Choosing Walking Equipment

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Introduction

The aim of this factsheet is to provide 'first stop' information on the types of walking aids available and details about the useful features of some of the more standard pieces of equipment. Fall alarms are also introduced. Relevant organisations are listed at the end of the factsheet followed by an option to view references / sources of further information. The print buttons (above to the right) let you choose whether to download and print with or without the references.

For up-to-date product and supplier information, please contact our equipment helpline. They are open Monday to Friday 10am - 4pm Tel: 0300 999 0004 (calls charged at your standard land line rate even if you are phoning from a mobile).

Alternatively, you can write to our letter enquiry service or contact us via email at advice@dlf.org.uk. To help us give you a concise and informative reply, please provide us with as much detail as possible including information on the difficulties you are having and any solutions you have considered, including equipment ideas.

Supply and Provision

NHS and Social Services

You may be able to get an assessment from your local social services or health services. Mobility assessment will usually be overseen by a physiotherapist. Physiotherapists work in a variety of settings including hospitals, health centres, GP practices, schools, work places, private clinics and also by visiting people at home. The two main treatment routes to see a physiotherapist are via the NHS and via private practitioners. Arrangements and eligibility criteria vary in different area and services are undergoing major changes (e.g. health and social services joint working). In some areas, and depending on your needs, there may be fall prevention services that include advice on walking aids. Referral to a physiotherapist can be made by a range of professionals including therapists, nurses, and doctors.

Following assessment, you may be advised about techniques, exercise and/or footwear. Walking aids may be provided or you may be advised on equipment to purchase yourself.

Private purchase

As a general recommendation you should not consider buying walking equipment privately without first consulting a healthcare professional, usually a physiotherapist. If you are becoming increasingly unsteady on your feet, it is important to investigate why this is happening. There may be treatment available to help you, for example instruction in muscle strengthening exercises by a physiotherapist.

Although this fact sheet will provide general guidelines on when to consider certain types of walking equipment these are no substitute for individual assessment. There are many possible circumstances which may mean the general guidelines do not apply to you. For example (Wilkin, 1996)

- If you have had a cerebro-vascular accident (CVA) using certain walk aids may encourage an inappropriate gait and the height of walking aids may need to be adjusted to inhibit increased spasticity
- If you have a severe and chronic respiratory condition you may require walking aids with certain features
- If you have parkinsons then certain settings and features may require modifying
- If your pain or energy levels vary during the day then you may require different walking aids at different times

Studies of walking aid use, including walking sticks and frames, have found that over 60 percent of walking aids in use may be unsuitable (Mulley, 1988 and Simpson and Pirrie, 1991)

. This is often because they are of an incorrect height (usually too high). The authors of these studies
concluded that this confirmed the importance of an assessment by a physiotherapist when choosing walking equipment.

Repeated use of a walking aid can lead to changes in your abilities, such as your balance and muscle strength and opinion is divided on the benefits and possible negative consequences. The significance of these changes will depend on whether you are likely to use the walking aid for the long term or are recovering from an injury / condition and wish to discontinue or change your walking aid in future (Wilkin, 1996). This is another reason why individual professional assessment of your needs is important.

However, there may be exceptions when purchase without a healthcare professional is less of an issue. For example, you may wish to purchase a second walking aid, with the same features as one you have already been provided, to keep at a friends or relatives or so that you can keep one upstairs and one downstairs. Some suppliers may have their own health care professional to advise you.

**Private physiotherapist**

If you wish to request a private appointment with a physiotherapist then you can obtain a list of local physiotherapists who offer private services from the Chartered Society of Physiotherapists at www.csp.org.uk or tel: 020 7306 6666 or Physio First www.physiofirst.org.uk/ If you do contact a private physiotherapist (or occupational therapist) make sure they are registered with the Health and Care Professions Council (HCPC). The HCPC is responsible for the conduct, performance and ethical behaviour of its registrants. Physiotherapists who do not meet the standards of practice, conduct and behaviour required by the HCPC are removed ('struck off') from the register. Visit the HCPC website to check the registration status of a physiotherapist.

**Funding equipment**

Charitable trusts may sometimes provide funding for equipment. A useful resource is www.turn2us.org.uk, a website that allows you to search for organisations that give grants, including for equipment and other services. You can refine / filter your search by specific health issues such as 'physical disability', 'ageing' or 'rheumatism’. If you're over 60, Charity Search is a free service to help you find a grant-giving charity www.charitysearch.org.uk

Charities will only give awards in accordance with a predetermined criteria, so it is important that you carefully select the trusts you apply to.

Most libraries hold directories of suitable funders in their reference section, such as the The Directory of Grant Making Trusts The Grants for Individuals website is run by the Directory of Social Change and lets subscribers search for grants but is intended for organisations searching for funding for individuals. http://www.grantsforindividuals.org.uk

**Try equipment before you buy**

If you decide to buy equipment privately it is best to try and compare the different ranges first. You may have an equipment demonstration centre near you where you can visit to view and try out ranges of equipment. You will receive impartial advice to help you choose appropriately. However, centres may not display examples of all the equipment in this factsheet. You will need to contact your nearest centre to find out what they have and to book an appointment. Contact details for your nearest Equipment Demonstration Centre can be found on the Disabled Living Foundation's web page Equipment Demonstration Centres in the UK.

Be cautious of sales people who try to persuade you to buy equipment that may not meet your needs fully or is over-priced. Buying from a company that belongs to a trade association, such as the British Healthcare Trades Association (BHTA) may give you some reassurance. BHTA members have signed up to a code of practice governing standards of customer service (see Useful organisations).

You don't have to pay VAT on products designed for disabled people if you have a long term illness or disability, or are terminally ill. Mobility shops may automatically sell you equipment without charging you VAT, but you may have to ask. Individuals with a temporary injury such as a broken arm or hip do not qualify for VAT...
relief. For more information, and to check for any changes in the regulations visit the GOV.UK, VAT relief on products and services for disabled people or the HM Revenue & Customs reduced rate VAT webpage (their Charities Helpline covers VAT relief for disabled people: Telephone: 0300 123 1073)

Purpose of walking equipment

Walking equipment is usually used for one of two purposes: as part of a rehabilitation programme when the user is recovering from an injury or operation; or as a long-term aid to mobility when the user has a permanent difficulty with walking. The rehabilitation process is a gradual progression towards independent and unassisted walking and may commence with the use of one kind of walking aid to give you confidence before progressing to another walking aid. The ultimate aim of a rehabilitation programme is for you to walk independently, without walking equipment. Sometimes, complete recovery is not possible or you may have an illness or disability that permanently affects your legs, balance or coordination. In these situations, mobility equipment may be required for long-term use, and to ensure that the appropriate device is selected, your lifestyle and home environment should be reviewed.

Walking equipment may perform one or more functions including:

- provision of greater stability and balance by providing a wider support base
- facilitating your walking pattern in terms of speed and evenness of stride. The equipment may also help maintain an upright body posture
- increasing your confidence in your walking ability
- weight redistribution - some of the weight carried through the legs when walking is transferred through the arms of the frame or stick as it is leant on for support. This may help reduce pain in the joints, muscles and ligaments in the lower limbs

Safe use of walking equipment

Walking equipment may improve your mobility but, if an inappropriate walking device is used, if incorrect techniques are adopted, or if the device is not suitable for a particular environment, your independence and safety may be jeopardised. Advice about walking equipment and the way it should be used is available from the professionals and sources listed above. Other factors that should be looked at to minimise the risk of falling whilst using a walking device include:

Home environment

Loose rugs, trailing flex, a cluttered floor area are all potential hazards.

Stairs

If you have stairs in your house and use a walking frame obtain a second one and keep one upstairs and one downstairs. Do NOT attempt to take a walking frame up and down stairs.

Standing from a chair

Do not attempt to use a walking frame to rise from a chair as you may pull the frame on top of yourself. You should push up with your hands on the arms of the chair and only hold the frame once standing (Johnson, 2000 and Mulley, 1990). If necessary ask to practice this with a health care professional.

Wet floors

Walking equipment should not be used in wet floor areas.

Footwear

Footwear should be appropriate and supportive.
Maintenance of the walking equipment

All walking equipment should be checked regularly for signs of wear and tear. Particularly vulnerable parts include the ferrules, which must be replaced if the slip-resistant rings or bobbles on their underside lose their definition, or if the rubber shows signs of cracking. Equipment that is height adjustable can show signs of stress at the height setting after prolonged use. Handgrips can also become worn.

Replacement ferrules are usually available from the issuing department, for example the hospital physiotherapy department or. If you feel that your walking device is structurally no longer safe to use, inform the issuing department which may provide you with a replacement. If you have bought your walking device privately, then you are responsible for maintenance and upkeep. Replacement parts are usually available from the commercial outlet from which you bought the equipment, ferrules are widely available.

Learning to use equipment.

Users with reduced cognitive functioning may not be able to learn, or remember how to use a frame. Hence an assessment with a health care professional is very important.

Walking Sticks

Walking sticks tend to be used by those with moderately reduced balance. The hand they should be held in will depend on whether you have one leg or side stronger than the other and on whether you are right or left handed so you need individual advice on this (Mulley, 1988 and Johnson, 2000). Likewise, there are also different ways of using them such as stick and involved leg moved first or stick first.

Types of walking stick

Wooden

These traditionally have a crook handle and are cut to the correct height. They are available in various diameters and strengths which are designed to take different loads. They are not as adaptable for use by different people as metal sticks.

Price range: £6 - £66
View our impartial list of wooden walking sticks

Metal

These tend to be stronger than wooden walking sticks. Some are fixed length, others are height adjustable. Metal sticks are available with right angled handles, crook shaped handles or anatomically shaped handgrips. The ferrules of metal sticks must incorporate a metal disc to prevent the end of the stick cutting into the rubber of the ferrule.

Price range: £5 - £34
View our impartial list of metal walking sticks

Released November 2013, Version 2 Helpline: 0300 999 0004
Folding walking sticks

These are lightweight metal sticks with sectioned shafts that enable them to be folded up for storage, for example in a handbag. Strong elastic runs inside the shaft to ensure that in its open position the stick remains stable. Fixed height or adjustable height versions are available. Some are provided with a plastic, storage wallet.

Price range: £7 - £30
View our impartial list of folding walking sticks

Walking sticks with a seat

These are particularly useful for people who need to rest periodically, for example for those with breathing difficulties or a heart condition. However, they are not recommended for people who need to take a lot of weight through the stick as the addition of a seat alters the balance of the stick.

The weight of stick seats and the amount of strength needed to open and close the seat varies.

The height of many of these sticks cannot be adjusted and it is important to ensure that the overall height is appropriate for the individual user so he/she gains walking support from it.

The seat size is often small and seat height varies between the models; the lower the seat the more difficult it is to stand up from. Most do not provide back support or armrests to push up from.

Those with three or four legs provide a broader base of support and are therefore more stable to sit on than the shooting stick type, which have only one leg. Seat sticks with a single point base must have a rubber ferrule. Traditional style shooting sticks with a single point and plate base instead of a ferrule do not provide sufficient stability.

Walking sticks for blind or partially sighted users

White walking sticks are available as walking aids for those people who are blind or visually impaired and also have difficulty mobilising. The white colour acts as an indicator to those around that the user has a visual impairment. Red tape can be wrapped around these sticks to indicate that they are being used by people who are both deaf and blind or white sticks with red stripes can be purchased.

These walking sticks should not be confused with symbol canes which enable people who are blind or visually impaired to establish the nature of their immediate surroundings. They act as guides by locating obstacles in the path of the user. They are also white in colour.

The RNIB can help with finding appropriate mobility training for you if you are having difficulty resulting from sight loss RNIB mobility training.

Price range: £8 - £35
View our impartial list of white walking sticks
Height

It is very important to have the walking stick at the correct height for use. If the height is incorrect then the support will not be adequate, or may cause discomfort. For example, if the walking stick is too high, this will result in you raising (elevating) your shoulders, therefore reducing your balance and comfort. The most effective method of checking the height is to stand in your regular footwear with your arms hanging relaxed with a slight natural bend at the elbow (flexed at 15 degrees). Have someone measure the distance between the wrist crease and the ground (Elmamoun and Mulley, 2007).

Over time your height measurements and posture will change so if it has been several years since you were provided with your stick you should check that it is still a suitable height for you (Marston and Brookes, 2005).

However, do not significantly change the height of a walking stick that someone has had for some time as they will have got used to it and there may be a reason why the stick length was chosen (e.g. sometimes stick length is adjusted for individuals who have had a stroke) (Mulley, 1988).

Remember that these are general guidelines and that there may be reasons why you require a different height so check with a health care professional.

Some walking sticks are made of wood, which can be measured and cut with a saw to the correct height. In practice, when therapists are measuring wooden sticks, they turn the stick upside down and mark the point where the stick should be cut; keeping in mind the small addition to the overall height once a ferrule is attached.

Metal sticks are available in a variety of fixed heights - the nearest suitable height should be chosen - or they have a telescopic mechanism. This can be finely adjusted using spring loaded catches.

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View our impartial list of walking sticks

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Handle shape

A variety of different shaped handles are available including:

Crook handles

These may be less comfortable to hold than a right-angled handle, but can easily be hooked over the arm when not in use.

Right angled handles or T-shaped

These are often more comfortable to use than a crook handle. The addition of a wrist strap may be useful to secure the stick when it is not in use.

Swan necked shafts

Handles with swan necked shafts are offset above the stick, which allows your weight to be evenly spread centrally over the base of the stick, this may be helpful if you require more stability.

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Price range: £8 - £35
View our impartial list of walking sticks with swan necks
Contoured handles, sometimes called Fischer sticks

These are anatomically shaped handles, which spread the pressure over a wider area of the palm to improve comfort for permanent users or those with painful hands, perhaps due to arthritis (Elmamoun and Mulley, 2007, Marston and Brookes, 2005). They are produced for left OR right handed use so if you are self purchasing make sure you buy the correct one.

Price range: £6 - £30
View our impartial list of walking sticks with contoured handgrips

Additional points to consider

When using only one stick it should be held in the opposite hand to the affected leg so that a natural walking pattern and an upright posture can be maintained. The stick and the affected leg should be moved forwards together. If using more than one stick, professional advice should be sought for guidance on the most suitable pattern of use.

Walking sticks are not often used by individuals with Parkinson’s disease as they tend to hold their sticks off the ground. Sticks with visible laser beams have been tried as visual cues to help individuals who experience freezing episodes, but studies have not proved they give consistent benefit (Elmamoun and Mulley, 2007). We recommend you discuss the pros and cons with your health care professional if you have Parkinson’s disease and are considering a walking aid.

Tripods and quadrupods

These walking aids have a walking stick style shaft and a three or four point base. They are therefore freestanding and are more stable than standard walking sticks. They are usually used singly rather than in pairs. If used in pairs models with a narrow base occupy less floor space and are therefore more practical. They are more difficult to use on stairs than standard walking sticks (Elmamoun and Mulley, 2007).

Tripods and quadrupods are sometimes used by individuals who have had a stroke. However health care professional opinion on this is divided. Some studies have suggested the use of tripods or quadrupods reduce sway by the user while critics argue they encourage an asymmetrical gait with the stronger, unaffected side leading rather than promoting equal use of the affected and unaffected sides (Elmamoun and Mulley, 2007).

Consequently we recommend you discuss the pros and cons with your health care professional if you are considering a tripods or quadrupod.

All tripods and quadrupods are made of metal, usually aluminium or steel, and have a telescopic mechanism for adjusting using spring loaded catches.

Features to consider

Size of base

Tripods and quadrupods are available in narrow and wide based versions, the wide base offering greater stability. All can be used right or left-handed; the handgrip can be rotated through 180 degrees so that the
spread of the base is away from the user.

**Elbow cuff**

Some quadrupods incorporate an extension above the handgrip that terminates in an elbow cuff, similar to the cuff found on elbow crutches. This gives added security, by retaining the forearm in a position immediately above the handgrip.

**Height**

It is very important to have the tripod or quadrupod at the correct height for use. The most effective method of ensuring this is to have the user standing in their regular footwear with their hands by their sides. The measurement to take is the distance between the wrist crease and the ground.

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**Crutches**

You should always get advice from a health care professional before choosing or using crutches. Crutches are designed to be used in pairs, you need good co-ordination to use them correctly (Ainslie, 2012). Occasionally one crutch is used on its own but this should only be done under the guidance of a physiotherapist.

There are different ways of using crutches such as two point gait, three point, four point and swing-to and swing-through gait, so it is not appropriate for us to give guidance on use, you need individual advice (Johnson, 2000).

**Types of crutches**

**Elbow crutches**

These are the most common type of crutch and may be single or double adjustable. Both floor-to-handgrip height and the distance between the cuff and the handgrip are adjustable on double adjustable elbow crutches. Single adjustable elbow crutches allow floor to handgrip height adjustment only. Standard and anatomically moulded handgrips are available.

Elbow crutches are available with two styles of cuff: open or closed. An open cuff is semi-circular in shape and provides a support to brace the forearm against in the step-through phase of walking. A closed cuff is a incomplete ring which prevents the forearm slipping forwards out of place and holds the crutch on the arm if, for example, you need to take your hand off the crutch to open a door.

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View our impartial list of tripods and quadrupods
Price range: £11 - £82
View our impartial list of elbow crutches

Axilla crutches
These have a single or double shaft, the height and the distance between the handgrip and the axilla pad are adjustable.

If you are using axilla crutches do not lean on the underarm pad as this may interrupt the blood flow and put pressure on important nerves that run through the armpit. The handgrips should be positioned so that the elbows are slightly flexed.

Price range: £22 - £52
View our impartial list of axilla crutches

Forearm crutches with gutter armrest
The height of these can be adjusted and they have trough or gutter armrests that support and spread the user's weight onto his/her forearms. The length and angle of the handgrip can be adjusted.

Price range: £56 - £63
View our impartial list of forearm crutches with gutter armrests

Height
Crutches must be at the correct height for use. Both axilla and elbow crutches usually have two adjustment points.

The overall height of axilla crutches can be adjusted. This should be measured by standing upright in appropriate and supportive footwear. The underarm pad should fit under the armpit with two finger widths of space above to ensure no pressure is applied through the armpit when the crutches are being used. The handgrip adjusts along the upright side of the crutches and should be set at a height level with the protruding bone at the side of the wrist.

The overall height of elbow crutches can be adjusted. This is measured by lining up the handgrips with the wrist bone. Some elbow crutches also have an adjustment for the elbow cuff, which should cradle the forearm just below the elbow joint so that movement of the elbow is not impeded.

Handgrip
Some crutches can have contoured handles shaped handles shaped to follow the contours of the hand, spreading the pressure over a wider area of the palm for more comfortable use. A gel handgrip can also help to improve comfort.
Elbow crutches can be supplied with gutter armrests. These allow people to bear weight through their forearms rather than through their hands. They have padded, vinyl covered, trough-shaped supports with vertical handgrips. The length and angle of some handgrips can be adjusted to achieve the most comfortable position.

Material

Some metal crutches can have a coloured paint finish. All crutches must be fitted with an appropriate ferrule. The ferrules of metal crutches must incorporate a metal ring to prevent the base of the crutch cutting into the rubber of the ferrule.

Most axilla crutches are made of wood although a few styles are made of metal, either aluminium or steel reinforced aluminium for heavy-duty use.

Walking Frames

Walking frames tend to be used by those with poor balance and/ or weak legs. A walking stick can off-load 25 percent of the user’s weight compared to a frame which can transfer 64 percent of the user's weight through the arms (Youdas, Kotajarvi & Padgett, et al., 2005). This weight re-distribution from legs to arms can help reduce leg pain.

Types of walking frames

Non wheeled standard pulpit frames (zimmer frames)

Standard walking or pulpit frames are commonly known as zimmer frames and are mostly used indoors. They include the following features:

- metal frames made from aluminium or steel
- rubber ferrules on the bottom of their four legs which aim to prevent the frame from slipping
- moulded plastic or foam rubber handgrips. It is possible to get models with contoured handgrips, which enable the pressure exerted through the hands to be spread evenly over the palm
- the height of some models is fixed, on others it can be adjusted

To use the frame correctly users should lift and move it slightly in front of them. They can then lean on the frame, taking their weight through the handgrips, and take two equal length steps into the centre of the frame.

Although walking frames are useful because they provide a large area of support, they do not allow the user to walk using a flowing walking pattern. The user has to keep stopping and starting as the frame is picked up, moved forwards and stepped into. This means they may not be suitable for you if you get tired quickly or have difficulty starting movements (this is often a symptom of Parkinson's disease) (Ainslie, 2012).

To conclude Zimmer frames may be used as a rehabilitation aid but other types of equipment may be more suitable for long-term use.

Price range: £18 - £375

View our impartial list of Non-wheeled pulpit frames
Consider the size of the base if it is going to be used in a domestic setting, some may be too wide to go through small doorways. Frames with four legs that are spread widely apart will be the most stable but may be difficult to get through doorways. If the doorway is particularly narrow, the user may have to walk through sideways. Narrow four legged frames are available, but are not as stable. Frames with three legs are compact and fold flat for storage, but are not as stable as four legged frames. The majority now have four legs.

**Folding pulpit frames**

A folding frame can easily be stored within the home if it does not need to be used all the time. It also makes it easier to transport in a car boot. Frames with three legs (now rare) tend to fold on the front leg. Folding frames with four legs have hinged sides, which can be folded flat against the front of the frame when catches are released. Users often find it difficult to fold frames with press button releases or levers (Hall et al., 1990)

![Folding pulpit frame](image)

Some pulpit shaped frames have a different folding mechanism with a hinged front leg section (shown on the left). The frame is folded by pulling up a wooden ball on a drawstring attached to a movable bar on the front of the frame. You may find this an easy mechanism to operate but these frames are not as compact when folded as those with other folding mechanisms.

**Price range:** £25 - £67  
View our impartial list of folding pulpit frames  

**High or forearm walkers**

These are also called 'gutter frames' and have forearm troughs or gutters which allow you to bear weight through your forearms rather than your hands. Thus gutter frames may be considered if you have arthritis in your hands or have broken your hand or wrist (Ainslie, 2012)

- Adjustable troughs and handgrips enable adjustment to achieve the most comfortable position. Alternatively, some walkers have a platform, rather than individual rests, on which to rest the forearms, and a vertical handgrip.

High or forearm walkers may be wheeled or non-wheeled. We can supply information on high / forearm walkers and their suppliers but please speak to a health care professional first and then call our Helpline on 0300 999 0004 for details.

**Reciprocal frames**

These frames are hinged so that each side can be alternately placed forwards with each step to give a reciprocal action (Johnson, 2000)

- They will go through tighter spaces than standard frames. The advice of a physiotherapist should be sought when considering this equipment. Users often have difficulty learning to use reciprocal frames which makes them unpopular (Mulley, 1990)

We can supply information on reciprocal frames and their suppliers but please speak to a health care professional first and then call our Helpline on 0300 999 0004 for details.

**Wheeled walking frames**

Frames with two wheels can be used in two ways:
the frame is pushed with the rear ferrules lifted fractionally off the ground or they are allowed to glide across the floor surface, allowing the person to adopt a more fluent walking pattern;
- alternatively, it is used like a non-mobile pulpit frame, except that the frame does not have to be lifted up to move it forwards - the person pushes it instead. This frame is held stationary while the user steps forwards.

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**Wheeled pulpit frames**

Wheeled walking frames are basically the same as standard pulpit frames but instead of ferrules they have small wheels on the front legs. It may be possible to exchange the ferrules on a standard, non-mobile frame for wheeled extensions. The small wheels make them more suitable for indoor use but, as the wheels do not swivel, they can be difficult to manoeuvre.

Wheeled frames are usually chosen over non wheeled frames when balance instead of reduced weight-bearing ability is the main concern (Elmamoun and Mulley, 2007) . They are also useful for people who find it difficult to use a traditional frame as they make a more continuous walking pattern possible, and do not need to be lifted clear off the ground to move forwards. The wheels on these frames are fixed and users have found that this means they may need to be lifted when turning. Users have also found that the ferrules on the rear legs can catch and ruck carpets and rugs (Hall et al., 1990) . They can be hazardous to individuals with a festinant or Parkinsonian gait (characterized by small shuffling steps) so consult with your health care professional (Elmamoun and Mulley, 2007) .

View our impartial list of wheeled pulpit frames
http://www.livingmadeeasy.org.uk/group.php?groupid=3578

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**Trainer walkers**

The style of walking equipment offers the user additional postural support for gait training and rehabilitation. We can supply information on high or forearm walkers and their suppliers but advice should be sought from a therapist about the use of this equipment. Please speak to a therapist first and then call our Helpline on 0300 999 0004 for details.

**Mobile frames for one-handed use**

These frames have a central handgrip that enables the frame to be held in one hand. Care should be taken if using a one-handed frame as it does not offer as much support as gripping the frame with both hands. Advice should be sought from a physiotherapist as using this sort of frame may have an adverse effect on some rehabilitation programmes.

**Reverse mobile walkers**
These are wheeled walkers in which you stand and face outwards. The cross rails of the walker are therefore behind you as you move forwards.

We can supply information on reverse mobile walkers and their suppliers but advice should be sought from a therapist about the use of this equipment. Please speak to a therapist first and then call our Helpline on 0300 999 0004 for details.

## Rollators

### Two wheels

Two wheeled rollators have small wheels or castors on the front legs and ferrules at the rear. The two wheels at the front allow these frames to be pushed by gliding them across the floor. This makes them less likely to run away than a four-wheeled frame. They may allow you to adopt a more flowing walking pattern than with a non-wheeled walking frame. The height of the pushing handles can be adjusted.

Price range: £19 - £195

View our impartial list of rollators with two wheels

### Three wheels

Triangular frames are sometimes called 'Delta' or 'tri-wheeler frames'. They have a single front swivel castor and two uni-directional rear wheels and are suitable for use outdoor. You may find them more manoeuvrable than four wheeled walkers, although not as stable. Like two wheeled rollators they may allow you to adopt a more flowing walking pattern than with a non-wheeled walking frame. The height of the pushing handles can be adjusted.

As with all mobility equipment, it is essential that triangular walkers are inspected regularly with particular attention paid to the locking mechanism (usually consisting of a cross brace), which maintains the rollator in an open position. If the folding mechanism is not properly locked the frame may fold unexpectedly (Ainslie, 2012).

Price range: £41 - £595

View our impartial list of triangular walkers

### Four wheels

Large wheels and/or large swivelling castors facilitate travel. However, they may be too mobile for people who need to lean or push against the frame for support - the frame may run away from them. When used appropriately, this style of frame will allow the person to adopt a more fluent walking pattern.

For outdoor walking
Can help with balance

Can you operate the brakes safely?
Will you remember to check that the folding mechanism is securely locked open?
Although many users find their rollators very useful, some find them difficult to handle especially when out in the community, for example getting them on/off buses (Brandt, Iwarsson and Stahl, 2003). Studies have suggested that users of rollators can walk faster and use less energy than users of zimmer frames (Cetin et al., 2010).

**Height**

It is very important to have the frame at the correct height for use.

- If the frame is too high, you may find it difficult to straighten your elbows sufficiently and may not take enough body weight through your arms.
- If the frame is too low, it will encourage you to be bent over in a poor posture. However, a physiotherapist may deliberately set up a frame at a low height for people who tend to fall backwards - this will encourage them to lean forwards (Elmamoun and Mulley, 2007)
- When being measured for the height of your walking frame wear appropriate and supportive footwear.

Generally to ensure that the pushing handles are in the best position for weight bearing, the height of the handgrips should be at the level of the wrist bone when the user’s elbows are very slightly bent (at an angle of about 15° flexion) (Hall et al., 1990).

Some models are available in a number of fixed heights - the nearest suitable height should be chosen. Others have telescopic handles so that their height can be more finely adjusted using spring loaded catches.

**Features**

Features to consider when choosing a walking frame include:

**Brakes**

It is very important to ensure that a fully mobile frame has brakes and that they can be operated quickly and easily by the user, so that he/she always feels in control. These are the most common types:
**Pressure brakes**

These are operated by downward pressure on a spring-loaded frame. This causes the motion of the rear wheels to be interrupted when the user is leaning on the frame. However, they may not be suitable for users who cannot push down heavily enough on the frame or for heavier users who may apply the brakes permanently.

**Cable**

These are similar to bicycle brakes and require a squeeze action to apply them so they may not be suitable if you have weak or painful hands. Care should be taken when using the brakes as they instantly stop the frame.

Users in some studies have found the brakes too stiff to operate or that they required too big a hand grip (Hall et al., 1990). Simultaneous use of both hands on each side of the frame is necessary. Cable brakes must be periodically checked and adjusted.

**Locking**

Many brake lever handles can be pushed down to lock the brakes in the on position so that the grip does not have to be continuously maintained. This safety feature is important when using a frame with a built-in seat.

**Handgrips**

Most standard walking frames have either moulded plastic or foam rubber handgrips. However, someone with weak or painful hands or wrists will find it uncomfortable to push down on these. Alternatives are available. A few mobile frames are available with contoured, anatomically shaped handgrips which are designed to spread the weight over a wider area of the palm.

**Material**

The majority of walking frames are made of aluminium. Some are made of steel which may be stronger for heavy duty use but weigh more. Rollators have a coloured finish, some suppliers will offer a range of colours.

**Weight**

Heavy frames tend to be more stable, but may be difficult for some people to lift. Heavy frames can also cause shoulder and neck discomfort (Hall et al., 1990). Walking equipment designed for heavy duty use may be steel reinforced, adding to its weight.

**Wheels**

Small solid wheels or castors are really only suitable for use indoors and may require more effort to push over deep pile carpet or carpet bars than larger wheels (Hall et al., 1990).

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View our impartial list of walking frames
http://www.livingmadeeasy.org.uk/group.php?groupid=3642
Pneumatic wheels will require pumping up from time to time, but provide more suspension than solid rubber tyres. If you have painful hands that may be aggravated by jarring you may find this an advantage.

**Swivel vs fixed wheels or castors**

Rollators with castors that swivel may be more manoeuvrable but fixed wheels can help to make it easier to walk in a straight line. Larger wheels are more suitable for uneven terrain and steps (Elmamoun and Mulley, 2007 and Choi et al., 2009). Some studies have suggested that four wheeled walker are more stable than three wheeled (Waara-Conway, 2001).

**Seats**

These enable you to take a rest if you becomes tired whilst walking. You apply the brakes, turn around and sits down. Some rollators have a small backrest for support when sat and armrests to help when sitting/standing. Check on the size and the height of the seat; some are very narrow, others are very low. A seat does increase the weight of the frame.

The rollator must have its brakes on before you sit on it to ensure that the frame remains steady when sitting and standing up. However, there is a risk that the brakes may fail to hold the wheels in place or that the brakes may hold but the wheels may slide along the ground or the entire rollator may tip over (Finkel, Fernie and Cleghorn, 1997). Consequently many healthcare professionals tell users to park the rollator against a wall before applying the brakes and sitting down. If you are purchasing your own rollator compare the stability of different models when sitting down on their seat with an experienced member of staff. Factors such as the rollators weight, the material of the wheels and how far the seat is from the braked wheels will all affect its stability when you are sitting (Finkel, Fernie and Cleghorn, 1997).

**Trays**

These can be fixed onto the frame and fold down or are removed when not required. They are especially useful for carrying items such as cups from room to room.

**Shopping baskets or bags**

The size and position of these will vary from model to model. Baskets that are positioned low down on the frame may be difficult to reach. However, carrying weight high up on the frame is more likely to disrupt the stability of the frame. Do NOT hand bags from the frame as this can affect its balance and/or cause it to fall over.

**Walking stick holders**

These hold a walking stick ready for use when it is not convenient to use the frame, for example in a tight space.

**Maintenance**

Maintenance is essential to ensure the safety of the walking aid. Checks should be made for signs of wear and tear particularly at the site of screws and height adjustment mechanisms. All ferrules should be checked regularly and replaced as appropriate.
Accessories for walking aids

Ferrules

Standard ferrules

The rubber tip of a walking aid is called the ferrule, it reduces the risk of the stick slipping on slippery or wet surfaces. On ice, metal tips give more grip. Ferrules must be replaced as soon as they show signs of excessive wear and tear (Elmamoun and Mulley, 2007). Different sizes are available to fit different diameters of shaft.

Replacements are usually available from the issuing authority if the walking aid has been loaned to you, otherwise contact the retail outlet that supplied your walking aid.

Pivoting ferrules

These have a large, swivel base, which enable the walking stick or crutches to maintain full contact with the ground when used at an angle or on uneven surfaces.

Price range: £3 - £29
View our impartial list of pivoting ferrules

Shock absorbing ferrules

These incorporate a mechanism to absorb shock and may be particularly appropriate for people who are full-time users of crutches.

Price range: £3 - £29
View our impartial list of shock absorbing ferrules

Ice ferrules

These have a metal spike which provides a firm grip on snow and ice. The spike can be flipped up and down when not needed.

View our impartial list of ice ferrules

Props and clips

It can be very annoying if your walking stick falls to the floor and difficult to pick it up. Props can be clipped around walking sticks or crutches. Several styles are available but they are all designed to support a stick in an upright position against, for example a table edge. Alternatively U-shaped clips can be attached to wheelchairs or walking frames, and are used to secure sticks or crutches when not in use.
Price range: **£2 - £21**
View our impartial list of props and clips

### Wrist loops

These can be attached to the top of a walking stick, and the loop can be placed around the person’s wrist to keep the stick at hand.

Price range: **£2 - £21**
View our impartial list of wrist loops

### Comfort handgrips

These can be fitted over the top of standard walking sticks and crutches to make them more comfortable to hold. They may be made of fleece, foam, rubber, terry towelling or gel.

Price range: **£1 - £36**
View our impartial list of comfort handgrips

### Bags, baskets and trays

A bag, basket or tray can be attached to some walking frames. Trays can be clipped onto the top of the frame and folded forward or detached when not in use. Carrying items like this on mobile frames will be more successful than on with those that need picking up to be moved forwards. Care should be taken when using accessories that attach to the front of a walking aid as they will alter the balance of the device and may make it unstable. Net bags, apron style bags with pockets and wire baskets are available. Bags should not be attached to walking sticks or crutches. A shoulder bag worn diagonally across the shoulders may provide a solution to carrying less bulky items.

Price range: **£4 - £40**
View our impartial list of bags, baskets, and trays

### Household trolleys

Household trolleys are not walking aids, but if your main difficulty is carrying items such as meals and hot...
drinks between rooms then you may wish to try out a household trolley in an equipment demonstration centre. Household trolleys are sometimes available through local authority social services departments, but depending on availability and eligibility criteria you may need to self purchase.

Household trolleys are designed for indoor use and their main advantage is that they enable items to be carried safely from room to room. You push them in front of you and should consider them as an aid to confidence rather than for transference of body weight.

View our impartial list of household trolleys
http://www.livingmadeeasy.org.uk/group.php?groupid=2334

Features to consider

Material
Wooden trolleys have wooden frames with melamine shelves. Metal trolleys tend to have metal frames and plastic trays, they may be fixed or height adjustable. Height adjustment is via telescopic legs.

Shelves
Trolleys are available with one or two shelves; the bottom shelf is sometimes recessed to give greater space for your legs when stepping forwards. Some trolleys have removable trays which may help when transferring items or cleaning the tray.

Wheels
The size of wheel will affect how smoothly the trolley travels over carpets and thresholds. Generally, larger wheels cope better than smaller wheels over higher thresholds and thick pile carpets. Front fixed wheels facilitate travel in a straight line; swivel wheels improve manoeuvrability in tight spaces and around corners.

Shopping trolleys

Shopping trolleys are not walking aids but if you are steady on your feet but lack walking stamina (for example a breathing difficulty or a heart condition, which may be made worse by carrying heavy loads) you may benefit from a shopping trolley that incorporates a seat. Some models fold so that they can be stored discreetly.

Price range: £29 - £88
View our impartial list of shopping trolleys

Having included shopping trolleys we should mention Shopmobility, a scheme which lends manual wheelchairs, powered wheelchairs or powered scooters to members of the public with limited mobility. The wheelchair or scooter can be used to shop or to visit leisure and commercial facilities within the town, city or shopping centre. The local schemes around the country all operate slightly differently, some provide Shopmobility as a free service while others make a charge, they all welcome donations.

The National Federation of Shop Mobility (NFSUK) supports and promotes affiliated shop mobility schemes
and provides best practice standards. www.shopmobilityuk.org They have a directory of all the shop mobility schemes around the country on their website. You can search their directory to find your closest schemes. You may wish to check that your local scheme is affiliated to the National Federation of Shop Mobility as this ensures it meets their best practice standards.

**Fall alarms**

If you have fallen you may have a medical condition which is causing these fall/s, and advice should be sought from a GP. You may be referred to a Physiotherapist for assessment and advice on safer mobility. In addition you may wish to consider an assessment from Social Services, especially if you live alone. Social Services may be able to provide advice, information and equipment/adaptations to help such as a grab rail or a community alarm to summon assistance.

Falls in the home often result in some injury and are even more of a problem if you live alone. Think about how you would get up if you fell but were not seriously injured or how you could summon help. Develop a plan for each room in your home. An Occupational or Physiotherapist may be able to advise you about techniques and equipment to help you stand up.

Consider what you can do to prevent a fall. This may include removing loose rugs, securing extension cables and removing other trip hazards. Footwear with worn soles or damaged uppers should be replaced. Many falls in the home occur at night when people are tired or not quite awake. In such a familiar place people may feel that they can manage without a light but especially if you live alone and/or may be at risk of falling, you should consider your lighting options. You could install a motion sensor light between your bedroom and the toilet or a nightlight that automatically turns on when the room darkens. Several of these systems are available to simply plug into your existing sockets so you may be able to fit them yourself. If in any doubt consult a qualified electrician.

If there is a significant risk of you falling and being unable to reach a static telephone, you could consider having a cordless landline or mobile telephone and carrying it with you around your home. Alternatively you may wish to consider purchasing an autodial alarm or telecare system. Telecare systems and services are a development of the community alarm schemes which gave users a button or pendant to press in an emergency. When the button was pressed the user could speak to staff in a call/monitoring centre and state what help they needed. The call centre could arrange for the emergency services to attend to the user or notify the users relatives. Telecare services do not rely on a user pressing a pendant to raise an alarm, but offer a range of sensors that will automatically raise an alarm in the event of an emergency.

Please refer to our telecare factsheet for more information on fall alarms, a summary of some of the information is provided below. www.dlf.org.uk/factsheets/telecare

Fall alarms can be preventative, warning that a fall could occur, or reactive warning that a fall has probably occurred. Preventative fall risk alarms include bed and chair occupancy sensors. A bed occupancy sensor is a pad which when placed under your mattress can detect when you’ve left your bed and start a timer. If you don’t get back into your bed within a preset time, it can trigger an alarm. Thus if you go to the toilet or for a quick snack and return to bed your alarm will not be activated but if you fall and do not get back into bed the alarm will be raised. Some of these bed occupancy sensors can be combined with a radio controlled electric socket
to automatically turn on a bedside light when you get out of bed. This helps reduce the risk of you falling over in the dark. Chair occupancy sensors work like bed occupancy sensors but are placed on a chair or wheelchair. If you leave the chair and do not return after a preset time period an alarm will be triggered, in case you have fallen and are lying on the floor.

Worn fall detectors are worn like a pendant around your neck, on your wrist or on a belt around your waist, and automatically trigger an alarm if they detect you've fallen over. They will usually only work within your home and garden. This may need checking if you have a large house, or garden, and if the house has thick walls. These fall detectors can cause false alarm calls, for example if you lie down for a nap or drop your trousers to go to the toilet. These fall detectors may also not detect certain types of falls such as a slow fall sliding off a chair. Thus it may be a good idea to have different sensors working together to protect you.

Personal locators are portable products carried by an individual to enable authorised individuals, such as relatives or carers, to find the individual's location (by logging onto the internet). They work via GPS (a satellite based global positioning system) and allow authorised individuals to find your location (if you are carrying the portable product) to approximately 10 metres. Certain models can automatically raise an alert if they detect that you have fallen, this will alert a monitoring centre that you have potentially fallen over and give the location. The monitoring centre can then inform your friend, relative, carer or the emergency services.

**Useful organisations**

**British Healthcare Trades Association (BHTA)**
New Loom House
Suite 4.06
101 Back Church Lane
London, E1 1LU
Tel: 020 7702 2141
Fax: 020 7680 4048
Email: bhta@bhta.com (and bhta@bhta.net)
Website: www.bhta.net

The British Healthcare Trades Association (BHTA) is the UK's largest healthcare association. Members of the BHTA sign up to a code of practice designed to ensure the public can trust that members will give a good service, and a high standard of behaviour.

**Charity Search**

Freepost (BS6610)
Avonmouth BS11 9TW
Tel: 0117 9824060
Email: info@charitysearch.org.uk
Website: www.charitysearch.org.uk

If you're over 60 and in genuine financial need, Charity Search is a free service to help you find a grant-giving charity.

**Chartered Society of Physiotherapy (CSP)**

14 Bedford Row
London, WC1R 4ED
Tel: 020 7306 6666
To find a chartered physiotherapist near you using a directory of private practitioners at Physio2u, go to: www.csp.org.uk/your-health/find-physio/physio2u

**DIAL Network (Disablement Information And Advice Lines)**

Scope  
6 Market Road  
London  
N7 9PW  
Tel: 01302 310 123  
Helpline: 0808 800 3333  
Fax: 01302 310 404  
Email: response@scope.org.uk  
Website: www.scope.org.uk/dial

DIAL is an independent network of local disability information and advice services, run by and for disabled people.

**Physio First**

Cedar House  
The Bell Plantation  
Watling Street  
Towcester  
NN12 6GX  
Tel: 01327 354 441  
Tel: 01327 354 476  
Email: towcester@physiofirst.org.uk  
Website: www.physiofirst.org.uk

Physio First is the Organisation which represents Physiotherapists in Private Practice. There are currently approximately 4,000 members.

**Rica**

G03, The Wenlock  
50-52 Wharf Road  
London N1 7EU  
Telephone: 020 7427 2460  
Fax: 020 7427 2468  
Email: mail@rica.org.uk  
Website: www.rica.org.uk

Rica (formerly Ricability), the Research Institute for Consumer Affairs, are a national research charity dedicated to providing independent information of value to disabled and older consumers. Their reports are based on rigorous research and provide practical information needed by disabled and older consumers. They have published a report on Community alarms: www.rica.org.uk/content/community-alarms

**Royal National Institute for the Blind (RNIB)**

Released November 2013, Version 2  
Helpline: 0300 999 0004
The RNIB are the UK’s leading charity for information, support and advice for people with sight loss. You may wish to visit one of their resource centres to try equipment. There are centres in London, Edinburgh, Belfast, Birmingham, Bristol & Liverpool. View a full list of RNIB centres: www.rnib.org.uk/aboutus/contactdetails/Pages/contactdetails.aspx

The National Federation of Shopmobility UK (NFSUK) is an independent registered charity, which aims to achieve equal access and independence of disabled people by encouraging new Shopmobility Schemes to form throughout the UK, Channel Islands, Republic of Ireland and overseas and continuing support for existing Shopmobility schemes.

**Released November 2013, to be reviewed by November 2016, Version 2**

**References**


Cetin, E., Muzembo, J., Pardessus, V., Puisieux, F. and Thevenon, A. (2010) Impact of different types of walking aids on the physiological energy cost during gait for elderly individuals with several pathologies and dependent on a technical aid for walking. Annals of Physical and Rehabilitation Medicine 53 p399–405 - (Type 3)


Hall, J., Clarke, A. and Harrison, R. (1990) Guide lines for prescription of walking frames. Physiotherapy 76(20) p118-120 - (Type 1)


For more information on the Types of Evidence, please visit http://www.livingmadeeasy.org.uk
/scenario.php?csid=276

**AskSARA**

If you would like further advice regarding daily living equipment related to choosing equipment for everyday living you could try relevant sections of AskSARA. AskSARA is our free online guided advice tool. AskSARA will ask you questions about yourself and your environment and then offer relevant advice, product suggestions and supplier details.
It’s all about **dignity**

We have **thousands of helpful aids** to help maintain independence at home. Feel free to browse our shop that’s packed with helpful, **value-for-money** gadgets like handy reachers and amplified phones. Packed with essential items like waterproof bedding and incontinence pants. We’ll have something to help you get dressed or in and out of the bath. We’ll help with opening a jam jar or raising a toilet seat. Have a browse - we’re here for you.

From a **bed** to a **beaker** or from a **moist wipe** to your **hoist** type, we’re here to help.

**Complete Care Shop**

Tel: 01772 675040
Email: sales@completecareshop.co.uk

www.completecareshop.co.uk
The majority of DLF's advice is now online. If you would like advice or support to get online or information on local courses about getting online please contact:

Age UK http://www.ageuk.org.uk/work-and-learning/technology-and-internet/  Call 0800 169 8787

BBC Webwise: http://www.bbc.co.uk/webwise/  Call 0800 150 950

Call 0800 228 9272 Or write: Digital Unite Limited, Unit 2B, Poles Copse, Poles Lane, Winchester, SO21 2DZ

Go On: http://www.go-on.co.uk/  Call 0800 77 1234
UK online centres, The Quadrant, 89 Parkway Avenue, Parkway Business Park, Sheffield, S9 4WJ

UK Online Centre: http://www.ukonlinecentres.com/

Please help ensure our free advice remains available to all.

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