Chairs to help with “sit to stand”

Many adults with muscular dystrophy and allied conditions are able to walk, but find it increasingly difficult to stand up from a sitting position (or to sit down again) and need the help of specialist equipment.

This fact sheet includes the following information:

- The method of standing up
- Choice of equipment & the importance of assessment
- Recommended features of the equipment
- Supply of equipment - timing and funding
- Specialist equipment recommended

The method of standing up
This is usually achieved in one of two ways:
- Positioning the legs in a wide stance with the knee joint locked and the legs straight; leaning forward on to a stable surface such as a table; bringing the feet closer together and then either climbing up the furniture or pressing on the thighs in order to extend the back and to balance;
- Twisting sideways; leaning heavily on one arm; pushing the legs out to the rear so that the knee joint is straight, and levering the body up using furniture as support.

Choice of equipment and the importance of assessment
Most people with neuromuscular conditions find that equipment that throws them forward with their knees flexed is inappropriate, because it is then impossible to straighten the knees to stand up. Fortunately, there are several pieces of equipment that have proved to be useful.

The equipment should be assessed prior to ordering, and if statutory funding is to be sought, it is usually extremely helpful if the person responsible for arranging the funding is at the assessment.

Recommended features of equipment:
- A seat which rises horizontally on which the user can inch forwards without being thrown forward, although a minor push at the last stage in the process of standing up can be helpful to some disabled people
- A seat which, depending on the user’s height rises to a sufficient height (usually between 790 and 870mm) to enable users to lower themselves to their feet with the knees braced back
- Armrests which rise up with the seat to provide stability and something to hold on to at the side of the thighs while the user is standing and slowly extending the back to achieve balance. It is important that the armrests extend far enough forwards, rather than being cut-away at the front, and that they are shaped so that they are easy for the user to grip.
- No protrusion at the base of the equipment to get in the way of the feet
- Designed to provide the help required while being aesthetically acceptable and not looking like ‘disability’ equipment.

Supply of the equipment - Timing and Funding
Most people with a neuromuscular condition choose to struggle to stand up for many years because they feel that this physical activity keeps their muscles active. Whilst this decision is a personal one, it may be more productive to accept the use of equipment at an early stage in order to conserve energy for more worthwhile activities. In addition, one of the difficulties of initially using this equipment is the
need to alter the method of standing up. Therefore, it is important to consider these items when standing up is just beginning to get difficult, because it is easier to adapt when less disabled.

Early supply will save the frustration of struggling, particularly if there is a delay while funding for the equipment is sorted out. It is possible that several of the items mentioned will be required, and if the need is staggered or identified by forward planning, this may help Social Services to budget the funding. Also, if the equipment will be used for several years, it is more likely to be funded than items that will be needed for a short time only.

**Specialist equipment recommended**

This is needed to overcome the difficulties experienced in standing up from:

- Existing chairs
- Easy chairs (for home)
- Office chairs
- Wheelchairs

**a) Products to go on existing chairs**

It is best to use these on upright chairs with arms, to give more support. However because these products raise the user’s bottom, it may then be more awkward to reach and use the arms of the chair. They are portable so may be useful devices when visiting or travelling. Only products which lift horizontally, rather than tilting at an angle, are listed here.

- Mangar Lifting Cushion.
  A lightweight and portable inflatable cushion. It is put on a chair and will lift the user by up to 8'/200 mm. It runs off a Mangar Airflo Compressor unit (either mains or battery powered) which is purchased separately. The maximum user weight is 30 stone or 190 kg.

- Marcon EasyLiftAir.
  Another inflatable cushion that sits on an existing chair - either underneath or on top of the chair cushion. It will raise the user by up to 10'/250mm. A variety of hand controls are available.

  The cushion is mains operated only, so there must be an electric socket available nearby. The maximum user weight is 20 stone/127 kg

**b) Armchairs (for home)**

All of these models can be ordered with a seat that rises horizontally (apart from the Multi-chair from AJ Way).

- Chairs from Cura Seating (was Gordon Medical & Rehabilitation Services Ltd)
  A range of made to measure chairs, giving the opportunity to cater for the individual needs of adults, including both tall and large users. The seat can be raised by up to 405mm / 16". The maximum seat height varies depending on what minimum seat height is selected; the lowest available ‘starting’ seat height could be 360mm/14” from the floor (to allow space under the chair for the motor) and this will lift up to 765mm/30”. Prior to a referral for a small child, it must be assessed whether the lowest height allows them to sit squarely with their feet on the floor. The use of a footstool may obstruct standing up from the chair, or require a helper to move and reposition the stool. The maximum available ‘starting’ seat height is 22”/560mm, which rises up to 965mm / 38”. There is the option of the seat rising horizontally, at an angle, or to the required height horizontally completing the action with a tilt. Where a dual motor is an option, then the back rest and leg rest can be operated independently of each other. Seat widths range from 460 - 740mm, the weight limit is generally up to 35 stone/ 222kg (for some models), and it should be possible to incorporate all the features needed by a user with a neuromuscular condition.
- **Vital chair (from Rainbow Rehab).**
  This chair has an electrically powered horizontal seat lift, also powered backrest tilt and powered leg rest - all these functions are operated independently. It comes in 2 sizes. The small model (which is most suitable for users up to 5’4” tall) has a seat rise of 420 to 720 mm, and the larger model rises from 450 to 750mm. Swing back armrests are an optional extra. Maximum user weight for both chairs is 130kg/20½ stone. The chair has a range of fabric, leather or vinyl upholstery on a birch wood frame.

- **Powered lift seat (from Chessco).**
  This is a more upright, less padded chair. Unlike all the other chairs, it has a split seat lift; the back part of the seat rises forwards and upwards horizontally from a height of 470mm to 640mm, whilst the front part of the seat folds down vertically. This may not suit everyone. The arm rests are static, they do not rise up with the seat, and there is no recline facility. Seat size is approximately 50 x 47cm, and the maximum user weight is 18.5 stone or 127 kg. The chair takes up less space than most riser chairs. At the time of writing the company does not cover Scotland, N Ireland, Wales or the South West of England.

- **Multi-chair (from AJ Way).**
  Another chair which is less padded, with wooden arm rests. It comes in 2 sizes, small and large. When the seat rises up it does not remain completely flat, there is some forward tilt. The chair comes with 1 of 3 levels of tilt, the minimum amount being 10°.

- **Uni El-lift chairs (from Altonaids).**
  This is a “typist” type office chair, with a battery-operated powered seat raise (not powered mobility). There is a wide range of seats, back and armrests. The brake can be fitted to either side, and there is a large free space between the front castors, enabling the user to “walk” the chair whilst seated. Leg and footrests can be fitted if required. The seat can rise from 430 to 630mm (or alternatively 480 to 680 mm), and the maximum user weight is 125kg/19½ stone.

- **Euroflex 200 (from Rainbow Rehab)**
  Also a typist style office chair, with 4 castors, which is moved about by “scooting”. It can be fitted with a brake operated from a sitting position, and other optional accessories include a headrest, high back, trunk supports, rotation lock, powered lift and powered tilt. There are 2 options for the powered lift: the short version lifts from a seat height of 440 to 620mm, and the tall version lifts from 490 to 740mm.

- **Classmate (from Rainbow Rehab)**
  This is like an office chair on wheels. It has a manual seat raise as standard, with a powered option. The seat depth and back angle/height can be adjusted. Powered seat height range is from 440-620mm (for the short model) or 490-740mm (tall model). Despite the name, there is a range of seating sizes, for ages from 5 years to adults. Other optional extras include headrest, seat rotation, trunk supports, electric brake and tray.

c) **Chairs (for school/college or office) - with seat elevation**
If a disabled person in employment, needs the chair to help carry out their work, an assessment should be arranged in conjunction with the disability employment advisor (DEA) or Access to Work advisor, who can be contacted through the local Job Centre. This support is essential for funding via the Access to Work scheme.
d) Chairs (for school/college or office) - with seat elevation and powered mobility

See above re employment and funding.

These chairs offer powered indoor mobility as well as powered seat elevation. A full assessment is recommended, to ensure that the chair works for the user, and that the correct size and options are ordered.

- **eMove chair** (from Advanced Seating Design).  
  This chair has a powered seat-raise and powered mobility.  The seat rises horizontally with the option of a powered seat tilt (if needed, to give the final push) and the armrests & foot plate rise with the seat to provide stability to the user. The seat rises from a minimum of 440 mm to a maximum of 700mm, but this can be modified. The chair can be fitted with any of a wide range of seats and back rests. It has a tight turning circle (it turns on itself) and fits through standard doors. The user weight limit is 117kg / 18½ st. The chair also has a manual swivel, adjustable swing back armrests (which allow sideways transfer from a wheelchair, and may facilitate access to a desk) and a fold up footrest. There are various optional features, including the seat tilt (stand assist), and an adjustable headrest. There are 5 speed settings, with an easy-to-operate joystick control for direction and seat adjustments. The firm specialises in postural seating, and using their POSE (Personal Office Seating Evaluation) system, can ensure the user sits correctly by tailoring the upholstery to individual requirements.

- **Prima S201 Power Chair** (from Totally Active).  
  This is a compact indoor powered chair, which turns in its own space. It has an office seat (like a typist’s chair). One of the optional features is a powered seat lift, but the actual height range is fairly limited - from a minimum of 535mm to a maximum of 650mm (21 – 25½”). Height adjustable backrest and armrests, and a swing away joystick come as standard, whilst other optional extras are folding armrests and an adjustable seat slide. The maximum user weight is 114 kg/18 stone. At the time of writing the supplier of this chair is changing from Stannah to Totally Active Ltd, and it is unclear whether the specifications of the chair will be altered.

- **Classmate (from Rainbow Rehab)**  
  See above. This chair can also be fitted to the Miniflex or Flexmobil bases for powered indoor mobility.

- **Flexmobil** (made by Euroflex, distributed by Rainbow Rehab).  
  A powered height adjustable office chair with powered mobility.  It has 6 wheels and centre wheel drive, so it turns on itself. Standard powered seat lift of 250mm, with electric tilt, postural devices etc. The seat rotates independently of the back, and there are various backrests with lateral supports, available. The swing back controls are bolted on to the armrest and the arm rests swing back.

- **Miniflex (from Rainbow Rehab).**  
  A front wheel drive indoor powered chair. Powered seat raise of 250mm/10” comes as standard, as do adjustable armrests and a swing-back control box. The height of the footrest adjusts with the seat height. The chair is designed to cope with internal thresholds. A manual seat tilt and various seating options are also available.

- **Suprema (from Wheelchair Corporation)**  
  The “Super” model is a powered chair with a seat that rises from 400mm to 740mm. The arm rests rise with the seat, and will fold back for sideways transfers. The controls are on the right armrest. The footrest rises with the seat, and can also be folded back. Maximum weight limit is 16 stone/100kg (or 120kg/18½ stone on request). The “Slide” model has the same features as the “Super” but the seat can slide forward by 200mm, so that access to a desk is easier. However it is only the seat base, and not the backrest, that moves forwards. There is also a “Relax” model, with a seat that can tilt back by 12° but this seat will only rise up to 650mm.
e) Powered wheelchairs
There are a large (and ever growing) number of height adjustable wheelchairs, with a range of features. This list does not cover all the chairs available.

- **DX Compact**, an indoor/outdoor chair from Rainbow Rehab, with a seat height range from 450 to 630mm. Optional powered tilt, recline and footrests.

The following wheelchairs offer a variety of more sophisticated features (in addition to the seat rise), such as back rest recline, seat tilt, adjustable arm rests, leg rests etc
- Wizard & Wizard ABC (for children) from Rainbow Rehab
- Balder chair
- Permobil
- Twister (from Invacare)
- Storm 3 (from Invacare)
- F55 (from Sunrise Medical)

The Muscular Dystrophy Campaign has also published information on products to help you from sit to stand in the bathroom (toilet surrounds and shower seats that rise up) and for cars. Please contact us, or check Target md magazine or our website for details.

**Contact Details**
Company details do change, so please notify MDC if any of these details are out-of-date.

<table>
<thead>
<tr>
<th>Company</th>
<th>Telephone</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advance Seating Designs</td>
<td>020 8578 4308</td>
<td><a href="http://www.asd.co.uk">www.asd.co.uk</a></td>
</tr>
<tr>
<td>A J Way</td>
<td>01494 471821</td>
<td><a href="http://www.ajway.co.uk">www.ajway.co.uk</a></td>
</tr>
<tr>
<td>Altonaids</td>
<td>0191 491 5840</td>
<td><a href="http://www.altonaids.co.uk">www.altonaids.co.uk</a></td>
</tr>
<tr>
<td>Balder</td>
<td>01256 767181</td>
<td><a href="http://www.balder.co.uk">www.balder.co.uk</a></td>
</tr>
<tr>
<td>Chessco</td>
<td>01244 659789</td>
<td><a href="http://www.chessco.net">www.chessco.net</a></td>
</tr>
<tr>
<td>Cura Seating</td>
<td>01733 243933</td>
<td><a href="http://www.cura-seating.co.uk">www.cura-seating.co.uk</a></td>
</tr>
<tr>
<td>Invacare</td>
<td>01656 776222</td>
<td><a href="http://www.invacare.co.uk">www.invacare.co.uk</a></td>
</tr>
<tr>
<td>Mangar</td>
<td>0800 280 0485</td>
<td><a href="http://www.mangar.co.uk">www.mangar.co.uk</a></td>
</tr>
<tr>
<td>Nopac</td>
<td>01708 688695</td>
<td><a href="http://www.nopac.com">www.nopac.com</a></td>
</tr>
<tr>
<td>Permobil</td>
<td>01484 722 888</td>
<td><a href="http://www.permobil.com">www.permobil.com</a></td>
</tr>
<tr>
<td>Rainbow Mobility Ltd</td>
<td>0151 353 1234</td>
<td><a href="http://www.rainbowmobility.co.uk">www.rainbowmobility.co.uk</a></td>
</tr>
<tr>
<td>Stannah</td>
<td>0800 715 455</td>
<td><a href="http://www.stannah.co.uk">www.stannah.co.uk</a></td>
</tr>
<tr>
<td>Sunrise Medical</td>
<td>01384 446688</td>
<td><a href="http://www.sunrisemedical.com">www.sunrisemedical.com</a></td>
</tr>
<tr>
<td>Simply Health</td>
<td>0800 048 2793</td>
<td><a href="http://www.simplyhealthstore.co.uk">www.simplyhealthstore.co.uk</a></td>
</tr>
<tr>
<td>Wheelchair Corporation</td>
<td>0121 568 7326</td>
<td><a href="http://www.wheelchaircorp.com">www.wheelchaircorp.com</a></td>
</tr>
</tbody>
</table>
Disclaimer
Whilst every reasonable effort is made to ensure that the information in this document is complete, correct and up-to-date, this cannot be guaranteed and the Muscular Dystrophy Campaign shall not be liable whatsoever for any damages incurred as a result of its use. The Muscular Dystrophy Campaign does not necessarily endorse the services provided by the organisations listed in our factsheets.