

Practitioner Manual for Transfer equipment, Hoists & Slings



A Manual devised by the SWEP Clinical
Advisory Team to assist SWEP registered AT
Practitioners



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Acknowledgments for information and use of images go to:
Ceiling Hoist Solutions (CHS); Easy Move Slide Sheets

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Background

This manual aims to support and enhance the prescription capability among practitioners.

The State-wide Equipment Program (SWEP) Clinical Advisors have developed this resource manual to provide:

- Useful information for practitioners
- Links to evidence-based practices
- Recommended assessments to assist with prescribing transfer products
- Outlines potential risks related to consumer, support person and the environment
- Description of products and links to a range of product types

Guidelines

The Department of Health and Human Services - Victoria provides a range of transfer equipment through SWEP to support people with a **permanent or long-term** disability to enhance their independence. Access to the guidelines for the Victorian Aids and equipment program are located on our website here:

<https://swep.bhs.org.au/other-relevant-documents.php>

Application and Prescription Form

An application for a consumer to receive items within this prescription category needs to be submitted through the portal available at this link:

<https://swep.service-now.com/csm>

Definitions

Transfer:

A transfer in the context of this manual is defined as a person moving from one position to another - either independently or with assistance of a person or an aid.

Hoist:

Is an assistive electrical device that allows consumers with limited mobility to be moved from one position to another.

Can be mobile on the floor, ceiling or wall mounted with tracks.

Gantry hoist systems are hoists that can be erected and dismantled. They can be temporary; can be used in short-term situations or when other types of hoists are unsuitable.

All Hoists require a compatible sling - see below for further information.

Products Supplied

Mobile Floor Hoists:

Floor or mobile hoists are battery operated lifting machines that can be moved on castors from one transfer area to another.

Floor hoists provide flexibility with the type of transfer to be completed and also being able to move the hoist from one room to another.

Consider environmental conditions such as floor coverings and surfaces, restricted circulation space that can increase manual handling risks and be assessed as inappropriate for some home environments

The sling required for a mobile floor hoist depends upon the person's function and requires trial and assessment.



Ceiling Hoists:

There are two main types of ceiling hoists:



- Fixed ceiling hoists use an overhead motor that operates on tracks installed permanently on the ceiling of a room. The machine can be either fixed to one track or a combination of tracks can be used. For example, an “H Track” system also known as an “XY track” system allows the occupant within the sling to access a larger area within a room
- Portable ceiling hoists also require a permanent ceiling tracking system but the hoist motor can be removed from one track and attached to another in another room.

The tracking system for ceiling hoists are permanently fixed to the ceiling joists.

Ceiling hoists provide a lift in a vertical direction up, then move in a horizontal direction on the track, and then a vertically lift to lower the person.

The hoist motor is controlled by a hand-held control to raise and lower the consumer. There is an emergency switch on all machines in case the hand-held control malfunctions.

Wall mounted hoists are also available for timber or steel stud walls. These can be considered when the ceiling is not structurally sound or suitable. For hollow core brick and block walls chemical anchors are recommended for extra support. Even though the support brackets are attached to the wall, the tracking system can still run across the room under (but not attached to) the ceiling. Alternatively, the wall mounted hoist mast itself can be mounted to the wall and the boom and spreader bar span out from the wall.

The manual handling demands and circulation space required during use of a ceiling hoist, as compared to a floor hoist, are both generally less- but this depends upon the individual transfer needs.

The sling required for a ceiling hoist depends upon the person’s function and requires

trial and assessment.

Standing Hoists:

Standing hoists are designed to assist people from a sitting to a standing position for transfers.

A standing hoist is only appropriate for people who are able to sit up independently and who are able to support their own weight whilst in a standing position.

Standing hoists are similar to a mobile floor hoist as they are portable-can be moved from one area to another.

Standing hoists require a large circulation space and manual handling risks due to environmental conditions, such as floor coverings, may eliminate their appropriate prescription. Standing hoists use a single band sling positioned around the patient's back and fitting under their arms. A calf strap is clipped around the back of the persons calves while the knees are braced against a padded knee pad.



Manual Transporters:

A transporter is designed to transport an occupant from one seated position to another seated position. The occupant needs to be able to weight bear through lower legs, knees are braced against a front knee pad and hands grip a front cross bar. Two paddles can be folded down behind the occupant for them to sit while the transfer occurs, the occupant is required to stand while the seat paddles behind them are folded away to allow them to lower down into the new seat.



Bath Hoists:

A bath hoist is a battery powered lift chair that assists with lowering a person into a bath and then raises them up again to bath rim level. The person must be able to transfer onto the bath hoist safely prior to being lowered into the bath. Safety considerations such as slipping off the bath hoist whilst lowering into the bath must



be assessed prior to prescription.

Slings:

Slings are a material device used in conjunction with a hoist, to assist in safely transferring a person. There are many styles of slings including padded, mesh, fabric and parasilk 'in situ' slings that can remain under the person between transfers. Size and type of sling depends on the purpose of consumers function, the transfer, weight, skin integrity and muscle control. Specialized slings are available and include toileting slings, amputee slings, slings with head support, hygiene slings and disposable slings. Slings are person specific and may require customization.



Question:

Is it best practice for 1 person or 2 people to be present to assist with a sling/hoist transfer?

Answer:

It is not a legal requirement for two people to hoist a patient. However, it is a grey area that has been strongly debated.

Some organisations insist on a 2-person lift. It is best to check the policy and procedures within your organisation and follow their guidelines.

Worksafe Victoria recommends 2 handlers when using an electric sling hoist¹. In an ideal world this is the safest option, however this is not always practical for home-based circumstances where only one carer is available at any one time, or the consumer is self-hoisting. In these situations, it is important that a thorough risk assessment is completed, taking into consideration consumer factors, environmental, equipment (including ceiling hoist vs mobile floor hoist), task requirements, staffing etc. and that the carer and consumer receive adequate and appropriate manual handling training (tailored to their needs) to reduce the risk of injury. A ratio of 1:1, 1:2 or even 1:3 may sometimes be recommended for consumers who require assistance.

Consumer details

Safe hoisting and the number of people that should assist with hoisting depends on the consumer's diagnosis/prognosis, weight, trunk/core strength, balance, upper limb ability and manual dexterity.

¹ WorkSafe Victoria: Handbook for Workplaces – Transferring people safely *Handling patients, residents and clients in health, aged care, rehabilitation and disability services*. Edition 3, 2009, p23.

Consumers with good upper limb strength and trunk stability, and with access to a suitable single-user hoist system, may be able to transfer independently. Single-user hoist systems are usually fully automated ceiling track hoists - a variety of components can be included to enable movement from room to room along the tracking.

Trialling

Trialling is crucial to check the following components:

- The sling is the optimum size/fit for the consumer.
- The mobile/ceiling hoist has adequate clearance over the bed, wheelchair or recliner chair arm rests, when the selected sling is in place.
- The door width is wide enough to accommodate the entry/exit of the mobile hoist.
- The type of flooring (timber/carpet) is smooth enough for the hoist to be turned once in the room.
- There is sufficient clearance under the bed to accommodate a mobile/sling hoist.
- There is sufficient circulation space to manoeuvre the hoist safely within the environment where it is to be used.

Training

Training the carers and consumer in the use of the particular hoist and sling to be used is imperative. Attention should be paid to the fitting of the sling and the safe hoisting process. Photographs and/or videos can be useful when there are carers involved who may not be familiar with the consumer's AT or routine.

Useful references:

<https://www.worksafe.act.gov.au/health-and-safety-portal/safety-by-industry/health-and-community-services/safe-moving-of-consumer>

https://content-v2.api.worksafe.vic.gov.au/sites/default/files/2018-06/ISBN-Transferring-people-from-beds-and-chairs-2011-05_0.pdf

<https://www.worksafe.vic.gov.au/safe-use-portable-patient-handling-ceiling-hoists-and-hoist-hooks>

<https://content-v2.api.worksafe.vic.gov.au/sites/default/files/2018-06/ISBN-Transferring-people-safely-handbook-2009-07.pdf>

Recommended Assessments and Measures

The following assessments and resources can be used as part of the evaluation of the consumer's transfer skills:

Home assessment

A home visit is essential when prescribing all transfer equipment:

- A trial of prescribed equipment should be conducted successfully in the environment where the equipment will be used. If this is not possible a trial of similar equipment is required.
- A detailed outline/care plan on recommended techniques during use and care of the prescribed equipment is required to be provided to the consumer or support person by the therapist on completion of the home visit and/or trial in the home.
- The home assessment must be conducted with the person and all appropriate support person/s present.
- Routines and recommendations on use of the equipment to be discussed and documented in collaboration with the consumer and care providers.
- A practical demonstration in the use of the equipment is recommended to ensure the consumer and the support person demonstrate their understanding of and ability to use the equipment safely.
- The prescribing therapist must ensure safe use of equipment prior to prescription. For ceiling hoists this is not always possible and may be completed post installation.

Issues that need to be assessed during the home assessment include:

- The compatibility of all equipment in the home - for example: bed, hoist, sling, mobile shower transporter, wheelchair.
- The height of the transfer surfaces. For example, wheelchair to bed using a slide-board
- The circulation space for the equipment to be used
- Consider under bed clearance for mobile hoist base.



- The flooring in the home - including the coverings and the condition of the flooring
- The weight tolerances of the flooring - in consideration of the weight of the person, hoist, care providers and equipment
- The ability to move the equipment safely in all areas required in the home
- The appropriate space for storage and charging of the device
- The home structure being able to withstand the equipment - especially in the prescription of ceiling hoists - refer to below
- The hoist is to be used only for transferring and **not** transporting the person

Structural Considerations for Ceiling and Wall Hoists:

- The structural environment has to be considered when prescribing a ceiling hoist and tracking.
- Ceiling or wall- mounted hoist systems must have adequate structure within the ceiling and walls to support them.
- Trusses, roof, ceiling and wall frameworks may require reinforcing to support the potential load.
- A consultation with a building surveyor and/or Archicentre is recommended to ensure that the installation of the hoist **does not** compromise location of heating/cooling ducts, ceiling fans or sprinklers.
- The areas where such tracking is being installed should be initially inspected for suitability to erect beams that can be safely supported and easily accessed.

Pressure area risk assessment:

- Waterlow scale
- Braden Scale (adult)
- Braden Scale (child)

Functional Assessments:

- Functional Independence Measure_(FIM)
- Barthel Index Scale

Cognitive Assessment:

- Standardised Mini- Mental State Examination (SMMSE) tool

Assessment of Weight bearing status:

This assessment should be carried out to establish which type of transfer equipment is suitable for the person. For example, the consumer needs to fully weight-bear to use the standing hoist and if unable needs a full sling hoists.



The Worksafe - Victoria - Transferring People Safely: a handbook for workplaces outlines how to assess and provide assistance safely when assisting a person who has difficulties transferring. www.worksafe.vic.gov.au The manual handling code of practice outlines acceptable manual handling practices in workplaces in Victoria. It is based on the Occupational Health and Safety Act 2004.

Considerations for Practitioners/Equipment

When prescribing transfer equipment the following issues should be considered:

Person specific:

- The person's ability to transfer safely.
- The persons health being at risk during current transfer techniques - including anxiety and skin integrity.
- The current transfer techniques being used by carers are unsafe to consumer or pose a risk of injury to the carer.
- The equipment is required to maintain the consumer's level of independence in the home.

- The consumer's weight must be assessed as appropriate for the prescribed equipment.
- An assessment and trial of the equipment (with the user) must be completed and documented to ensure the equipment is appropriate for the consumer and the consumer is accepting of the equipment
- The persons prognosis and future expected care requirements
- The persons weight and expected changes in the future



Carer/support person specific:

- The appropriate number of carers must be available to use the equipment during each transfer - as per Worksafe OH&S guidelines for transferring people safely
- The carer has been trained and observed using the transfer equipment
- The carer/support person is able to use the equipment safely
- The carer understands the health and safety risks of using the equipment
- The carer is physically able and willing to use the prescribed equipment when assisting with all transfers
- The carer has agreed to follow an outline of use of the transfer equipment, as provided by the prescribing therapist
- The carer is knowledgeable on the set-up, maintenance and trouble-shooting of the equipment if it malfunctions




Equipment specific:



- A second sling may be required. For example - for hygiene purposes or different transfers
- Ceiling hoists are generally considered to have less manual handling risks than mobile floor hoists
- Secondary ceiling hoist tracks with a portable ceiling hoist system may increase the ability to transfer in more than one room



- The maximum weight capacity of the prescribed equipment must be known and checked against the weight of the occupant





Product Range and Features


Equipment	Definition	Functional Implications
<p>Slide board</p> 	<p>A flat smooth board that can form a bridge between two surfaces over which a person who is unable to weight bear can slide across.</p> <p>It can be used in conjunction with a Transfer Belt.</p>	<p>Assists a person to make a sideways slide movement from one surface (i.e.: bed/wheelchair) to another surface (e.g. Chair/commode) without the need to do a manual lift.</p> <p>Can empower the consumer to be involved in the transfer by assisting the sideways slide movement with trunk, pelvis or upper limbs where possible.</p>
<p>Transfer Belt</p> 	<p>A transfer belt is a webbed belt that fits around a person's waist and (may) have grip handles around the outside of the belt for the attendant carer to hold and support the person.</p>	<p>It assists the attendant carer to have a secure grip around the consumer's waist.</p> <p>To ensure a secure but not too tight fit, check that you can slide two fingers between the inside of the belt and the person's trunk.</p> <p>A transfer belt can be used in conjunction with a Pivot Turntable (if the person can weight bear through both limbs)</p>
<p>Slide Sheet</p> 	<p>A nylon sheet that can be used as a single sheet or folded over to create two surfaces that slide easily one over the other.</p>	<p>Reduces manual handling by assisting attendant carers to turn a person lying flat on their back to a side position.</p> <p>Can also be used to re-position a person up higher or lower in the bed.</p>




Equipment	Definition	Functional Implications
<p>Pivot Turntable</p> 	<p>A pivot turntable is comprised of two circular discs with small ball bearings between them so they can rotate against each other.</p>	<p>It is used when a person can weight bear through both legs.</p> <p>It can assist a person who finds lifting their feet and stepping difficult to do a 90-degree transfer (bed to chair)</p> <p>May result in better manual handling by having a smoother safer rotating transfer for the attendant carer.</p>
<p>Rotating Seat</p> 	<p>A Rotating Seat is comprised of two circular discs that rotate against each other.</p>	<p>The person sits on the top disc that can be padded for comfort.</p> <p>It assists a person to make a ninety degree turn in a horizontal plane without trunk rotation.</p> <p>It can be used on a car seat or a chair.</p>




Equipment	Definition	Functional Implications
<p data-bbox="125 244 286 272">Bath Hoist</p> 	<p data-bbox="544 220 1232 288">A bath hoist is placed on the base of a bath. It is usually battery operated via a hand control.</p> <p data-bbox="544 328 1205 397">It raises and lowers a seated person within the bath and some models have back recline.</p>	<p data-bbox="1299 220 2018 288">Assists a person who has difficulty getting into and out of the bath.</p> <p data-bbox="1299 328 2085 437">When the seat is raised to be level with the bath rim the side flaps sit on the rim to enable a side transfer onto the seat.</p>
<p data-bbox="125 604 315 633">Mobile Hoist</p> 	<p data-bbox="544 606 1182 675">Used to transfer a person who cannot weight bear.</p> <p data-bbox="544 715 1205 823">Fully suspends an occupant in a sling thereby eliminating the need for a carer to manually lift another person.</p>	<p data-bbox="1299 606 1758 639">Eliminates need for carers to lift.</p> <p data-bbox="1299 647 1895 681">One unit can be used in various locations.</p> <p data-bbox="1299 689 2002 758">Pushing hoist may cause manual handling issues for carers.</p> <p data-bbox="1299 766 2024 834">Some surfaces are easier to push a hoist over than others.</p> <p data-bbox="1299 842 1688 876">Consider any slope in floor.</p> <p data-bbox="1299 884 1769 917">Motor driven hoists are available.</p> <p data-bbox="1299 925 2080 994">Clear access is needed under a bath or bed/chair to be able to lift using a mobile hoist in this situation</p> <p data-bbox="1299 1002 2045 1070">Consider problems associated with lifting in confined spaces.</p> <p data-bbox="1299 1078 2101 1179">Can have alternative spreader bar shape attached (such as a cradle that assists in tilting the occupant into a seated position) or a cross bar that 'opens up' the sling.</p> <p data-bbox="1299 1187 2085 1256">Needs to be stored where it does not become a tripping hazard.</p>


Equipment	Definition	Functional Implications
<p data-bbox="120 220 353 258">Standing Hoist</p> 	<p data-bbox="539 225 1238 295">A mobile hoist that assists a person to stand and supports them in a standing position.</p>	<p data-bbox="1294 225 2051 295">Only suitable for consumers who are able to partially weight bear.</p> <p data-bbox="1294 336 2112 406">The consumer is encouraged to use hands to grasp hoist handles to assist in the half standing posture.</p> <p data-bbox="1294 448 2013 518">If consumer has contractures extra care should be taken to avoid pain and injury.</p> <p data-bbox="1294 560 2107 668">Stand up Slings are similar to hygiene slings. They support the consumer around the trunk and some have a Velcro trunk support across chest.</p> <p data-bbox="1294 710 2101 818">Some stand up slings have leg pieces with extra-long attachment loops to give extra support. These give extra support around the thighs.</p> <p data-bbox="1294 860 1883 930">Partial weight bearing may assist in bone strengthening.</p>


Equipment	Definition	Functional Implications
<p data-bbox="120 172 427 204">Manual Transporter</p> 	<p data-bbox="539 172 1256 355">A mobile transporter that requires the occupant to be able to push up from seated position to a weight bearing standing position while left and right seat supports are folded down to provide complete perch seat.</p> <p data-bbox="539 395 1189 467">The occupant uses the knee support to brace against until seated.</p> <p data-bbox="539 507 1200 611">The mobile transporter can move an occupant from one seated position to another seated position.</p>	<p data-bbox="1294 172 2125 244">Suitable for consumers who can follow instruction and can push to a standing position and weight-bear.</p> <p data-bbox="1294 316 2107 387">Suitable for consumers who can grip the handlebars and support themselves for a short-term standing.</p> <p data-bbox="1294 459 2107 531">The left and right fold down seat supports join together to become one seat.</p> <p data-bbox="1294 603 2074 675">The transporter has a smaller footprint than a standing mobile hoist for smaller environments.</p> <p data-bbox="1294 746 2067 818">The transporter is a lighter unit than a standing mobile hoist for the carer to push.</p> <p data-bbox="1294 882 2096 954">A larger uncluttered circulation space is required for use to ensure safe manual handling when using.</p>


Equipment	Definition	Functional Implications
<p>Ceiling Hoists (Fixed) Hoist motor is fixed into tracking.</p> 	<p>Used to transfer a person who cannot weight bear.</p> <p>Motor is fixed to the tracking.</p>	<p>It fully suspends an occupant in a sling thereby eliminating the need for a carer to manually lift another person.</p> <p>Occupant is lowered by a strap and spreader bar from the motor (less intrusive for some occupants)</p> <p>More tracking may be required with a fixed motor hoist, because continuous track is required to get the occupant from the lifting point to the lowering point.</p> <p>Ability to use larger floor area to access baths, beds and spas</p> <p>Can travel for a short span (i.e. bed to chair) or throughout a house to access a number of rooms</p> <p>Pushing the occupant along a fixed overhead tracking may reduce manual handling for carer in comparison to a mobile hoist, impacting on energy conservation, Occupational Health and Safety and Manual Handling.</p> <p>Horizontal travel may be powered to further reduce manual handling.</p>



Equipment	Definition	Functional Implications
<p>Portable Motor</p> 		<p>Can be lifted off the tracking. (with trolley)</p> <p>Less tracking required if the motor is portable. It can be lifted down from the tracking and put on a trolley and wheeled to another span of tracking within the house.</p> <p>Motors are suspended on the strap and are lowered with the occupant.</p> <p>Some occupants may find this intrusive (motor closer to occupants head)</p> <p>Portable Motors may be used for travel or in temporary/rented accommodation.</p>
<p>Portable Hoist (on tracking gantry)</p> 	<p>A portable frame that can be assembled and dismantled for use in the short term.</p> <p>The frame suspends a hoist motor and spreader bar.</p>	<p>Portable tracking on a gantry may be transported for use in multiple environments. (i.e. on holiday)</p> <p>Gantry can be adjusted in width to span over various bed sizes</p> <p>Portable versions can be used in rented or temporary accommodation</p>




Equipment	Definition	Functional Implications
<p>Wall Mounted Hoist Systems</p> 	<p>The mast of a wall-mounted hoist can be attached to the wall and the boom and spreader bar span across the room.</p> <p>An overhead track system sometimes requires the support brackets to be mounted to the wall.</p>	<p>A consideration when the ceiling is not strong enough or suitable for an overhead tracking.</p>
<p>Tracking (for Overhead Hoists) H or XY Configuration</p> 	<p>The tracking along which the hoist motor moves</p>	<p>Various configurations of tracking can be prescribed:</p> <p>Straight tracking (from A-B or along a corridor)</p> <p>Recessed (track is sunk to be level with the ceiling)</p> <p>'H' configuration' (also known as XY shape). This tracking allows traverse and longitudinal travel within a room.</p>
<p>Curved Tracking</p> 		<p>Functional Implications</p> <p>Curved track is used to span around internal or external corners or avoid fixtures such as lights.</p>

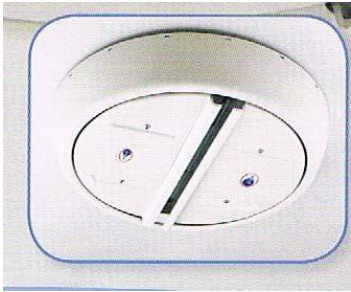

Equipment	Definition	Functional Implications
<p data-bbox="129 186 488 284">General Purpose / Universal Sling (without head support)</p> 	<p data-bbox="544 186 1010 220">A large U-shaped piece of fabric.</p> <p data-bbox="544 256 1245 363">It provides full back support and divides at the top of the pelvis area into two sections that are fitted around each leg.</p>	<p data-bbox="1301 193 1872 226">Supports from shoulders to lumbar area.</p> <p data-bbox="1301 268 2119 336">This sling would not be chosen to lift a person from a lying position due to lack of head support.</p> <p data-bbox="1301 378 2018 446">Supporting the legs individually separates the legs, which may strain the hip joints and cause pain.</p> <p data-bbox="1301 488 2085 595">The leg supports can either be placed between the legs to support each leg separately or positioned to support the legs together.</p> <p data-bbox="1301 638 1854 671">Arms are normally kept inside the sling.</p> <p data-bbox="1301 713 1850 746">Slings can be fitted in a sitting position.</p> <p data-bbox="1301 788 2069 857">Due to the sling material covering the occupant's body access for toileting and changing may be difficult.</p>



Equipment	Definition	Functional Implications
<p data-bbox="129 185 477 252">General Purpose Sling (with head support)</p> 	<p data-bbox="544 185 1016 220">A large U-Shaped piece of fabric.</p> <p data-bbox="544 253 1167 288">It provides full back, neck and head support.</p> <p data-bbox="544 325 1162 395">Divides at the top of the pelvis area into two sections that are fitted around each leg.</p>	<p data-bbox="1299 185 1962 220">Head and torso are fully supported in the sling.</p> <p data-bbox="1299 260 1848 295">Suitable for lifting from a lying position.</p> <p data-bbox="1299 335 1962 370">Head support may be part of sling or separate.</p> <p data-bbox="1299 410 1955 480">Suitable for consumers who have spasticity or extensor spasm.</p> <p data-bbox="1299 520 2022 590">Supporting the legs individually separates the legs, which may strain the hip joints and cause pain.</p> <p data-bbox="1299 630 2092 732">The leg supports can be placed between the legs to support each leg separately or positioned to support the legs together.</p> <p data-bbox="1299 772 1984 807">Cocoon effect may make occupants feel secure.</p>


Equipment	Definition	Functional Implications
<p data-bbox="129 188 443 256">Hammock Style/Amputee Sling</p> 	<p data-bbox="544 188 1182 252">A rectangular piece of fabric with or without a commode aperture.</p>	<p data-bbox="1317 188 2101 432">A highly supportive sling that may be suitable for a high level or double amputee. Support needs may vary depending on length of stump. For high-level amputations and through-hip disarticulations, the support level needs to be greatest. If not fitted correctly or the sling is inappropriate, there is a risk the occupant could fall through.</p> <p data-bbox="1317 475 2078 651">Extra-long straps at the front edge of the sling may be required if the occupant is to achieve an upright position. Length of the stump is critical to consider in prescription. For occupants who experience pain while in a sling, a hammock may distribute their weight over a larger area and therefore be more comfortable.</p> <p data-bbox="1317 794 2107 927">Sling material around head and torso may make some occupants feel enclosed. To ensure fabric is under the buttocks this sling must be fitted and removed in a lying position.</p> <p data-bbox="1317 970 2078 1070">Due to the material coverage of the occupants body access for toileting and changing is not possible when sling is on.</p> <p data-bbox="1317 1118 2107 1294">As it is unable to be removed in a sitting position the occupant would need to sit on this while seated after transfer. Careful consideration must be given to a consumer's pressure care needs and the material of the sling.</p>

Equipment	Definition	Functional Implications
<p data-bbox="129 188 499 252">Sling Hygiene/Toileting/ Access</p>  <p data-bbox="129 767 499 831">Hygiene Sling with head support</p> 	<p data-bbox="562 188 1256 288">A U-shaped piece of fabric designed to leave the entire buttocks area uncovered for ease of toileting and washing.</p> <p data-bbox="562 325 1200 432">It has long narrow leg sections, which provide support under the mid-thigh area, and a narrow back support section.</p>	<p data-bbox="1301 188 2040 261">Standard hygiene or toileting sling provides minimal support around the pelvic area.</p> <p data-bbox="1301 304 2074 378">Some hygiene incorporate slings incorporate a vest for added support. Head support also available.</p> <p data-bbox="1301 416 2096 523">May incorporate a buckle/ Velcro fastening at front. May be required as a safety feature to reduce the risk of occupant sliding down in sling</p> <p data-bbox="1301 564 2074 638">Trunk and hip control required to maintain safe upright posture in sling</p> <p data-bbox="1301 679 2085 753">As position of occupant tends to be more upright it may impact on gastro reflux, peg feed or recent surgery</p> <p data-bbox="1301 791 1738 823">Arms must be outside the sling</p> <p data-bbox="1301 865 2063 938">Due to its smaller amount of fabric than other types of slings it may be easier to fit in a sitting position</p> <p data-bbox="1301 979 2107 1053">Allows access from waist to buttocks for toileting, but not possible if pants are on.</p>

Equipment	Definition	Functional Implications
<p data-bbox="125 220 349 256">Stand-up Sling</p> 		<p data-bbox="1301 228 2119 300">This can be a single band that goes behind the consumer with a securing front trunk strap.</p> <p data-bbox="1301 339 2029 448">It may have leg extension straps that go around the upper thigh to further secure the person.</p> <p data-bbox="1301 488 2033 560">This is an easier sling to put on and can be used for toileting purposes.</p>
<p data-bbox="125 671 398 708">Disposable Slings</p> 	<p data-bbox="551 675 898 711">Used by one person only</p>	<p data-bbox="1301 679 1872 716">Impacts on hygiene and infection control</p> <p data-bbox="1301 756 2107 858">They should not be washed and should be disposed of once soiled or damaged or the person no longer requires it</p>

Equipment	Definition	Functional Implications
<p data-bbox="129 220 488 288">Ceiling Hoists with Junctions or turntables</p> 	<p data-bbox="584 220 1272 328">A turntable is a circular junction that allows a number of straight or curved tracks to join and then change direction.</p> <p data-bbox="584 368 1189 403">It is part of the overall ceiling track system.</p> <p data-bbox="584 443 1256 552">The rotating mechanism of the turntable can be operated via the hoists hand held controls or manually via a pull cord.</p>	<p data-bbox="1301 220 2119 288">Used in situations where the person needs to be lifted and transferred to a number of locations within a building.</p> <p data-bbox="1301 328 1989 403">May be used in situations where space does not allow the span required for a curved track.</p>
<p data-bbox="129 783 461 892">Ceiling Hoists that require modifications though a doorway</p> 	<p data-bbox="584 783 1200 852">A ceiling hoist that is required to travel from room to room through a doorway</p>	<p data-bbox="1301 783 2074 852">This requires removing a section of the wall above the door.</p> <p data-bbox="1301 900 2101 1008">Clear measurements are required by builder and hoist installer to ensure that clearance for the bracket, rail and hoist motor can travel through freely.</p>

Equipment	Definition	Functional Implications
<p data-bbox="129 220 488 292">Load Capacity Two motors on track(s)</p> 	<p data-bbox="600 220 1120 292">Overhead twin motors on a single or double tracking system</p>	<p data-bbox="1301 220 2056 292">Used for bariatric consumers when an increased load capacity required.</p> <p data-bbox="1301 331 2085 435">Overhead twin motors mounted to a single or twin parallel tracks can increase the functional load capacity to be lifted.</p>
<p data-bbox="123 839 459 871">Multifunctional Hoists</p> 	<p data-bbox="600 839 1211 911">Hoists that can be a full body lift or a stand up hoist.</p> <p data-bbox="600 951 1003 983">They can also be motorized.</p>	<p data-bbox="1301 839 2063 911">The ability to change the hoists function results in use by more than one user.</p> <p data-bbox="1301 951 1827 983">May be used in a progressive illness.</p>

Equipment	Definition	Functional Implications
<p data-bbox="116 225 409 260">Elk Lifting Cushion</p> 	<p data-bbox="607 225 1218 296">A portable battery operated inflatable lifting cushion consisting of four individual layers.</p> <p data-bbox="607 336 1189 408">Each layer is inflated individually via a hand held control in numerical sequence.</p> <p data-bbox="607 448 1211 520">It assists a fallen person from the floor to a seated position.</p>	<p data-bbox="1285 225 2085 296">Will assist in lifting a fallen person from the floor with the help of a one or two person assist.</p> <p data-bbox="1285 336 2130 376">The deflated Elk is placed under the pelvis prior to inflation.</p> <p data-bbox="1285 416 2085 488">The person being lifted requires trunk control and sitting balance.</p> <p data-bbox="1285 528 2136 600">It is important to support the seated person at the shoulders as it does not have a backrest for support.</p> <p data-bbox="1285 639 1715 711">It has a lift capacity of 320 kgs (supplier stated)</p> <p data-bbox="1285 751 2107 823">May reduce the need to call an ambulance if the person is not injured but has difficulty in standing up.</p>

Contract / tender details

After a rigorous and robust evaluation process, SWEP has contracted suppliers for a wide range of Assistive Technology. This has ensured that the equipment selected has been certified under the relevant Australian Standards, meets the specifications required by our consumer group and has been secured at the best value for money. SWEP have a Contracted Item catalogue on our website, which contains all items listed by category, with a product brochure link, specification and relevant information. You can access the catalogue here:

<https://swep.bhs.org.au/picklists-catalogue.php>

Summary of Evidence

Manual Handling Legislation, Acts/Code of Practice and Standards.

Occupational Health & Safety Act (2004) – Victoria. www.worksafe.vic.gov.au

Occupational Health & Safety Regulations (2017) These specify the ways duties imposed by the Act must be performed. www.worksafe.vic.gov.au

Australian Legal Information Institute www.austlii.edu.au

Manual Handling Code of Practice 2001 www.worksafe.vic.gov.au

Standards

AS/NZS ISO 10535-2011 Hoists for the Transfer of Disabled Persons - Requirements and Test methods

AS ISO 10535-2002 Hoists for the Transfer of Disabled Persons - Requirements and Test methods. (Status-superseded)

AS 1735.15 - 2002 Lifts, escalators and moving walks - Low rise passengers lifts - Non-automatically controlled

Note:

ISO=International Standards Organisation

AS= Australian Standards

Relevant Articles

- Alexander, P. (2008). Slings and things: The importance of assessment, *International Journal of Therapy and Rehabilitation*, 15(1), 44-49.
- Alexander, P. (2009). Hoists and slings: the correct procedures for moving a patient, *British Journal of Healthcare Assistants*, 3(2), 58-60.
- Alamgir, H., Wei Li, O., Gorman, E., Fast, C., Yu, S. & Kidd, C. (2009). Evaluation of Ceiling Lifts in Healthcare Settings, *AAOHN Journal*, 57(9), 374-380.
- Bakewell, J. (2007). Which hoist and why? A product guide, *International Journal of Therapy and Rehabilitation*, 14(9), 424-429.
- Chhokar, R., et al. (2005) *The three year economic benefits of a ceiling lift intervention aimed to reduce healthcare worker injuries*. *Applied Ergonomics*. 36 223-229
- Dansie, D. (2007). Easy Riser, *Independent Living Journal*, 23(1) 14-18.
- Edlich R. F., et al. (2004) *Prevention of Disabling Back Injuries in Nurses by the use of Mechanical Patient Lift Systems*. *Journal of Long Term Effects of Medical implants* 14 (6) 521-533
- Fothergill J., (2010). *Manual Handling Reducing incidents through Assistive Technology* *Independent Living Journal* 26 (3)
- Gallagher A.,(2017) *The Manual Handling Revolution: How health professionals can achieve creative solutions for people with disabilities and their caregivers*. *Book*
- Jung , Y.M., (2010). *Ceiling Hoists as part of a Sustainable Care Strategy*. *Independent Living Journal*. 26 (3) 24-25.
- Miller, A., et al. (2006) *Evaluation of the effectiveness of portable ceiling lifts in a new long-term care facility*. *Applied Ergonomics*. 37 377-385
- Motacki, K. & Motacki, L.M. (2009). Safe Patient Handling and Movement in a Pediatric Setting, *Pediatric Nursing*, 35(4), 221-225.
- Smith L.C., et al (2002). *A Clinical Evaluation of Ceiling Lifts: Lifting and Transfer Technology for the Future*. *SCI Nursing Journal* 19 (2) 75-77.
- Stafford, D. (2007). Weighty Matters: A look at Bariatric Equipment, *Independent Living Journal*, 23(3), 22-25.
- Watchorn, V. (2008). Getting a Lift, *Independent Living Journal*, 24(2), 20-22.

**Please note that some of these articles aren't Australian and the legislation they refer

to is different. Therapists should refer to the relevant Australian legislation and Work Cover booklets for accurate Australian information.

Useful links and resources:

- Independent Living Centre website: <https://ilcaustralia.org.au/>
- Association for manual handling people website: <http://www.aamhp.org.au>
- Victoria's hub for health services & business: <http://www.health.vic.gov.au>

References

<https://www.worksafe.vic.gov.au/>

A guide to Designing Workplaces for Safer Handling of people for Health, Aged Care, Rehabilitation and Disability Facilities (2007)

<http://www.homemods.info>

Home Modification Information Clearing House. Translating high quality research specific to better design and building practice.