaves, all the knowledge and experience leaves with him or her.

## Planning your service capacity

Managers need to be able to plan their service based on how many wheelchair users they will be able to provide a service for each month and year. This can be called the “service capacity”.

Service capacity includes:

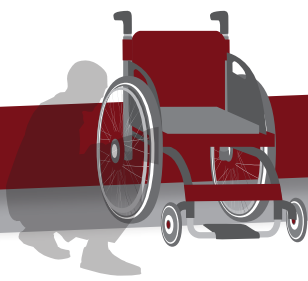
- the number of wheelchair users who will receive a wheelchair for the first time;
- the number of wheelchair users who will be followed up on.

Service capacity is directly linked to:

- the number of personnel available for wheelchair service delivery;
- the amount of time personnel have available for wheelchair service delivery;
- the number of wheelchairs the service is able to procure – which in turn is often directly linked to the budget.

## Calculating personnel time

Managers need to calculate how much time their personnel will spend on wheelchair service delivery in order to estimate service capacity. To do this, managers need to know:



# WHEELCHAIR

## SERVICE TRAINING PACKAGE

- the number of working weeks available each year (deducting public holidays and annual leave);
- the percentage of time personnel will spend on carrying out wheelchair service delivery (and not other duties, roles or activities).

Managers should also consider how long their personnel take to carry out the different wheelchair service delivery steps. There are many factors that will influence this. For example, whether service personnel are new or experienced; whether the wheelchair provided requires modification or not. However, as a guide, an experienced team (clinician and technician) may be able to provide:

- two basic level clients with a new wheelchair per day or
- one intermediate level client with a new wheelchair per day.

The table below provides an example of estimated service capacity based on a team of two people working together. One member of the team fulfils a clinical role, the other fulfils a technical role, and both provide user training. The team works 5 days/week, for 42 weeks of the year. If there are sufficient wheelchairs and materials, this team can provide:

- an estimated 357 wheelchair users with a basic level wheelchair service each year; or
- an estimated 179 wheelchair users with an intermediate level wheelchair service per year.

	Basic service	Intermediate service
<b>Planning working week</b>		
Number of working days/week	5	5
Number of working weeks/year (deducting holidays and leave)	42	42
<b>Estimating service capacity</b>		
Number of service users/day	2	1
Number of service users/week	10	5
Number of service users/year	420	210
Contingency @ 15% (for unexpected events)	-63	-31
Estimated number of users/year	357	179

### **The role of the manager in creating or developing a wheelchair service delivery team**

- Identify existing or new personnel to carry out the different roles in the wheelchair service.
- Arrange for training for those personnel who do not already have the necessary skills.
- Define the time personnel have available to spend on wheelchair service delivery, making sure that this time is realistic based on any other duties, roles or activities they fulfil.
- Estimate the annual service capacity – and communicate this to the team.
- Support personnel to carry out their wheelchair service delivery roles. For example:
  - involve personnel in planning for the service;
  - create a weekly/monthly planning tool – showing appointments and other activities;
  - hold weekly meetings to check on progress, highlight successes, and address challenges.

## **B.5: What does a wheelchair service cost?**

Identifying the cost of wheelchair service delivery is an important role for the manager. The following table shows some of the common budget lines associated with setting up and running a wheelchair service. The actual costs will vary depending on the context.

# WHEELCHAIR

## SERVICE TRAINING PACKAGE

Budget item	Comments
<b>Start-up costs</b>	
Product design	
Sourcing a range of products	
Tools	
Equipment	
Building/facilities	<i>May include building/renovation/refurbishment.</i>
Stock of materials	
<b>Operational costs</b>	
Wheelchairs	<i>Wheelchair stock – based on estimated service capacity and anticipated needs of wheelchair user clients.</i>
Spare parts	<i>Maintaining a stock of commonly needed spare parts is very useful.</i>
Materials	<i>At the basic level, some materials are required for modifications. At the intermediate level, more materials are required.</i>
Freight (product transport)	<i>Shipping and customs for imported wheelchairs. Transporting wheelchairs to satellite centres.</i>
Personnel	
Management	<i>A wide range of potential staff are listed in the budget guide. It is not expected that each service will have all of these staff members.</i>
Clinical staff	
Technical staff	
Trainer/peer trainer	
Administrator	
Local transport	
Local transport for personnel	<i>For example, follow-up, outreach services, training referral networks.</i>
Local transport for clients	<i>Travelling to the service for appointments.</i>
Accommodation for clients	<i>Cost of providing accommodation for clients who need to stay overnight (if this is covered/supported by the service).</i>
Printed materials	<i>Forms, checklists and user information.</i>
Consumables	<i>For example, glue, thread, and paint.</i>
Tool replacement	<i>Tools wear out – and funds therefore need to be budgeted for replacement.</i>
Overheads	<i>Consider electricity, water, rent – for the different service areas (clinical, technical, storage, user training, and office).</i>
Training of personnel	<i>Consider any training costs for service personnel.</i>
Training partners/referral networks	<i>Consider any training/awareness activities for partners or referral network organizations.</i>
Fundraising	<i>The cost of any fundraising activities should be budgeted for.</i>
Monitoring and evaluation	<i>Costs associated with monitoring and evaluating – for example, visiting service users to gather feedback. The costs may include travel or additional personnel.</i>

## Cost-effective solutions

Managers working in less resourced settings need to look for ways to reduce costs. Some ways that costs can be reduced are:

### Integrated services

- An integrated service, which effectively shares facilities, can provide significant cost-sharing opportunities compared to establishing individual services.

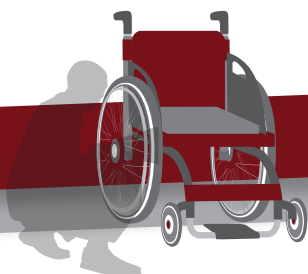
### Cost-sharing with other organizations

A service may partner with other organizations to share costs. For example:

- Some international donor/development organizations may be interested in sharing the cost of wheelchairs. The benefit for the service centre is that the products are more affordable. The benefit for the international organization is that their funds go further, and they see that the service centre is demonstrating capacity to work towards financial sustainability.
- Local community organizations may be willing to partner with the service to provide more local services. The community partner may be able to provide facilities, and some personnel to carry out some of the wheelchair service delivery steps (for example, follow-up and user training). The *benefit* for wheelchair users is that there would be less travel and cost. The *benefit* for the service centre is that services can expand into the community.

### Potential funding sources

More information on how to source funding for wheelchair service set-up and running costs is discussed in C.4: Planning for financial sustainability.



## C: Running a wheelchair service

### C.1: How do you know if your service is working?

Monitoring and evaluation (M&E) helps managers see what is (or is not) happening as a result of their teams' activities. It also helps managers and their teams to learn what is and is not working, and to understand what their service users and stakeholders think.

#### What is monitoring and evaluation?

	Monitoring	Evaluation
When is it done?	<ul style="list-style-type: none"> <li>• Continuously</li> <li>• Integrated into daily service activities</li> </ul>	<ul style="list-style-type: none"> <li>• At key stages of the service – for example during an annual review (although some information may be collected continuously)</li> </ul>
What is measured?	<ul style="list-style-type: none"> <li>• Service activities</li> <li>• Wheelchairs and extra supports used</li> <li>• Number and population of people benefitting</li> </ul>	<ul style="list-style-type: none"> <li>• Impact on individuals and communities</li> <li>• Sustainability</li> </ul>
What sources of information are used?	<ul style="list-style-type: none"> <li>• Service user databases</li> <li>• Service notes</li> <li>• Service data</li> <li>• User feedback</li> <li>• Financial reports</li> <li>• Analysis of staff time</li> </ul>	<ul style="list-style-type: none"> <li>• Surveys</li> <li>• Questionnaires</li> <li>• Group discussions</li> <li>• Home visits</li> <li>• Observation of service in practice</li> <li>• Review of accounts</li> </ul>






## Efficient and effective services

### How is M&E useful for managers and others involved in the service?

- Provides important information to improve the quality of service delivery.
- Provides information to guide product procurement.
- Helps to contain costs by increasing efficiency and justify current and proposed funding.
- Enables services to demonstrate with evidence the effectiveness of the service to funders – including the government and NGO donors.
- Helps identify and quantify unmet needs.
- Informs appropriate allocation of resources.
- Raises awareness of the benefits of the service.
- Develops stronger partnerships with service recipients.

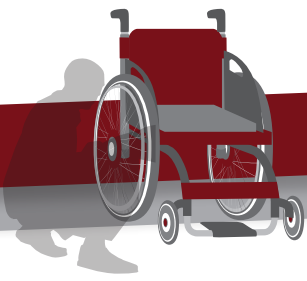
When planning how to monitor and evaluate a service, it is helpful to create a three-step framework. Further details can be found in table 3.5 of the *Wheelchair Guidelines*.

1. Planning area to be monitored	2. Setting performance targets	3. Identifying ways of collecting information
		

When analysing the information and data gathered there are two important considerations:

- when an activity is not going well, work together with service users, service personnel and other stakeholders to get to the root cause of the problem;





- when an activity is going well and targets have been achieved, find ways to share and celebrate the success. This is very motivating for the service team and other stakeholders.



## The importance of user feedback

Evaluation allows the service to reflect on what is working well and what needs to change. It also allows the service to reflect on whether it is achieving its overall purpose.

The purpose, as stated in the *Wheelchair Guidelines* is:

- to promote personal mobility with the greatest possible independence;
- to enhance quality of life through improved access to wheelchairs;
- to increase inclusion and participation.

There are a number of criteria that can be used to evaluate a service. These include:

- users served and the intervention they received;
- cost of service, including cost of products and service delivery;
- staffing (numbers of personnel, their roles and competencies);
- the facilities and equipment available to the service;
- the quality of service delivery (good practice recommendations are listed in the *Wheelchair Guidelines* in section 3.3);
- the impact the service has had on users and their families.

It is very important to involve wheelchair users in the evaluation of wheelchair services. When planning user feedback, here are some important considerations:

- Transport and time are two of the most significant costs. Wheelchair users providing feedback may need support to cover any associated travel or time.
- Feedback could be routinely gathered from every service user, or on a random selection each month or year.
- The service will only benefit if service users feel free to be open and honest with their feedback. It can be helpful to have a person who is not directly part of the service carry out interviews.



### **An example of the benefit of service evaluation from Ethiopia:**

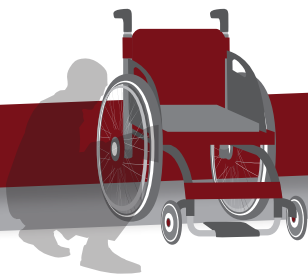
Two field officers interviewed 140 wheelchair users from seven service centres across the country. Both field officers had a mobility disability and this was found to be very beneficial for their role.

The *field officers* themselves became well informed of issues facing wheelchair users in their country. The process has empowered them as advocates for the needs and rights of wheelchair users. The *service users* gained emotional and psychological benefits from being interviewed by a positive role model.

Following the evaluation interviews, an informal network evolved which led to a stronger relationship between the service providers and users. In addition, through the evaluation, some instances were identified where a wheelchair user had not received a wheelchair suitable for their needs. This was traced back to a training need within the service, and the service has been able to act on this.

## **Importance of baseline information when evaluating impact**

In order to look at the impact that the service has for people who receive a wheelchair, it is important to record the situation for an individual before any intervention, that is, before an assessment begins.



Possible opportunities for gathering baseline information include:

- when a referral is made – by personnel at a referral centre or clinic;
- between referral and assessment – through a home visit or by telephone;
- at the time of assessment – before starting the assessment.

For more information, refer to the Additional Resources for Managers Manual on the Pen Drive.

When carrying out interviews to gather information from service users it is important to prepare the person/s who will carry out the interviews. This is in order to get a clear, complete response to each question. This is important for valid data.

#### **Advice on interview technique**

Preparation:

- practice what you will say before the interview. Don't say more than is necessary.

Technique:

- read questions as they are stated;
- do not suggest answers to the respondent, not even subtly;
- be neutral if you need to explain anything;
- record responses correctly.

Respect the person:

- do not proceed unless the person freely and voluntarily agrees to be interviewed;
- help the person to feel relaxed;
- do not appear shocked, pleased or upset by anything the person says;
- treat the person's answers as confidential.

Establishing a good baseline user information system will improve the quality of the wheelchair service, which in turn will reflect on the impact of the service on the user's quality of life.

This can be carried out:

- as a routine part of follow-up;
- as a separate activity.

## Evaluating impact for children

Where possible, it is important to give children “a voice” in feeding back on the impact of their wheelchair and service. An example is the use of Feeling Dice(11). First, the different feelings are categorized with the child. Then, they can be asked to complete statements such as “I am happy when...”, “I am sad when...”



Angry



Sad



Hurt



Embarrassed



Excited



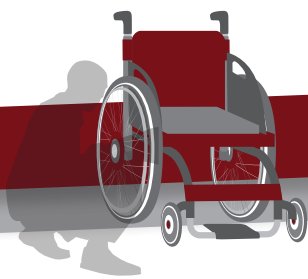
Happy

## Recording and processing data

Monitoring and evaluation involves recording, collecting, storing, and processing information (data). Efficient recording of data can save time and money. It is ideal to enter the data directly into a database, which is set up to process results and create the most useful reports for the service. Portable tablet computers can be very useful as they allow data to be recorded in field visits as well as at a centre. Mobile phone technology is progressing rapidly and may also be a method for entering, sending, and receiving data.

## Creating a service plan

An annual service plan, which is monitored throughout the year, can help to ensure an efficient and effective service. Remember to motivate, engage and commit service personnel by involving them in creating the plan and targets. The service plan may include an evaluation at the end of the year. A sample service plan framework with one example is presented below.



Service plan framework			
Identify a need/problem to be monitored	Action/objective to address the need/problem	Target	Information collection
<p><i>Far fewer women than men (20% women, 80% men) have accessed the wheelchair service in the past year.</i></p>	<p><i>Increase identification and referral of women to the service by:</i></p> <ul style="list-style-type: none"> <li><i>• talking to referral sources – including village representatives about identifying women</i></li> <li><i>• collaborating with the national DPO to identify women role models who can encourage women to attend the service.</i></li> </ul>	<p><i>Increase the percentage of women accessing the wheelchair service to at least 40%.</i></p>	<p><i>Continue to keep wheelchair user database up to date – as this identifies how many men and how many women are accessing the service.</i></p>

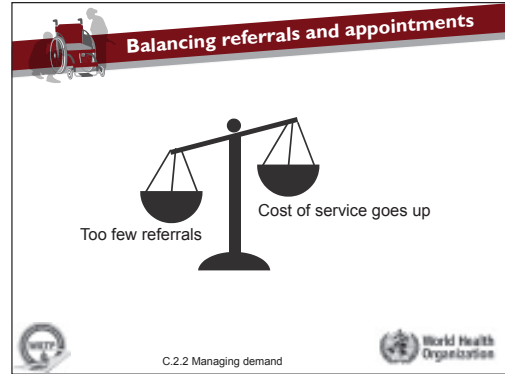
## C.2: Managing demand

When running a service there is an important balance between user needs generating demand and the capacity of service personnel to supply an appropriate service.

### Creating demand

The need for services can be estimated by calculating 1% of the population in the area in which the service is working. However, if people lack awareness of the service and its benefits, or are unable to access the service, then demand may be low despite the need.

When the demand for services is low; the cost per service user goes up; threatening the financial sustainability of the service.



A manager's role is to get to the root cause of why referrals are low. Possibilities include:

- the service has not identified the most appropriate referral sources;
- people who need a wheelchair are not accessing the referral sources;
- referral network training did not get across the benefits and importance of a wheelchair service;
- wheelchair users are unable to access the service – because it is too far from where they live, and/or there is no transport available.

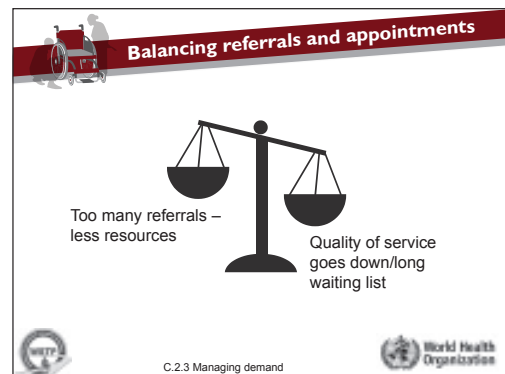
Once the cause or causes of lack of referrals is known, managers and their teams can work to generate demand.

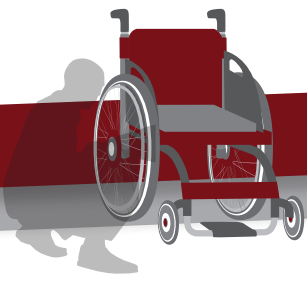
## Managing demand

If the number of people being referred to a service becomes more than the personnel can manage, there are three likely results:

- personnel spend less time than they need with each person – and the quality of service goes down; or
- the time that wheelchair users have to wait for an appointment goes up; or
- some wheelchair users are turned away.

In each case, the situation is demoralizing for both service users and service personnel.





It is therefore very helpful to carefully manage demand. Managers should initially target fewer referral sources, starting with sources close by. This has the added advantage of making follow-up easier while the service is new. Mass media and national toll-free numbers are likely to generate mass demand from long distances. Without a service network, this will be difficult and costly for the service users and service providers to manage.

### **Creating and managing waiting lists**

When demand for a service is high; create a waiting list. It is cost effective to invest time in creating a system that uses a database to record this information. This will allow a manager and service personnel to access information efficiently and enable easy processing of service statistics. Once a person accesses the service, additional information can be added, for example date of assessment, date of fitting, follow-up appointment.

### **Screening referrals and waiting lists**

As numbers on waiting lists increase, some organizations screen and prioritize referrals. The following groups of people should be considered a priority:

- children – because of the importance of early referral and increased risk of developing posture deviations during growth spurts;
- wheelchair users at risk of developing a pressure sore – because this is a life-threatening condition;
- wheelchair users who have a progressive condition – because of the urgency of their position;
- people who are experiencing pain because of a lack of wheelchair or a poorly fitting wheelchair.





Some key database fields to consider to help screening and planning appointments include:

- age;
- type of disability;
- reason for referral;
- geographical location.

## **Service capacity**

It is important to manage expectations of what a service can provide – in terms of the number of wheelchair users who can be seen, and the level of service delivery.

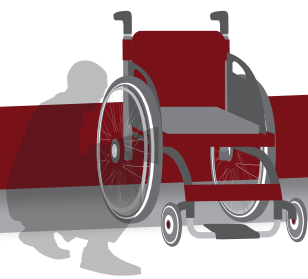
Although the need will exist for intermediate and advanced services, not every service will have the capacity to deliver at these levels. However, service personnel will be presented with service users who have needs that go beyond their knowledge, skill and product availability. Managers need to ensure there is a strategy for how to deal with this situation. Managers can:

- ensure that information about the service (what the service can do) is clear on brochures/leaflets;
- liaise with other service providers to see if referral or collaboration is possible for people with needs that go beyond the capacity of their service;
- document needs that cannot be met – and plan for increasing the capacity of personnel and products available.

## **The importance of early referral for children**

Many children who require wheelchairs, may also need additional posture support. This means that many children require an intermediate level service. It is very important for all children to be referred to services as early as possible, to prevent or slow down problems with posture.

The specific needs of children and the benefits of early referral are discussed in the session on Children in the WSTP intermediate training. Early referral is important for children for the following reasons:



- Children who have difficulty sitting upright can develop postural problems if they are not well supported. If a child is referred after a delay some postural problems may have become fixed. This can make it difficult for the child to sit comfortably even with support.
- Without the experience of sitting and being mobile, a child's development can be delayed.
- For children who have some ability to walk – using a wheelchair may make their daily life easier and allow them to do more things in a day.

Unfortunately, children are frequently not referred to a wheelchair service as soon as they should be. Parents may be hoping that their child will be “cured” and will walk again. Some parents worry that a wheelchair will cost too much, or do not know about the service. In some instances, parents may think that providing a wheelchair will stop their child from walking.

It is important that the whole service team is clear about the reasons why early referral is important. Personnel can also reassure parents and referral sources that a wheelchair is unlikely to prevent a child from walking if this is possible for them. The experience of mobility through a wheelchair while the child is learning to walk will benefit their development in many other ways.

### **Example of success: early referral by parents in Mexico**

Here is an example of how a group of rehabilitation centres for children in Mexico built an effective early referral network.

Although rehabilitation centres primarily targeted neonatal doctors and paediatricians with their awareness-raising activities, they also had a major annual fund-raising campaign aimed at the general community that used extensive media coverage including radio and television. This led to a lot of word-of-mouth referrals and many parents self-referring their children.

During the awareness activities, the centres had a clear message: the importance of referring children for rehabilitation when they are born. They also presented a powerful vision of success with many positive stories relating to integration and achievements of the children with whom they work. Over a period of 15 years, the rehabilitation centres have seen a cultural shift as paediatricians and families are now actively making early referrals.

The result: A third of all referrals are for children aged 3 years and younger.

### **How managers can build success in encouraging early referrals**

- clear message about who is being targeted;
- clear goal of what they want to achieve;
- a different approach for professionals and parents;
- sharing success stories to encourage parents and professionals to refer;
- sustained awareness-raising activities over a period of years.

## Running efficient and effective services

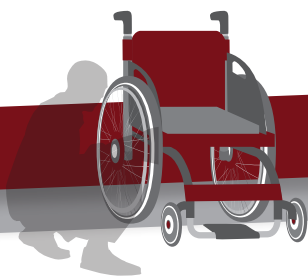
### *Analysing service efficiency and effectiveness*

Once a service is running, it is useful to analyse each service step and observe how long each step is taking. Improving the efficiency of the service steps should focus on:

- encouraging good teamwork;
- planning what can be prepared in advance for each service step.

The table below provides some suggestions for how to improve service efficiency.

<b>Different ways to improve service efficiency – for each step in wheelchair service delivery</b>	
Referral	<ul style="list-style-type: none"> <li>• Set clear goals and targets for the level of demand the service wants to achieve.</li> <li>• Clear message about who the service is for.</li> <li>• Identify a range of referral organizations and professions for awareness-raising.</li> <li>• Closely monitor the levels of referrals.</li> <li>• Share success stories with service personnel and the referral network when referrals increase.</li> </ul>
Assessment	<ul style="list-style-type: none"> <li>• Plan the appropriate level of training for service personnel.</li> <li>• Build the capacity of community partners to provide basic level services and refer intermediate level service users.</li> <li>• Ensure all equipment is in place for assessment to be carried out.</li> </ul>
Prescription	<ul style="list-style-type: none"> <li>• Establish effective stock control systems.</li> <li>• If products have limited adjustability, modifications must be prescribed to make the products fit individual users.</li> <li>• Ensure personnel discuss prescription solutions with the wheelchair user; and if possible show the user the product options. This will avoid the user rejecting solutions.</li> <li>• Build the capacity of community partners to provide basic level services and refer intermediate level service users.</li> </ul>
Funding and ordering	<ul style="list-style-type: none"> <li>• Clear documenting of information and record keeping.</li> <li>• Establish effective stock control systems.</li> </ul>



### Different ways to improve service efficiency – for each step in wheelchair service delivery

Product preparation	<ul style="list-style-type: none"> <li>• Source products with as much range of adjustability as possible.</li> <li>• Source products that can easily be modified.</li> <li>• Prefabricate posture support devices and/or source products with PSDs.</li> <li>• Source appropriate tools for making quick product adjustments.</li> <li>• Source appropriate materials for cushion and PSD fabrication and modifications.</li> <li>• Establish effective stock control systems.</li> <li>• Prepare a small stock of wheelchairs in different sizes.</li> <li>• Build the capacity of community partners to provide basic level services and refer intermediate level service users.</li> </ul>
Fitting	<ul style="list-style-type: none"> <li>• Clinical and technical teams work together during fitting.</li> <li>• Pre-prepare sample product set-up options.</li> <li>• Source products with as much range of adjustability as possible.</li> <li>• Source appropriate tools for making quick product adjustments.</li> <li>• Source products that can easily be modified.</li> <li>• Build the capacity of community partners to provide basic level services and refer intermediate level service users.</li> </ul>
User training	<ul style="list-style-type: none"> <li>• Allocate user training to a specific person, for example, a peer trainer.</li> <li>• Identify facility for user training close to clinical and technical areas.</li> <li>• Build the capacity of community partners to provide basic level services and refer intermediate level service users.</li> </ul>
Follow-up	<ul style="list-style-type: none"> <li>• Build capacity of community partners to follow-up clients in the community, referring back to the service when a problem is identified that cannot be solved at the community level.</li> </ul>
Overall	<ul style="list-style-type: none"> <li>• Hold regular team meetings to create shared work plans.</li> <li>• Clear scheduling for joint working.</li> <li>• Clear documenting of information and record keeping</li> <li>• Build the capacity of community partners to provide basic level services and refer intermediate level service users.</li> </ul>

### **Transition from basic only service to basic and intermediate service**

Many wheelchair services begin by offering only basic wheelchair service delivery. This is a good place to start, as the service can focus on building the systems associated with delivering the eight steps, and personnel can gain experience.

However, as noted above, many wheelchair services will face a demand for intermediate level wheelchair service delivery. This is not surprising, as it is

estimated that 35% of users needs are at basic level and 65% at intermediate or advanced level.

Therefore, service managers are likely to need to begin planning for how they can meet intermediate level needs within their service. As previously noted, intermediate level services require:


- personnel with the appropriate training
- more facilities, equipment and materials.

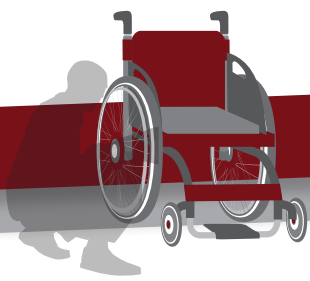
Some possible strategies for managers to consider when transitioning from basic services to intermediate services include:

- Work with personnel to identify how intermediate services could be offered. Consider the additional facilities and equipment required, and the service model that would be used.
- Identify whether personnel providing basic level services have the capacity to deliver intermediate level services with more training. If yes – identify and train replacement personnel for basic level services first; and then train the identified intermediate level personnel.
- Consider whether it is possible to collaborate with other organizations – if your service cannot identify personnel or does not have funds to pay more personnel.

### C.3: Planning follow-up

Follow-up is the eighth step in wheelchair provision. All wheelchair users benefit from being followed up. It is important for a service to have a plan for how follow-up will be carried out. During follow-up, services also benefit from the opportunity to learn about the impact of the service on the user, their family members and their community.

8. Follow-up, maintenance and repairs	Follow-up appointments are an opportunity to check wheelchair fit and provide further training and support. The timing depends on the needs of the user and the other services that are available to them. The service may also offer maintenance and repairs for technical problems that cannot be easily solved in the community.	
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## Importance of follow-up

### Some examples of why follow-up is important

**Duli:** is a 21-year-old woman living with her family. On follow-up, the team found that she was unable to leave her house because her wheelchair had flat tyres due to punctures. The wheelchair had been abandoned underneath the house. The punctures were repaired and advice was given to the family. Duli was then able to leave her home again. The family did not value follow-up until they experienced the benefits. The service team decided to create stickers with the service contact number for all wheelchairs to reduce this problem in the future.

**Maria:** received an appropriate wheelchair nine months after having a spinal cord injury. On follow-up, she was uncomfortable and was experiencing spasms, which she thought were due to the wheelchair. It was discovered that bugs had infested the wheelchair upholstery and were biting her. This could have led to serious health complications and abandonment of the product. However, the problem was identified and dealt with and Maria is now healthy and happy with her wheelchair.

**Anton:** was known in his community for his ability as a rugby player. Then he had a rugby injury, causing a spinal cord injury. He received an appropriate wheelchair and user training but on follow-up it was found he was not leaving his home. A peer trainer was part of the follow-up team and spent time talking with Anton and discovered he had lost confidence and did not want to meet his friends. He felt isolated, lonely and embarrassed about “being disabled”. The peer trainer returned the next day to go out with him for the first time. Since that day, Anton’s life has moved forward.

**Gihan:** is a 3-year-old boy living with his parents and brother. At follow-up, his supportive seat was found to be covered in food, and was not maintained. His parents reported that Gihan had difficulty sitting up and was uncomfortable in the chair. They had lost confidence in the product and did not like it. Gihan was booked in for reassessment with a team who had received intermediate level training. Modifications were made to the wheelchair set-up and Gihan was able to sit upright and started looking around and exploring his environment. Gihan and his parents were very happy and watched closely when they were shown how to care for and maintain Gihan’s wheelchair.

### Benefits of follow-up for the user and the service

- Personnel can confirm whether or not the wheelchair is meeting the user’s needs in their own environment.
- Home and community visits are a good opportunity to gather user stories – which can be used to provide feedback for the service and help with fundraising.
- Centre-based follow-up is still an opportunity to gather user stories to provide feedback for the service and help with fundraising.

## Purpose of follow-up and where it should happen

The purpose of follow-up is to:

- gather information from the wheelchair user
- check that the wheelchair is in good working order
- check the fit of the wheelchair.

### Common follow-up actions



Some of the common actions that arise from a follow-up visit are:

- providing more advice or training
- readjusting the wheelchair
- carrying out minor repairs
- referring the wheelchair user to another service for support or assistance if needed.



Wherever possible, follow-up appointments should not turn into a new assessment or full refurbishment of a wheelchair. If the need to carry out a full assessment, or do major work on the wheelchair is identified – an appointment should be made for that to happen.

### Where should follow-up happen?

Follow-up can happen in the wheelchair user's home or at the wheelchair service centre or any other location that suits the wheelchair user and the wheelchair service personnel.

The advantages of follow-up in different locations are listed in the table below.

**Benefits of follow-up in the user's home or local community**

- More cost effective for user and their family.
- Personnel learn more about the barriers to participation and inclusion that people face in their homes and communities.
- Seeing personnel in action can increase community awareness – and therefore referrals.

**Benefits of follow-up at a service centre**

- More cost and time effective for personnel/the service.
- Major repairs can be carried out with full workshop facilities.
- All equipment and facilities are already set-up.
- Other personnel are available for a second opinion.

**Planning for follow-up**

All wheelchair users benefit from follow-up. However, follow-up is most important for:



- children with disabilities;
- wheelchair users at risk of developing a pressure sore;
- wheelchair users who have a progressive condition;
- wheelchair users who need extra support in their wheelchair (intermediate level);
- wheelchair users who have had difficulty with training in transfers, mobility, health or wheelchair maintenance.

**Timing of follow-up**

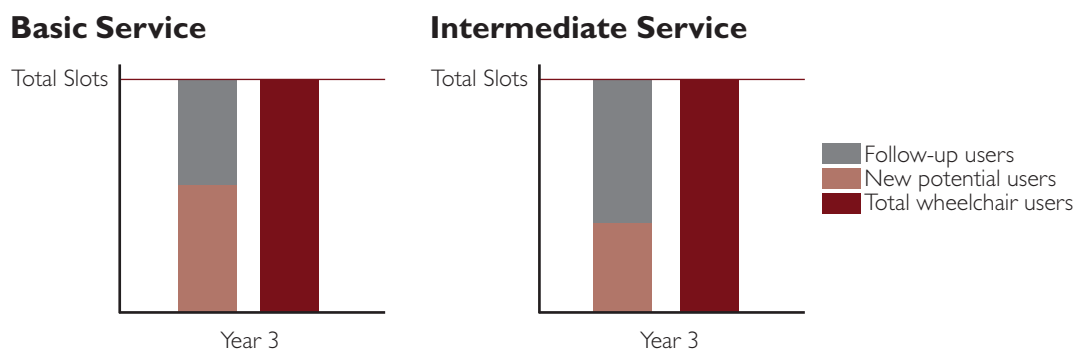
There are no rules about when follow-up should happen, as the best time to follow-up will depend on the needs of the wheelchair user.

- It is helpful to review intermediate users within six weeks of receiving a new wheelchair to check that the wheelchair is meeting their needs.
- For children and people with a progressive condition, it is ideal if follow-up is at least every six months. This is because the needs of children or people with a progressive condition can change quickly.
- It is ideal if all other users are offered follow-up within 12 months of receiving their wheelchair.



**Remember:** Follow-up should be built into the service model when first planning a service. Community partnerships are vital to create follow-up capacity.

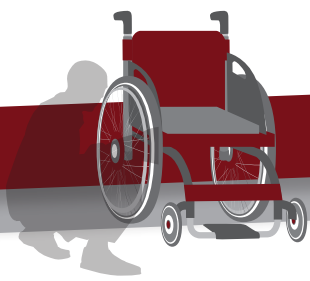
### Impact of follow-up if community partnerships are not established



The impact of follow-up on the availability of new appointments will be felt very quickly if a service does not plan. Intermediate services in particular are at risk of getting close to saturation by year three.

One solution for this is to collaborate with community-based organizations – and train their personnel to carry out as much follow-up as possible. Community-based personnel may be able to manage many of the simpler follow-up tasks, only referring back to the wheelchair service for reassessment, major repairs, or other problems they cannot solve.

There are many benefits of this role being carried out by a positive role model such as a person with a mobility disability.



### Establish community partnerships and plan the service model

<p>A partner may support referral and follow-up including maintenance and repairs</p>	<p>A partner may also support user training</p>	<p>Depending on the capacity of the partner, they may also support some of the wider responsibilities of a service</p>
---	---	--

### Reducing barriers to follow-up

Despite the benefits to service users and service providers, the number of people receiving follow-up are often low. It is important to get to the root cause of why numbers are low, in order to overcome the barriers and improve the service.

#### Possible barriers to users attending an outreach-based follow-up service:

- costs of service centre staff travelling to communities;
- time for service centre staff to travel to the community;
- follow-up is not prioritized by service managers;
- follow-up is not valued by service users until they experience the benefits.

#### Possible barriers to users attending a centre-based follow-up service:

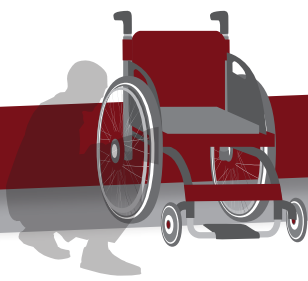
- cost of travel and time off work for one or more family member;
- users and family members are often not aware of the benefits of follow-up;
- difficulty finding accessible transport;
- pressure to focus on new appointments at the centre can leave no time for follow-up;
- difficulty scheduling appointments: users may turn up when staff are not available, or not turn up when staff are available.

### **An example of an approach to follow-up in Indonesia**

For a wheelchair provision programme in Indonesia; rather than charge a fee directly for the wheelchair itself, they charge membership fees that contribute to the service, follow-up, maintenance, and administration costs. This membership fee entitles “members” to a quality service and ongoing support. There is a “sliding scale” fee system, in which the amount that an individual pays is determined based upon that individual’s household income, as identified via utility bills, civil service employment documents, self-reporting and other supporting income indicators.

This wheelchair programme has found that the membership system is effective on a number of levels:

- Members feel empowered to expect a quality service and product.
- Because members have paid a significant amount relative to their income level (usually in the range of \$ 2–20, but anywhere up to \$ 150), they are more likely to value their wheelchair and feel a sense of pride in owning it.
- Because the membership entitles them to free or discounted follow-up service, which expires within two years, members are more likely to seek follow-up sooner.

**Possible actions for overcoming barriers to follow-up**

Motivate, engage and commit service users to the benefits of follow-up:

- explain benefits of follow-up during user training, service step seven;
- share stories of the benefits of follow-up in the waiting room, on websites, on community noticeboards;
- membership system for service users.

Motivate, engage and commit service personnel to the benefits of follow-up:

- pilot a follow-up scheme delivered by service personnel;
- collect case studies of the benefits of follow-up.

Identify an immediate and measurable result:

- set targets for a pilot follow-up scheme;
- gather and share stories of success.

Prioritize follow-up when allocating resources:

- use stories of success about the benefits of follow-up to support fundraising for specific costs relating to follow-up;
- allocate time to develop community partnerships and train and mentor personnel in the community;
- make sure all transport is accessible.

Maintain support for facing ongoing challenges:

- monitor follow-up data closely and identify the root causes of problems;
- make follow-up part of the service model, systems and procedures.

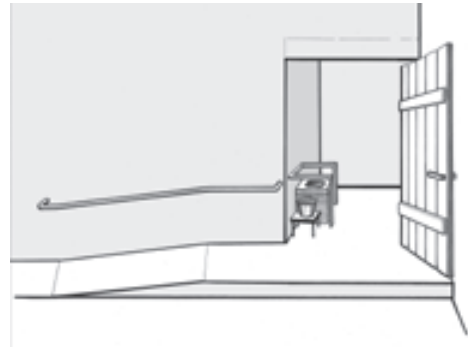
**Inclusion and participation in the community**

Follow-up is a time to assess the impact of the service and whether it is achieving the overall vision: of increasing quality of life, inclusion and participation in the community.

One of the wider roles of a wheelchair service is improving accessibility. This can have a significant impact on the inclusion and participation of wheelchair users in the community.

## Accessible homes and public spaces

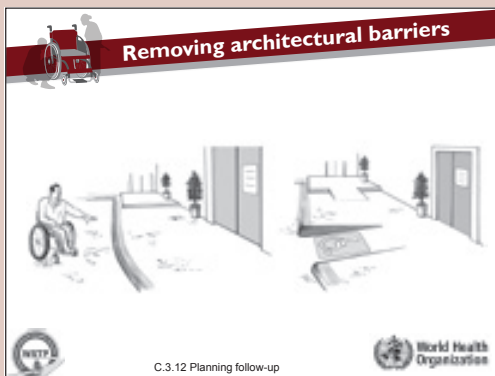
One of the main barriers to returning home is often access to a toilet



Advice on simple changes to the home can make a huge difference to quality of life

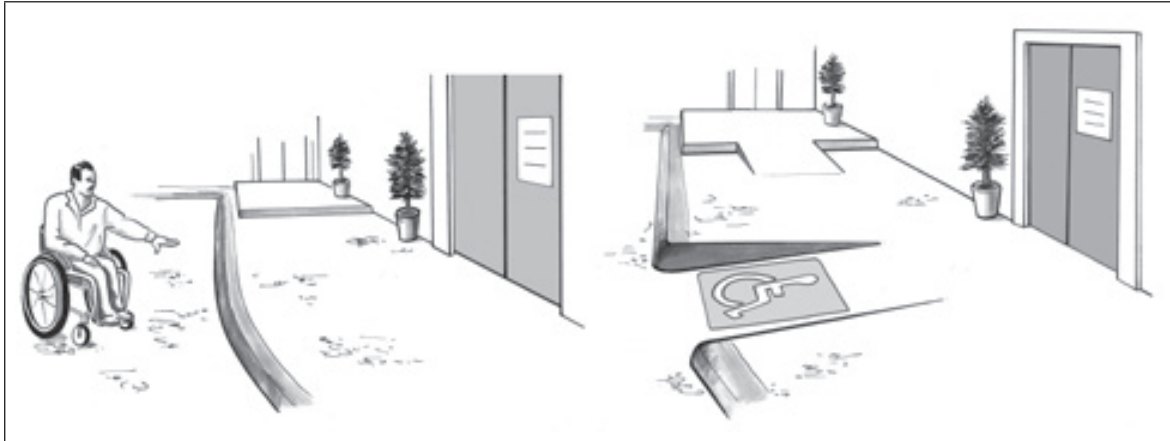


### An architectural barriers campaign in Nicaragua



In Nicaragua, a DPO called CADISCA ran a campaign in its capital city to highlight the problem of high kerbs and steps. The DPO members (all wheelchair users) built 200 ramps and “drop” kerbs (making a small area of a kerb level with the road) in just three months, creating access to public areas. The members of CADISCA were seen out in their community doing something positive, which raised support and resulted in local companies sponsoring the building of more dropped kerbs and ramps throughout the city.

Early on, CADISCA used wheelchair basketball to promote self-confidence and boost member involvement in DPO activities. Sport training sessions also gave an opportunity for regular DPO meetings, where plans to raise awareness were organized. These training sessions were held in a public park, exposing the community to the DPO’s activities and raising awareness. Ultimately, the sports programme helped influence the success of the access campaign through gaining public awareness and support for disabled people. This helped to eventually pressure the government to fund dropped kerbs throughout Managua. The removal of physical barriers has given wheelchair users an equal opportunity to access key financial, educational and social areas within the city.



The cost to build in accessible features at the time of construction is minimal – sometimes less than 1% of the construction cost.

Access to education can be prevented by something as simple as the width of a pathway and access to a toilet. Being able to offer resources and information on accessible buildings and pathways can empower schools to be inclusive. There are many resources on making buildings accessible.

By providing advice and information on accessible environments; services can facilitate access to homes, transport and education; in this way, a service is maximizing the opportunities for inclusion and participation of people with mobility disabilities.



## Accessible transport

Transport is a common barrier for wheelchair users. Challenges include:

- getting transport to stop long enough to transfer and stow a wheelchair
- being charged an additional fee to carry a wheelchair
- risk of removable parts being lost or stolen, for example, wheels
- difficulty accessing transport due to thresholds and doorways.

There are inclusive transport initiatives in many countries; including Dial-a-Ride in South Africa and the Bus Rapid Transit system in Colombia. There are many useful resources on accessible transport around the world.<sup>(1)</sup>

<sup>1</sup> Useful resources for more information on accessible transport: International Transport forum (ITF), Accessible Multimodal Transport, South Africa, Access Exchange International newsletter, Paratransit Guide – guidebook to transport issues.

## **C.4: Planning for financial sustainability**

### **What is financial sustainability?**

Financial sustainability for a wheelchair service means having the funds and resources required to carry out the eight steps of wheelchair service delivery and wider service responsibilities – consistently. Wheelchair service managers play a key role in developing a plan for how their wheelchair service will become financially sustainable.

#### **Example of a service statement on financial sustainability**

A sustainable wheelchair provision program is one with the capacity to provide appropriate wheelchairs through the eight steps of service to a consistent number of individuals over a significant period of time.

This requires continuous investments in product supply, trained personnel, space, and monitoring and evaluation systems. Financial sustainability is reached when a service has secured, or is consistently able to secure, the funds and resources necessary to enable this continuous investment.

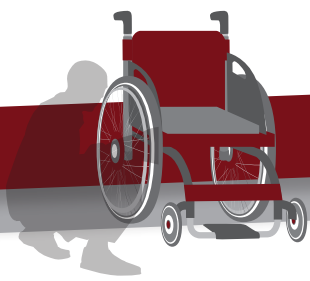
### **Planning for financial sustainability**

This includes:

- clearly identifying the funds and resources needed to sustain the service (see B.5)
- identifying potential sources of funding
- identifying potential non-monetary support
- developing a strategy for securing funding and donations in kind.

### **Identifying potential sources of funding**

Wheelchair services can be funded in many different ways, through a range of different funding sources. Some services may have one single funding source (for example, the government), but most services will secure the funds and resources needed from a range of different sources. Each funding source may contribute to specific area/s of the budget or resource requirements.

**Different funding sources that managers may consider**

Government	Income generation/social enterprise
National insurance schemes	Community groups/charitable societies
Private donors and sponsors	Diplomatic missions
Corporate (business) donors and sponsors	International and national NGOs
User contributions or full purchase	

**Identifying potential non-monetary support**

Non-monetary support includes donations in kind (for example, donations of equipment, wheelchairs or materials), volunteer support, and provision of facilities. Non-monetary support can reduce the amount of funds required to manage the service.

Some wheelchair services may regularly receive donated wheelchairs. While this can be very helpful – it is always important for the service to assess the quality and suitability of these wheelchairs. Not all donated wheelchairs are appropriate.

**Combining different funding sources to sustain a wheelchair service**

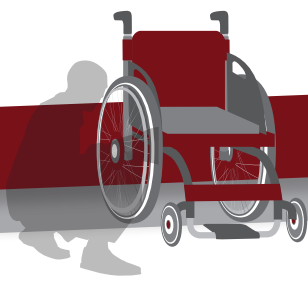
The table below provides an example of the different funding sources an example wheelchair service has identified; and how those funding sources contribute to the funds and resources needed for the organization to be financially sustainable.



<b>Funding sources for an example wheelchair service</b>	
<b>Funding source</b>	<b>Funds or resources provided</b>
Government	<ul style="list-style-type: none"> <li>• Provides 50% of the cost of each wheelchair provided by the service;</li> <li>• Funds two personnel working for the wheelchair service (50% of the personnel budget).</li> </ul>
Corporate (business)	<ul style="list-style-type: none"> <li>• One local company provides an annual donation each year to the wheelchair budget line;</li> <li>• Another local company has pledged to sponsor 10 children each year – covering the cost of their wheelchairs and service delivery.</li> </ul>
Individuals	<ul style="list-style-type: none"> <li>• Provide donations to the service (not specified to any particular budget line).</li> </ul>
Social enterprise activities	<ul style="list-style-type: none"> <li>• The wheelchair service carries out a number of social enterprise activities. These include accessibility audits (of buildings) and supply of urinary management products. The profits from this work are used to support the wheelchair service, and are usually sufficient to fund at least 50% of the personnel budget.</li> </ul>
INGOs	<ul style="list-style-type: none"> <li>• The service has been awarded grant funding to provide wheelchairs to people living in specific areas through International NGOs on two occasions.</li> </ul>
Faith based organization	<ul style="list-style-type: none"> <li>• Provides an annual donation of 200 wheelchairs (wheelchairs selected by the service).</li> </ul>

### **Developing a strategy**

Once potential funding sources have been identified, service managers need to develop a strategy for what kind of support will be requested from which potential funding source, and how much. Part of developing a strategy includes considering how likely it is that the funding source will provide funds; how much the funding source may be able to provide; and how much time and effort will be required to secure this funding.



# WHEELCHAIR

## SERVICE TRAINING PACKAGE

To help plan a strategy, managers can prioritize the different funding sources, and plan how they will approach securing funding. Managers need to consider:

- **Funding source:** who will be approached?
- **Support:** what will the manager ask that funding source to support. This may focus on a budget line, such as products – or a service step (or steps), with a number of associated budget lines. Consider the specific funding source, and what they are most likely to want to support.
- **Request:** how much will you ask the funding source to provide/support? Factors to consider include resources of the funding source and the size of previous donations to the service or others. Aim to ask for a realistic amount.
- **Likelihood:** the likelihood that the funding source will fund/support the service. This can be categorized as low, medium and high.
- **Effort:** what will be required to secure the funding, and what reporting or other obligations will there be. The amount of the support should be in proportion to the amount of the funding. Obligations should also be affordable/manageable for the service.

Two examples have been given in the table below. By considering the type of support, request, likelihood of success and the effort required, managers can better prioritize which funding sources to pursue.

Funding source	Type of support	Request	Likelihood	Effort
1. Corporate (local business)	Donation to wheelchair procurement budget.	10% of wheelchair budget.	Medium (have funded previously, however do not always fund the same organization each year).	At least two meetings with the business manager; 2 page proposal and budget to be submitted and invite manager to next open day.
2. Local government	Potentially may fund costs of all outreach visits to wheelchair users in their area.	20% of all outreach costs and 20% of service personnel salaries.	High (have been in discussion with this local government for a while. Have run one outreach to their area. They are very keen to support this and funding seems to be available).	Formal proposal and budget to be submitted. Reporting commitments – require accurate data of all people seen from their area and financial reporting.

## **Funding approaches**

Securing sustainable funding sources for a wheelchair service can be hard. The following are some examples of different funding approaches and ideas that could be considered. Note that often the approaches are different depending on the funding source.

### **A business approach to meet a social need and generate income**

An NGO in Romania uses social enterprise as part of its approach to financial sustainability. The approach has two key objectives: a social impact and a financial impact.

Wheelchair users are employed as part of multidisciplinary teams providing quality mobility equipment and medical supplies to people with disabilities. The quality of services is high as the team are very aware of the importance of correct positioning, and prevention of health care complications.

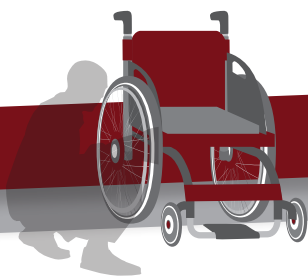
The activity provides employment to people with disabilities, creating empowered consumers. The services also generate income to support other programmes run by the NGO.

### **Direct purchase by the provider**

Some wheelchair services require a minimum contribution from the wheelchair user for the receipt of a wheelchair and wheelchair service delivery. Often there is a “sliding scale” fee system, in which the amount that an individual pays is determined based upon that individual’s household income, as identified via utility bills, civil service employment documents, self-reporting and other supporting income indicators. Services securing some funds in this way do need to ensure that people who cannot pay any costs towards their wheelchair are not disadvantaged.

### **Corporate donors and sponsors**

The Teletón in Mexico is an annual TV and radio event, held to raise money for children’s rehabilitation centres (CRIT centres). It is produced by Televisa and more than 600 Mexican and foreign media; and 20 commercial firms sponsor the event. They sell their vision of success with powerful positive stories about integration and achievements. Over a three month period prior to the event, the case studies are released through the media as part of the build-up. High profile personalities are involved in the promotion of the event.



In Romania, an NGO has a relationship with a corporate sponsor. To consolidate this relationship, an annual swimming gala is held at a prestigious health centre. Integrated teams involving the corporate staff, peer trainers, NGO staff and people with learning disabilities compete against each other. It is a fun event with benefits at many levels. Corporate staff then give ongoing financial support throughout the year; either direct contributions or through fundraising events.

## **Government funding**

In Kenya, the Ministry of Medical Services has partnered with an NGO in wheelchair and other related rehabilitation services. The NGO provides all the logistical support to eight branches housed in government hospitals. The government provides the human resources. To date the Ministry has allocated 56 staff to the NGO branches.

### **National Insurance Scheme in Romania**

- The first step for the wheelchair user is to apply for a disability certificate. Without this certificate an application for a wheelchair is not possible.
- Next is to make an appointment with a rehab doctor who writes a prescription for a wheelchair.
- The wheelchair user then makes an application to the county National Insurance Agency (NIA).
- When the wheelchair user receives the approval/voucher, he/she chooses a supplier, and one of its wheelchairs.
- If the wheelchair price is less than the subsidy, then the supplier provides the wheelchair to user in exchange for the voucher, which it uses to invoice the NIA.
- If the wheelchair price is more than the subsidy, then the user must pay the balance or find complementary sources of funding, for example, donors, employers, and individuals.

For further resources to support wheelchair services of basic and intermediate levels, please refer to the digital files in the Pen Drive.

## References

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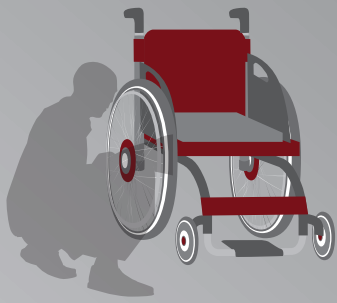
For Managers



**Workbook**

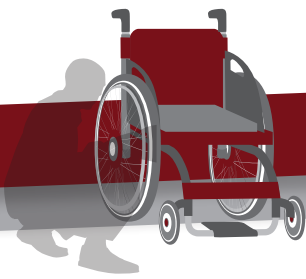






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FOR MANAGERS

# WHEELCHAIR

SERVICE TRAINING PACKAGE

## **Actions for managers to create or improve wheelchair provision**

**The Workbook is divided into two parts:**

### **Part One: What needs to be done to start a service?**

This section focuses on the eight steps of wheelchair provision, facilities, equipment, range of appropriate wheelchairs, initial costs of starting a service and managing a demand.

### **Part Two: What needs to be done to make a service sustainable beyond the initial start-up investment?**

This section focuses on appropriate wheelchair provision, running a service and actions to improve the efficiency, effectiveness, and responsiveness of service delivery. Financial sustainability is also discussed, including the importance of establishing partnerships and income streams to cover the ongoing costs of running and expanding a service.

Both parts are divided into three sections:

- A. Core knowledge
- B. Starting a wheelchair service
- C. Running a wheelchair service.

# Part One

## A. Core knowledge

### A.1: Leading change

- Review the change facilitators listed below. Record actions that you can take to introduce or improve wheelchair provision at your service centre.

#### 1. Create a shared vision of appropriate wheelchair provision

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#### 2. Communicate the importance of appropriate wheelchair provision with a sense of urgency

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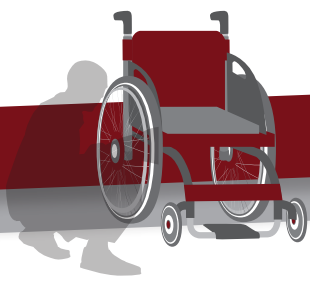
#### 3. Align personnel and resources

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#### 4. Motivate, engage and commit personnel:

- include personnel in planning and implementation
- overcome obstacles together
- create and recognize short term wins
- make the change stick in your organization's systems and culture.

--



## B. Starting a wheelchair service

### B.1: Accessing services

Questions	Answers
<p><b>Question 1: Building a Referral Network</b></p> <p>As a manager, what actions can you take to build a network of individuals and organizations able to identify and refer wheelchair users to your wheelchair service?</p>	
<p><b>Question 2: Referral Forms</b></p> <p>Look at the sample referral forms in the Additional Resources for Managers Manual on the Pen Drive.</p> <p>Would this referral form (or an adapted version of this form) be a useful tool for your service?</p> <p>If no, why not?</p> <p>If yes - as the manager of your service – what can you do to introduce a referral form?</p> <p>(Note – if your service/s are already using a system, you can describe what you as manager/s have done to introduce or support the referral form).</p>	
<p><b>1.Actions I can take to identify referral sources</b></p>	
<p><b>2.Actions I can take to build a referral network</b></p>	
<p><b>3.Actions I can take to decide whether to promote a referral form</b></p>	
<p><b>4.Actions I can take to actively work towards an equitable wheelchair service</b></p>	

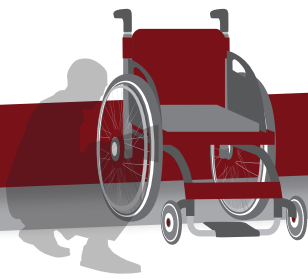
## **B.2: Facilities and equipment**

**1.Actions I can take to identify facilities and equipment suitable for my service model**

**2.Actions I can take to integrate forms and checklists into the service steps**

**3.Actions I can take to organize the facilities**

**4.Actions I can take to create systems and procedures for each facility including delegation of work where possible**



## B.3: Range of appropriate wheelchairs

**1. Actions I can take to identify the needs of service users and the most important product features to meet those needs**

**2. Actions I can take to identify a suitable range of appropriate wheelchairs, cushions and spare parts**

**3. Actions I can take to identify suitable supplies of materials for making modifications to products**

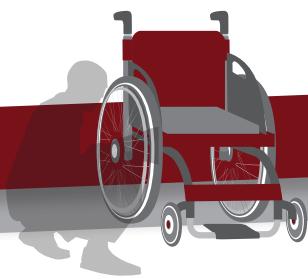
**4. Actions I can take to discuss with different stakeholders the cost-benefit of appropriate wheelchairs and cushions delivered through a service**

## **B.4: Align personnel**

<b>1.Actions I can take to identify service personnel</b>
<b>2.Actions I can take to include service personnel in planning</b>
<b>3.Actions I can take to coordinate teamwork and establish a weekly working plan</b>
<b>4.Actions I can take to identify annual service capacity</b>

## **B.5: What does a wheelchair service cost?**

<b>1.Actions I can take to consider service integration when planning a service model</b>
<b>2.Actions I can take to consider community partnerships when planning a service model</b>
<b>3.Actions I can take to prepare a budget for the planned service model</b>



## C. Running a wheelchair service

### C.1: How do you know if your service is working?

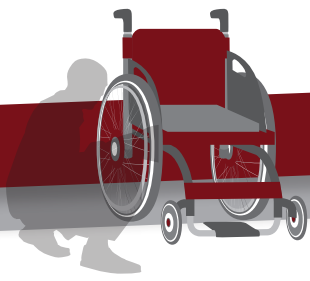
Service areas and activities	Service performance targets	Methods of information collection
<b>Referral</b>		
Number of users referred	The service will receive 30 referrals per month	Record referrals received
<b>Wheelchair provision</b>		
Number of users who receive a wheelchair	The service will prescribe and fit wheelchairs for 20 users per month	Wheelchair prescriptions recorded on users' files
<b>Wheelchair population served</b>		
Details of users referred to the service, such as age, gender, disability, postural support needs	The service will encourage equal access	Number of women, men, girls and boys accessing the service recorded on user files
<b>Service costs</b>		
Cost of products supplied, including modifications made within the service	The individual cost of each wheelchair will be less than (amount specified according to budget and realistic cost of available products)	Home address of users accessing the service recorded on user files



<b>Service plan framework</b>			
<b>Identify a need/ problem to be monitored</b>	<b>Action/objective to address the need/problem</b>	<b>Target</b>	<b>Information collection</b>
1.	1.	1.	1.
2.	2.	2.	2.
3.	3.	3.	3.

**Record actions to know if the service is working (if time permits)**

<b>1.Actions I can take to create a service plan</b>
<b>2.Actions I can take to monitor personnel in working towards a service plan</b>
<b>3.Actions I can take to evaluate how effectively the service is achieving its goal</b>
<b>4.Actions I can take to recognize team or individual success</b>



### C.2: Managing demand

**1.Actions I can take to establish a system to monitor referrals and manage waiting lists**

--

**2.Actions I can take to share success stories of early referrals with parents and referral sources**

--

**3.Actions I can take to plan management of referral of clients with needs beyond the capacity of the service**

--

**4.Actions I can take to monitor and improve efficiency of service steps**

--

### C.3: Planning follow-up

**1.Actions I can take to plan follow-up**

--

**2.Actions I can take to establish and train community partnerships**

--

**3.Actions I can take to identify potential candidates for user training and follow-up**

--

**4.Actions I can take to gather and share success stories of the benefits of follow-up**

--

## **C.4: Planning for financial sustainability**

**1.Actions I can take to create a shared vision of financial sustainability**

--

**2.Actions I can take to identify the funds and resources required**

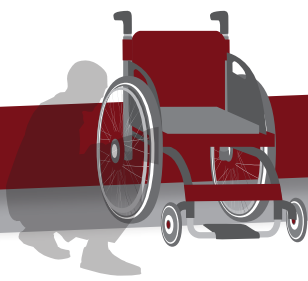
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**3.Actions I can take to identify funding sources**

--

**4.Actions I can take to prioritize funding sources and develop a fundraising strategy**

--



## Part Two

### A. Core knowledge

#### A.1: Appropriate wheelchair provision: National policy

- Read the two examples of national policy relating to wheelchair provision.
- Consider what policies already exist in your country.
- Discuss how useful the policies below would be in your country and consider where they would fit within your government's structure.

##### **Example 1: Policy in Afghanistan relating to wheelchair provision**

In October 2003, the Ministry of Martyrs and Disabled in Afghanistan published a Comprehensive National Disability Policy. The policy was “developed in a collaborative manner by all stakeholders including disabled people organizations and self-help groups; disability NGOs both national and international; major line ministries including Ministry of Education, Ministry of Public Health, Ministry of Labor and Social Affairs, Ministry of Women Affairs, and Ministry of Martyrs and Disabled (MMD); related UN agencies; and the President's Office” (4). It is expected that the initial policy will lead to a more detailed and prioritized plan of action. The policy goes on to state:

Provisions for people with physical disability should include orthopaedic rehabilitation centres; physiotherapy services, and orthopaedic, assistive and mobility devices. These services should be close to a regional or provincial hospital with orthopaedic surgical services so that the local population has easy access. Persons with disabilities have the right to receive devices. Devices should be well-made, well-fitting, of local materials whenever possible and repairable locally. Appropriate technology should be standardized throughout the country. A mechanism for national standardization should be created with relevant experts in collaboration with MOPH [the Ministry of Public Health].

### **Example 2: Policy in South Africa relating to wheelchair provision**

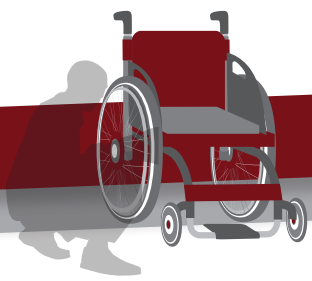
In 2003 national guidelines for assistive devices in South Africa were published. These guidelines were developed through consultation among all provinces of South Africa. The contribution made by the Western Cape province was based on their experience of developing provincial guidelines.

The development of provincial guidelines was started by a group of clinicians providing wheelchair services. They consulted a provincial programme manager and the local rehabilitation services to develop a plan to professionalize the standard of wheelchair services. The plan had three major focus areas:

1. Perform a situation analysis of wheelchair services in the province
2. Implement training of wheelchair service providers
3. Set up guidelines for a provincial wheelchair management strategy.

Provincial guidelines were drafted which included minimum standards for key service steps, as well as key management steps, such as training of staff, setting up and management of waiting lists, budgets and provision of repair and maintenance services.

The provincial management assisted the group in becoming a formal advisory group. Representatives of this group accompanied the provincial managers to national meetings and contributed to the establishment of the national guidelines for assistive devices in South Africa.



### A.2: Service delivery

Broader role of a manager
<p style="text-align: center;"><b>Awareness</b></p> <p style="text-align: center;"><b>Policy</b></p>
Shared actions to improve appropriate wheelchair provision in the country
Actions I can take in the next three months

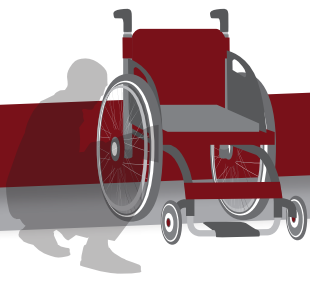
## B. Starting a wheelchair service

### B.1: Facilities and equipment

#### B.1.1 Identifying suitable facilities

- Look at the list of facilities below.
- Think about practical solutions that will work in your service.

Basic level facilities				
	Does this facility already exist?	Could this be a shared facility with an existing service?	Could a room with another purpose be converted?	Could an existing room be reorganized or restructured?
1. Waiting and reception				
2. Quiet area for lying down				
3. Accessible toilet				
4. Office area for personnel				
5. Clinical: area for assessment and fitting				
6. Technical: area for wheelchair preparation, maintenance and repair				



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7. Storage				
8. User training				
<b>Additional intermediate level facilities</b>				
	<b>Does this facility already exist?</b>	<b>Could this be a shared facility with an existing service?</b>	<b>Could a room with another purpose be converted?</b>	<b>Could an existing room be reorganized or restructured?</b>
9. Assessment and fitting area with bed for assessment in lying position				
10. Additional storage space for materials				
11. Additional product preparation area: sewing and upholstery				



### **B.1.2 Identifying equipment**

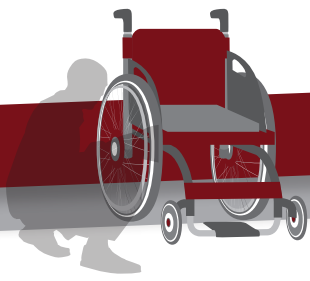
- Refer to the reference manual for guidelines on equipment and paperwork.

<b>Equipment</b>	
<ul style="list-style-type: none"><li>• Identify what equipment is already available and in use at your service centre and take note of any equipment to be made or purchased.</li></ul>	
<b>Already available</b>	<b>To be made or purchased</b>

<b>Paperwork</b>	
<ul style="list-style-type: none"><li>• Review the list of forms and checklists in the Additional Resources for Managers on the Pen Drive.</li><li>• Which forms and checklists are already integrated and in use? Take note of any forms or checklists to be integrated into daily use.</li></ul>	
<b>Already available</b>	<b>To be integrated into existing service</b>

### **B.1.3 Workspace organization**

- Refer to the reference manual for guidelines on facilities and equipment.
- Review tips on good workspace organization listed below:
  1. Remove clutter: eliminate all unnecessary tools, parts, equipment, and out-of-date paperwork.
  2. Identify regularly used items: tools, parts, instructions and paperwork. These items should be arranged so they are easiest and quickest to locate.
  3. System and responsibility: have a system for each workspace and someone responsible for implementing the system.
  4. Monitor: monitor the system to make sure the change sticks.



FOR MANAGERS

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SERVICE TRAINING PACKAGE

## Technical area

- Analyse the example and make recommendations for improvement.



## Outreach clinical and technical area

- Analyse the example and make recommendations for improvement.



## B.2: Range of appropriate wheelchairs

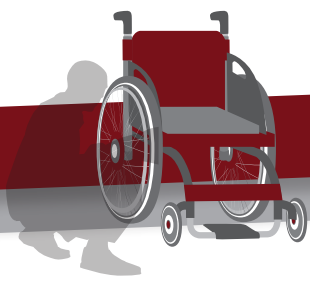
### B.2.1 Durability, repairability

- Work together with your group and complete a set of questions assigned to you – based on your group number.
- Use your own knowledge and experience along with the reference manual to complete the activity.

<b>Group 1</b>	<ul style="list-style-type: none"><li>• What questions can you ask about the safety and durability of the products supplied?</li><li>• How can you find out whether the product supplier (donor; manufacturer) is supplying products that will be safe and durable for your specific context?</li><li>• Who else can you talk to in order to find out about safety and durability of products being offered by a donor/manufacturer/supplier?</li></ul>
Durability	

<b>Group 2</b>	<ul style="list-style-type: none"><li>• Even products that are durable have parts that commonly wear out and break. What are some of these vulnerable parts?</li></ul>
Parts which break and wear out	

<b>Group 3</b>	<ul style="list-style-type: none"><li>• A service needs spare parts.</li><li>• How can you identify which spare parts are needed?</li><li>• How do you know which spare parts need to be ordered?</li></ul>
Spare parts	



### ***B.2.2 Supply of appropriate wheelchairs***

#### **Scenario I**

- Read your assigned scenario below. Then read 'Principles of providing appropriate mobility devices'.
- Prepare a role-playing scenario among provincial officials and a group of stakeholders advocating for a change in the wheelchair procurement system (3-5 minutes for role play).

#### **When discussing the role play, think about:**

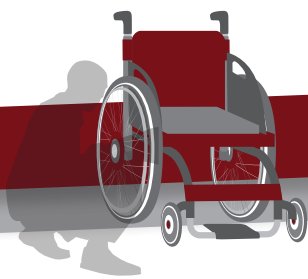
- What are the problems in the scenario?
- Possible actions to overcome the problems.

A government hospital in your region has allocated a budget for the provision of wheelchairs. Annually the budget gets reviewed and the product list gets reconsidered. Even though each year there are requests to change the products available there is never any change and the procurement department purchases two types of product based on cost.

### **Principles of providing appropriate mobility devices**

In order for countries to meet their obligations related to assistive technology (mobility devices), outlined in the Convention on the Rights of Persons with Disabilities the following key principles need to be considered:

- Acceptability – people with disabilities must be involved in all stages of mobility device provision
- Accessibility – mobility devices and related services must be accessible to everyone with an identified need
- Adaptability – mobility devices and related services need to be adapted and modified to ensure they are appropriate to the needs of the individual
- Affordability – mobility devices and associated services must be affordable
- Availability – facilities, personnel and products must be sufficient for the needs of the population and provided as close as possible to the people's own communities
- Quality – products, facilities and services are of an appropriate quality.



## Scenario 2

- Read about the two government tender systems below.
- Summarize the current system in your country now.
- Refer to the 'Principles of providing appropriate mobility devices'.
- Prepare suggestions to create or improve a government tender system for supply of wheelchairs in your country.

### South Africa

In South Africa purchase of wheelchairs by the government is controlled by a National Tender. The government works with people from different provinces who have expertise on wheelchairs and wheelchair services. They also consult with current wheelchair providers.

Following the consultation, the product categories and the items in those categories are finalized, including a detailed specification of each product. Categories include a range of comfort and high risk cushions.

Minimum durability standards for each product are specified.

Once the tender specifications are finalized and approved, the national treasury opens the tender for the bidding process. Knowledgeable representatives inspect all products submitted for the bidding before contracts are awarded. The contracts include minimum delivery periods and penalty clauses for breach of contract conditions.

### Romania

State funding for wheelchairs in Romania follows the pattern of subsidy for medicines. The subsidy process for wheelchairs started in 2001 when the State organized a tender for suppliers of wheelchairs. As a result of the tender, a base/reference price was agreed upon but nothing was defined regarding product quality or service delivery. The value of the subsidy is re-established every year.

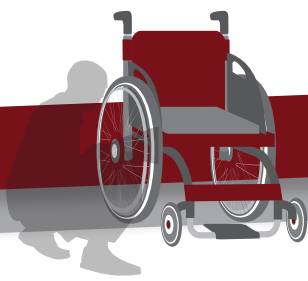
The first step for a wheelchair user is to apply for a disability certificate. Without this certificate it is impossible to access a wheelchair. Next, the user should make an appointment with a rehabilitation doctor who will write a prescription for a wheelchair. The wheelchair user then submits an application to the county National Insurance Agency (NIA). When the wheelchair user receives the approval/voucher, he or she first chooses a supplier, then a wheelchair. If the wheelchair price is less than the subsidy, the supplier provides the wheelchair to the user in exchange for the voucher, which is then used to invoice the NIA. If the wheelchair price is more than the subsidy, the user must pay the balance or find complementary sources of funding, for example donors, employers, and individuals.

### Scenario 3

- Prepare a role play scenario that demonstrates a meeting with a donor where you come up with a plan to supply appropriate wheelchairs through your service delivery system (3-5 min role play).

#### **When planning your role play:**

- Discuss how donated wheelchairs are currently distributed in your country.
- Read the 'Principles of providing appropriate mobility devices'.



### B.3: Align personnel: Roles

- Look at the table listing the roles of wheelchair service personnel.
- Write the name of who is responsible for each role in the table.
- If you are responsible for more than one service centre be sure to list the personnel in each location.

	Clinical	Technical	User Training	Administration
Service centre				
Service centre				
Service centre				

### B.4: What does a wheelchair service cost?

**Review:** each line in the budget below and consider which costs can be shared or saved by integrating a wheelchair service into an existing service.

Circle in black pen all costs that can be saved.

Circle in red pen all costs that can be shared.

#### Example scenario of an integrated service

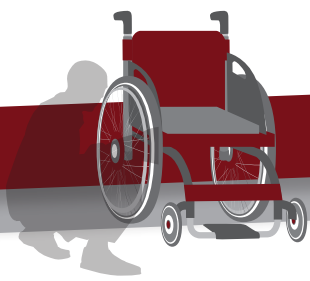
A P&O service is planning to integrate a wheelchair service. Two personnel have been identified and sent on the WSTP basic course.

Both personnel will work three days per week in the wheelchair service and two days per week in the P&O service.

A workspace has been allocated in the workshop for a wheelchair technician. The therapy department have cleared out all broken and unused equipment to create space for a work area for the clinical role.



Budget Guide	SERVICE STEPS							
	Referral & appointment	Assessment	Perscription	Funding & ordering	Product preparation	Fitting	User - training	Maintenance, repairs & follow-up
<b>START-UP COSTS</b>								
Product design								
Sourcing range of products			✓					
Tools			✓		✓			✓
Equipment		✓				✓		
Building/facilities		✓			✓		✓	
Stock of materials					✓			
<b>OPERATIONAL COSTS</b>								
Wheelchairs					✓	✓		
Spare parts								✓
Materials					✓	✓		✓
Freight (product transport)						✓		✓
<b>Personnel</b>								
Management	✓			✓				✓
Clinical staff		✓	✓	✓	✓	✓	✓	✓
Technical staff			✓		✓	✓	✓	✓
Trainer/Peer trainer							✓	✓
Administrator	✓	✓	✓	✓				✓
<b>Local transport</b>								
Local transport for personnel		✓			✓	✓		✓
Local transport for clients		✓				✓		✓
Accommodation for clients		✓				✓		
Printed materials	✓	✓		✓			✓	✓
Consumables					✓	✓		✓
Tool replacement					✓	✓		✓
Overheads		✓	✓	✓	✓		✓	✓
Training of personnel		✓	✓		✓	✓	✓	✓
Training partners/referral network	✓		✓					✓
Fundraising	✓	✓	✓	✓	✓	✓	✓	✓
Monitoring and evaluation	✓	✓	✓	✓	✓	✓	✓	✓



## C. Running a wheelchair service

### C.I: Efficient and effective services

#### C.I.I Monitoring

#### Section I

- In your group: read and complete your section of the table below.
- Some of the boxes have been completed to help you get started. The remaining boxes should be filled in.

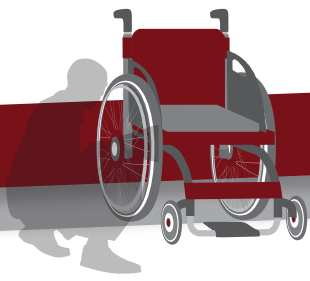
Areas and activities	Example performance targets	Information collection
<b>Referral</b>		
Number of users referred	The service will receive 30 referrals per month	Record referrals received
Average waiting time from referral to appointment		On the user's file record the date when the referral was received and the assessment date
<b>Wheelchair provision</b>		
Number of users who receive a wheelchair	The service will prescribe and fit wheelchairs for 20 users per month	
Average waiting time from assessment to fitting		
Number of follow up appointments carried out		

- Record below why it is useful to know whether or not targets have been met.

	<b>Useful to know targets met because:</b>	<b>Useful to know targets not met because:</b>
Number of users referred		
Average waiting time from referral to appointment		
Number of users who receive a wheelchair		
Average waiting time from assessment to fitting		
Number of follow up appointments carried out		

## Section 2

<b>Areas and activities</b>	<b>Example performance targets</b>	<b>Information collection</b>
<b><i>Wheelchair population served</i></b>		
Details of users referred to the service, such as age, gender, disability, postural support needs	<p>The service will encourage equal access</p> <p>The service will aim to meet the needs of users requiring basic wheelchairs and those requiring modifications and postural support</p>	<p>Number of women, men, girls and boys accessing the service – recorded on user files</p> <p>Types of postural needs presented and wheelchairs prescribed – recorded on user files</p>
Geographical area covered by the service		Home address of users accessing the service – recorded on user files



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<b>Service costs</b>		
Cost of products supplied, including modifications made within the service	The individual cost of each wheelchair will be less than (amount specified according to budget and realistic cost of available products)	
Amount of time spent by personnel on service activities (For example assessment, follow-up, and training.)		

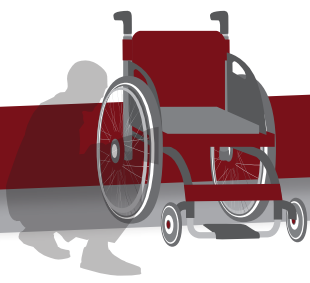
- Record below why it is useful to know whether or not targets have been met.

	<b>Useful to know targets met because:</b>	<b>Useful to know targets not met because:</b>
Details of users referred to the service, such as age, gender, disability, postural support needs		
Geographical area covered by the service		
Cost of products supplied, including modifications made within the service		
Amount of time spent by personnel on service activities (for example, assessment, follow-up, training)		

### C.1.2 User feedback

- There are some important considerations when planning to gather feedback from service users. Use this checklist to make notes for your service.

<b>Planning feedback from service users</b>
Points to consider: Transport and time are two of the most significant costs.
When will it happen?
Who will do it?
What feedback questions should be asked?
<b>Baseline information (Refer to the tools stored in the Additional Resources for Managers Manual on the Pen Drive)</b>
Points to consider: In order to assess the impact of the service, it is important to record the situation before any intervention. That is, before an assessment begins.
When will baseline information be gathered?
Who will gather this information?
At what intervals will information be collected?



## Recording and processing data

Points to consider: Efficient recording of data saves time and money

How will you record the data?

What methods can you use to make the recording and processing of the data as efficient as possible?

Who will record the data?

Who will process the data?

## C.2: Developing efficient services

### C.2.1 Monitoring a service plan

- Create a service plan for your service.
- Select a need or problem to be monitored from your own service and fill in the information under each heading.

#### Service plan framework

Identify need/ problem to be monitored	Action/objective to address need/ problem	Target	Information collection

## C.3: Managing demand

### C.3.1 *Generating demand and early referral*

- Read the example.
- Discuss and then list the reasons for success.

#### **Example of success: early referral by parents in Mexico**

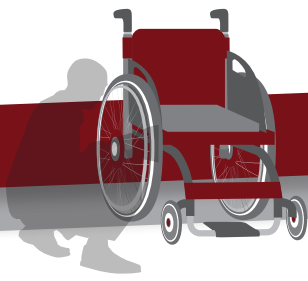
Here is an example of how a group of rehabilitation centres for children in Mexico built up an effective early referral network.

Although rehabilitation centres primarily targeted neo natal doctors and paediatricians with their awareness raising activities, they also had a major annual fundraising campaign aimed at the general community that used extensive media coverage including radio and television. This led to a lot of word of mouth referrals and many parents self-referring their children.

During the awareness raising, the centres had a clear message: the importance of referring children for rehabilitation when they are born. They also presented a powerful vision of success with many positive stories relating to integration and achievements of the children that they work with. Over a period of 15 years, the rehabilitation centres have seen a cultural shift as paediatricians and families are now actively making early referrals.

The result: A third of all referrals are for children 3 years old and younger.

#### **Reasons for success**



### **C.3.2 Analysing service steps**

**Time available for service delivery each day:** \_\_\_\_\_ mins

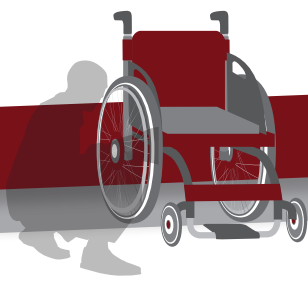
- Work together in groups.
- Read each service challenge in column 1.
- Read possible strategies for more efficient service delivery in the table below.
- Match service challenges with strategies to improve efficiency. List the number of each strategy in column 2. A challenge may require a number of strategies.

#### **Strategies to improve service efficiency**

1. Source products with as much range of adjustability as possible
2. Source products which can easily be modified
3. Source products with posture support devices (PSDs)
4. Pre-prepare sample product set-up options
5. Pre-fabricate posture support devices
6. Clear scheduling to allow for joint working
7. Hold team meetings to create shared work plans
8. Clinical and technical teams to work together during fitting
9. Clinical and technical teams to discuss prescription solutions
10. Clear documenting of information and record keeping
11. Plan appropriate level of training for service personnel
12. Source appropriate materials for cushion and PSD fabrication and modifications
13. Source appropriate tools for making quick product adjustments
14. Allocate user training to a specific person, for example, a peer trainer
15. Identify facility for user training close to clinical and technical areas
16. Establish effective stock control systems
17. Prepare a small stock of wheelchairs in different sizes
18. Establish community partnerships to identify service users and provide transport to the service centre
19. Build capacity of community partners to provide basic level services and refer intermediate level service users
20. Be open to new ideas – innovation.



Column 1: service challenges		Column 2: service strategies
	<b>Assessment:</b>	
1.	If service personnel are travelling to a service or carrying out home visits, travel time may need to be factored into the assessment	
2.	If team members are inexperienced the assessment will take longer	
	<b>Prescription:</b>	
3.	If products have limited adjustability, modifications must be prescribed to make the products fit individual users	
4.	If extra posture supports require fabrication, additional measurements and drawings are required	
	<b>Product preparation:</b>	
5.	Quick access to type and size of product required	
6.	If a wheelchair has limited adjustability then more time may be required for product preparation	
7.	If modifications for posture support are necessary, more time will be required	
	<b>Fitting:</b>	
8.	If modifications have been made or extra supports added to the wheelchair, fitting will take longer	
9.	If any changes are made to the wheelchair set-up during fitting; further fitting checks are required	
	<b>User training:</b>	
10.	If it is the first time a person is receiving a wheelchair, or a health complication exists, more time will be required to cover user training in health, mobility, handling the wheelchair as well as care and maintenance, and referring to other referral sources	



### C.4: Planning follow-up

#### C.4.1 Overcoming barriers

- Read the list of possible barriers to follow-up below and add any additional barriers that the group has highlighted.
- Discuss actions to overcome the barriers to follow-up and list them in the table below.

#### Barriers to follow-up

Possible barriers to an outreach follow-up service:

- costs of service centre staff travelling to communities;
- time for service centre staff to travel to the community;
- follow-up is not prioritized by service managers;
- follow-up is not valued by service users until they experience the benefits

Possible barriers to a centre based follow-up service:

- cost of travel and time off work for one or more family members;
- users and family members are often not aware of the benefits of follow-up;
- difficulty finding accessible transport;
- pressure to focus on new appointments at the service centre can leave no time for follow-up;
- difficulty scheduling appointments: users may turn up when staff are not available, or not turn up when staff are available.

#### Actions for overcoming barriers to follow-up

--

## C.5: Developing financial sustainability

### C.5.1 Identifying funding sources

- Read through the list of possible funding sources and refer to the reference manual for more details.
- Choose the three sources that you believe have the greatest immediate potential for your service and complete the table below for the selected funding sources.

#### Different funding sources for managers to consider

1. Government
2. National insurance schemes
3. Private donors and sponsors
4. Corporate (business) donors and sponsors
5. User contributions or full purchase
6. Income generation/social enterprises
7. Community groups/charitable societies
8. Diplomatic missions
9. International and national NGOs

#### Selected funding sources

Number in priority order by considering the:

- Effort required
- Short- or long-term financial reward (or both)

Priority	Funding source	Investment/ effort required high/medium/ low	Short-term reward high/medium/ low	Long-term reward high/medium/ low

**WHEELCHAIR**

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**C.5.2 Developing a strategy**

- Read the example strategy below.
- List the three funding sources from the previous exercise in the table.
- Complete the columns of the table for the selected funding sources.

<b>Funding source</b>	<b>Type of support</b>	<b>Request</b>	<b>Likelihood</b>	<b>Effort</b>
1. Corporate (local business)	Donation to wheelchair procurement budget.	10% of wheelchair budget.	Medium (have funded previously. However, do not always fund the same organization each year).	At least two meetings with the business manager; 2-page proposal and budget to be submitted and invite manager to next open day.
2. Local government	Potentially may fund costs of all outreach visits to wheelchair users in their area.	20% of all outreach costs and 20% of service personnel salaries.	High (have been in discussion with this local government for a while. Have run one outreach to their area. They are very keen to support this and funding seems to be available).	Formal proposal and budget to be submitted. Reporting commitments – require accurate data of all people seen from their area and financial reporting.









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