



# CONTENTS

Introduction	Page 1
<b>SECTION 1</b>	
Key Risk Assessment Elements	Page 2
<b>1:1</b> Task	Page 3
<b>1:2</b> Individual capability	
<b>1:3</b> Load (Patient)	Page 4
<b>1:4</b> Environment	
<b>1:5</b> Equipment	Page 5
<b>SECTION 2</b>	
Decision trees for product specification selection	Page 6
<b>2:1 Slings</b>	
<b>2:1:1</b> Sling style	
<b>2:1:2</b> Sling size	Page 7
<b>2:1:3</b> Sling fabric	
<b>2:1:4</b> Sling compatibility	Page 8
<b>2:2 Spreader bar</b>	
<b>2:3 Hoist selection</b>	Page 9
<b>2:3:1</b> Selection of mobile hoist features	Page 10
<b>2:3:2</b> Selection of tracking	Page 11
<b>SECTION 3</b>	
<b>3 An Overview</b>	Page 12
<b>3:1</b> Slings - Sling style	
<b>3:2</b> Sling fabric	Page 13
<b>3:3</b> Sling size	Page 14
<b>3:2</b> Special slings	
<b>3:5</b> Spreader bars	Page 15
<b>3:6</b> Birdie and Birdie Compact	Page 16
<b>3:7</b> Robin and Robin Mover ceiling hoist	Page 17



*This resource sets out to guide you through the process of assessing a patient for the selection of a suitable sling and hoist.*

*This selection needs to be holistic taking in to account the client/carer needs as well as the working environment. to ensure all elements are covered. Inevitably it may be necessary to make compromises but these compromises should not threaten the safety of either the carer or the patient.*

*It is important to be aware of the legal requirements of good practice as set out in:*

- *Management of Health and Safety at Work Regulations 1999.*
- *Manual Handling Operations Regulations 1992.*
- *Safe Use of Lifting Equipment - Lifting Operations and Lifting Equipment Regulations 1998.*

Sequentially the selection process should include:

**1.** Risk assessment of the key decision elements.

- Task
- Individual carrying out the task
- Load being lifted
- Environment where the task to be carried out
- Equipment identified to reduce the risk associated with that task

This takes the form of a questionnaire that identifies issues that are of high risk and therefore need addressing with some urgency. This process will almost certainly need to be carried out with the same patient on more than one occasion, in order to identify risk factors for more than one activity, or with more than one carer who may have different competencies.

**2.** Decision trees to assist the appropriate selection of equipment:

- Slings
- Spreader bars
- Hoist
- Tracking

The sling, as the interface between the patient and the hoist, should be considered first and the associated products built up around it.

**3.** The results of point 2, above, assists the development of a product specification pertinent to an individual patient's needs.

**4.** An analysis and overview of specific products in the sling and hoist range - this will assist in identifying whether a product has the characteristics that can address the need as identified in 1 and 2.

# Section 1

## KEY RISK ASSESSMENT ELEMENTS

Designed to assist in the assessment of risk within defined categories in order to reduce risk of injury and improve ease of effectiveness of the defined moving operation.

### THE TASK

Definition and analysis of the moving process.

It is important to define clearly what the task is that needs to be achieved and it may be necessary to sub-divide and analyse those sub-sections individually.

### THE INDIVIDUAL

Analysis of the person carrying out the task.

It is important to link the skills and abilities of the person carrying out the task with the requirements of the task itself.

### THE LOAD

Analysis of the person being moved.

It is important to evaluate all the factors that need to be considered, not just the weight. How that weight is distributed and how it behaves is also of importance.

### THE ENVIRONMENT

Analysis of the environment where the move is being carried out.

### THE EQUIPMENT

Analysis of the selection and suitability of the equipment identified to assist the process.

It is important to consider not only the detail of the primary handling equipment but also to look at whether using a range of other fully adjustable equipment that may make the process safer. The primary aims of using equipment is to provide safety for both carer and patient, maintain dignity and to minimise hazards whilst maximising functional independence for the patient.



### Completion of documents

Ensure that the following 5 sections are completed in full as it represents a detailed evaluation of the patients needs and ensures improved levels of inter-professional communication, thus improving the safety of both the patient and carer:

The following sections should be completed by grading as below:

1. Significant (as in risk/importance/ability/level/likelihood etc.)
2. High (as in risk/importance/ability etc.)
3. Some (as in risk/importance/ability etc.)
4. Small (as in risk/importance/ability etc.)
5. No/none (as in risk/importance/ability etc.)

In sections 1:1 to 1:4 the higher the risk grading the more urgently appropriate solutions should be put in place. Section 1:5 initiates an evaluation of suitable equipment.

Significant

High

Some

Small

No./none

### 1:1 TASK

Define (may be more than one).

1. How important is it to carry out the move?
2. What ability does the patient have to move themselves?  
(i.e. 1=low/5=high)  
independently without equipment?  
independently WITH equipment? (define)
3. Can the move be automatised/mechanised?
4. Will the process involving poor postural practices such as reaching, bending, twisting, stooping, stretching?
5. Will the process involve excessive, extended or protracted handling of the patient?
6. Will the process involve excessive pushing or pulling?
7. Will the patient needing to be positioned precisely during the process?
8. What level of complexity of task is being carried out by the carer?  
(e.g. carrying out more than one task at a time, such as cleaning someone who is being hoisted)
9. How frequently will the move be carried out?
10. What additional equipment will be involved in the process?  
(e.g. bed/wheelchair; bed/commode, wheelchair/static chair; wheelchair/bath, wheelchair/shower chair etc.)
11. Will the move will require lifting from the floor?

### 1:2 INDIVIDUAL CAPABILITY

1. What level of unusual strength is required to carry out the process?
2. What level of unusual height is required to carry out the process?
3. What level of risk does the process present to carers who may have a health problem, disability or be pregnant?
4. What specialist training/knowledge/competency is required to ensure the execution of the process safely?
5. Will training be required for the person carrying out the process?
6. What level of peer communication is required for the safe implementation of the process?
7. Will the process be limited by wearing inappropriate clothing, footwear, and jewellery?

Significant

High

Some

Small

No / none

### 1:3 LOAD (Patient)

1. Is there an increased risk in relation to a patient's weight?
2. Is there an increased risk in relation to a patient's height?
3. Is there an increased risk is there in relation to a patient's bulk or physical size?
4. What level of risk is there in relation to the patient presenting as unwieldy during the process?  
(e.g. if attached to monitors, drips etc.)
5. What level of risk is there in relation to a patient being unstable or asymmetrical?
6. What level of risk is there in relation to the patient being unpredictable or suffer spasm or pain during the process?
7. What level of risk is there in relation to a patient being unco-operative?
8. What level of risk is there in relation to a patient being unable to assist in the moving process?
9. What level of postural support is required by the patient during the moving process?

### 1:4 ENVIRONMENT

1. What level of constraint is placed on the carers posture because of limitation of operational space?
2. What level of constraint is placed on the patient's position during the process because of limitation of operational space?
3. What level of likelihood is there that the process will need to be carried where there are uneven, slippery, unstable or variations of floor levels?
4. What level of likelihood is there that the process will need to be carried out on carpeted floors?
5. What level of likelihood is there that the process will need to be carried out on more than one floor?
6. What is the likelihood that the process needs to be carried out where there are extremes of temperature variations or humidity?
7. What is the likelihood that the process needs to be carried out where there are poor lighting conditions?

	Significant	High	Some	Small	No / none
1. Is there an increased risk in relation to a patient's weight?	○	○	○	○	○
2. Is there an increased risk in relation to a patient's height?	○	○	○	○	○
3. Is there an increased risk is there in relation to a patient's bulk or physical size?	○	○	○	○	○
4. What level of risk is there in relation to the patient presenting as unwieldy during the process? (e.g. if attached to monitors, drips etc.)	○	○	○	○	○
5. What level of risk is there in relation to a patient being unstable or asymmetrical?	○	○	○	○	○
6. What level of risk is there in relation to the patient being unpredictable or suffer spasm or pain during the process?	○	○	○	○	○
7. What level of risk is there in relation to a patient being unco-operative?	○	○	○	○	○
8. What level of risk is there in relation to a patient being unable to assist in the moving process?	○	○	○	○	○
9. What level of postural support is required by the patient during the moving process?	○	○	○	○	○
1. What level of constraint is placed on the carers posture because of limitation of operational space?	○	○	○	○	○
2. What level of constraint is placed on the patient's position during the process because of limitation of operational space?	○	○	○	○	○
3. What level of likelihood is there that the process will need to be carried where there are uneven, slippery, unstable or variations of floor levels?	○	○	○	○	○
4. What level of likelihood is there that the process will need to be carried out on carpeted floors?	○	○	○	○	○
5. What level of likelihood is there that the process will need to be carried out on more than one floor?	○	○	○	○	○
6. What is the likelihood that the process needs to be carried out where there are extremes of temperature variations or humidity?	○	○	○	○	○
7. What is the likelihood that the process needs to be carried out where there are poor lighting conditions?	○	○	○	○	○

## 1:5 EQUIPMENT

1. What level of load can the equipment safely accommodate? (maximum user weight)
2. What level of reliability is required from the product?
3. What level of competency is required to operate the equipment?
4. What level of maintenance does the product require?
5. Is the equipment suitable/fit for purpose is the equipment relative to the task?
6. What space is available to operate the equipment?
7. What space is available to store the equipment?
8. What pieces of additional equipment are required to be interfaced with the primary handling equipment? (eg. sensory suites, special seating, wheelchairs)
9. What likelihood is there that the primary handling equipment will need to be used by more than one patient?
10. What likelihood is there that the equipment will need to be transported from one venue to another?
11. What likelihood is there that the equipment will need to be used in conjunction with a bed?
12. What likelihood is there that that bed will be height adjustable?
13. Is there a likelihood that the equipment will need to be used in conjunction with a large static chair or wheelchair?
14. Will it be necessary to use one manufacturer's sling with another manufacturer's hoist?

	Significant	High	Some	Small	No / none
1. What level of load can the equipment safely accommodate? (maximum user weight)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. What level of reliability is required from the product?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. What level of competency is required to operate the equipment?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. What level of maintenance does the product require?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Is the equipment suitable/fit for purpose is the equipment relative to the task?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. What space is available to operate the equipment?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. What space is available to store the equipment?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. What pieces of additional equipment are required to be interfaced with the primary handling equipment? (eg. sensory suites, special seating, wheelchairs)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. What likelihood is there that the primary handling equipment will need to be used by more than one patient?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. What likelihood is there that the equipment will need to be transported from one venue to another?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. What likelihood is there that the equipment will need to be used in conjunction with a bed?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. What likelihood is there that that bed will be height adjustable?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. Is there a likelihood that the equipment will need to be used in conjunction with a large static chair or wheelchair?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. Will it be necessary to use one manufacturer's sling with another manufacturer's hoist?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



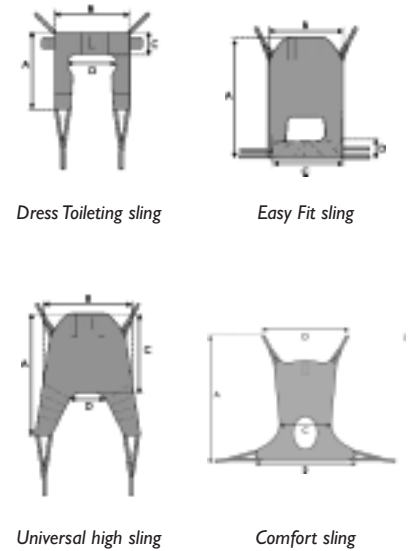
# Section 2

## DECISION TREES FOR PRODUCT SPECIFICATION SELECTION

### 2:1 SLINGS

Selecting the correct sling depends on:

- Moving tasks required - where to/from.
- The abilities of the individual carer to apply the sling.
- Specific clinical needs, comfort and required positioning of the patient, for example to position a patient in/out of a good sitting position it is necessary to have the straps adjacent to the shoulders in a short position and the straps at the legs in a longer position.
- Where the process is being carried out e.g. bathroom in a nursing home.
- The hoist that it will need to be interfaced with.

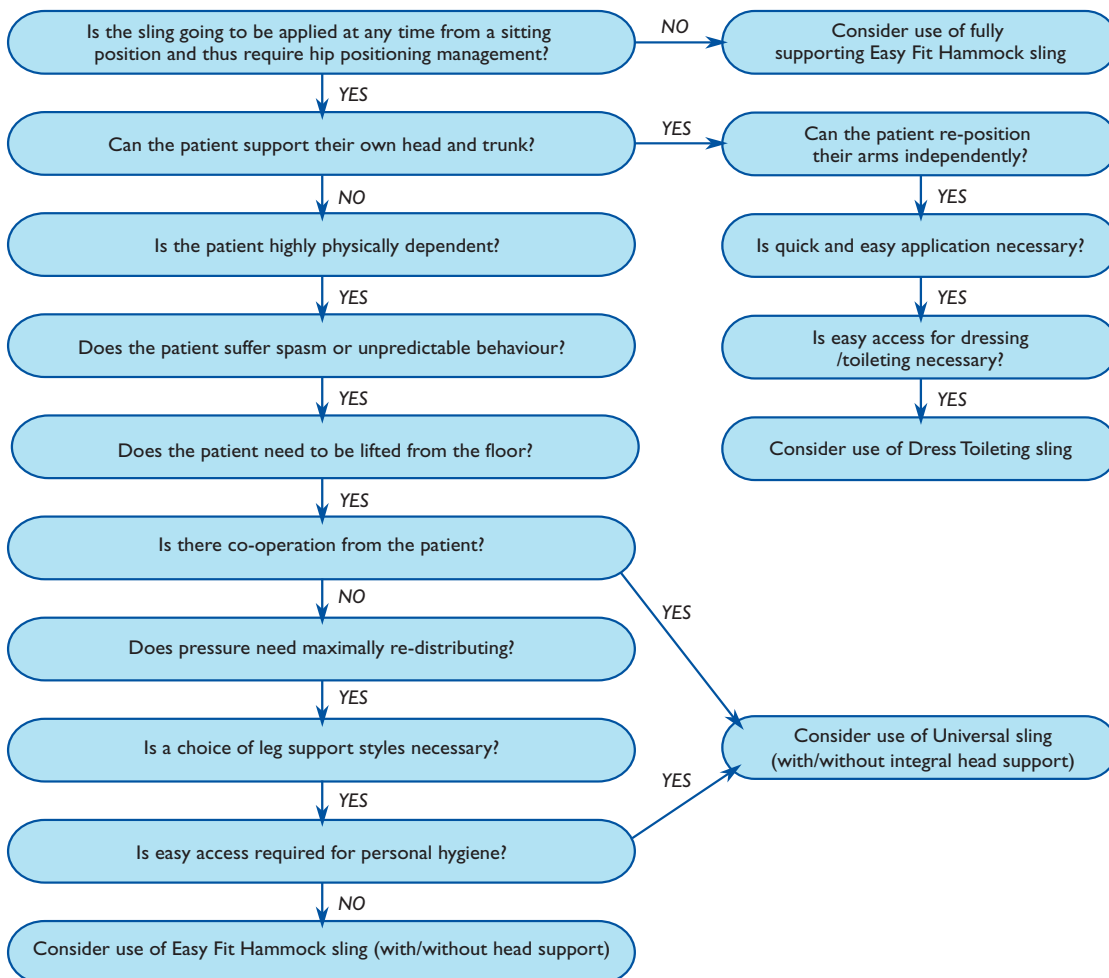


### 2:1:1 SLING STYLE

There are essentially three basic styles of sling manufactured with variations on those three styles giving more or less trunk support, head support, leg support, and existence of commode aperture. These are (in order of degree of support):

- Dress Toileting sling
- Universal sling
- Easy Fit
- Comfort sling

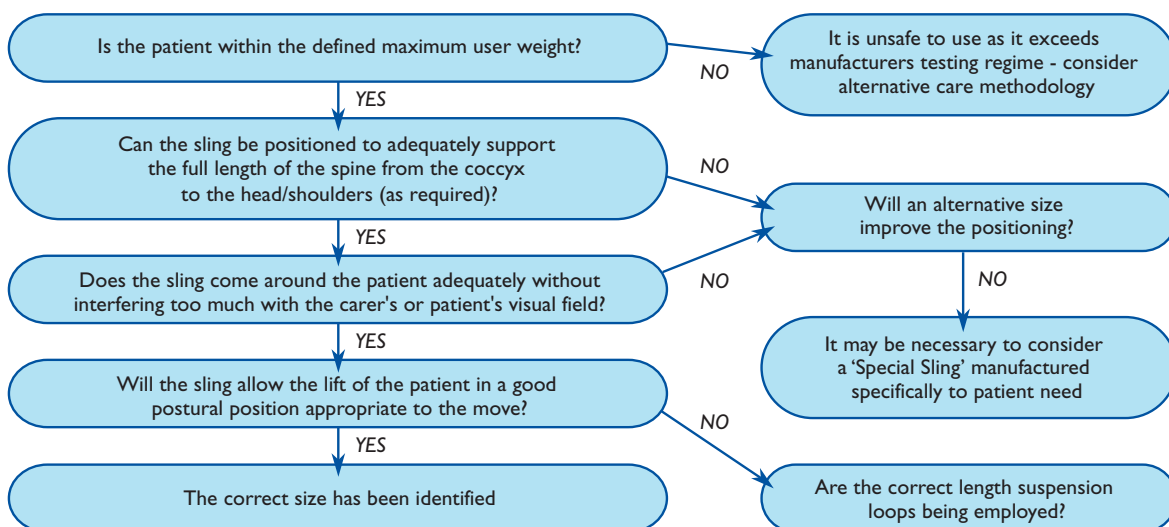
*(Two piece band slings are not recommended for use because of poor safety, resulting in a UK Department of Health hazard notice, as it is very easy to 'jack knife' out of the sling and should only be considered in exceptional circumstances following a detailed and well documented risk assessment).*



## 2:1:2 SLING SIZE

Generally speaking the more fabric there is in a sling the greater the level of support it offers.

It is also important to evaluate the sling loops as they represent the interface between the sling and the spreader bar of the hoist. There needs to be an adequate number to allow a patient to be lifted in such a way that they are safe and posturally positioned well. It is important to select an appropriate size sling to take full advantage of the appropriate level of support.

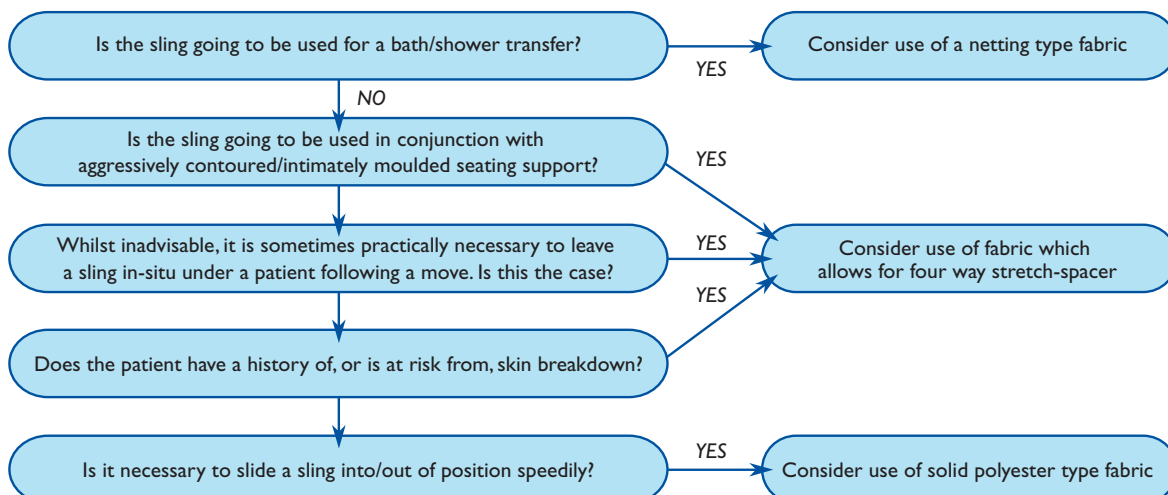


## 2:1:3 SLING FABRIC

The selection of an appropriate fabric will significantly impact the safe and effective use of the sling. Broadly there are three different types of fabric available in sling manufacture; they are:



- Spacer fabric - suitable for skin protection
- Net - suitable to allow water to drain away quickly
- Solid Polyester (or similar smooth fabric) - suitable for sliding easily into place



## 2:1:4 SLING COMPATIBILITY

The sling represents the interface between the patient and hoist and should be selected with care.

There are issues around the use of one manufacturer's slings being used in conjunction with another manufacturer's hoist. To ban the use of one manufacturer's sling with another's hoist is unhelpful for clinicians and their patients and could also be considered anti-competitive.

It is considered essential to perform a risk assessment of each moving task, to document in detail and to define the risk. It is important to examine:

- Hoist
- Sling
- Task
- Load

And then the combination of all of the above.

It is helpful to risk assess in the following categories:

**Attachment Risk** - Consider whether the attachment method on both designs is as the manufacturer intended, are the attachment points of a suitable size, position and shape. Could the sling become inadvertently detached, could the selected method cause undue wear or damage.

**Clearance Risk** - Could the user hit any part of their body on the equipment, will the selected combination adequately lower/raise the patient relative to other equipment being used.

**Stability** - Could the alternative configuration impact on the centre of gravity and affect hoist stability.

**Spreader Bar** - Risk associated with spreader bar shape and size.



Two-point spreader bar



Four-point spreader bar



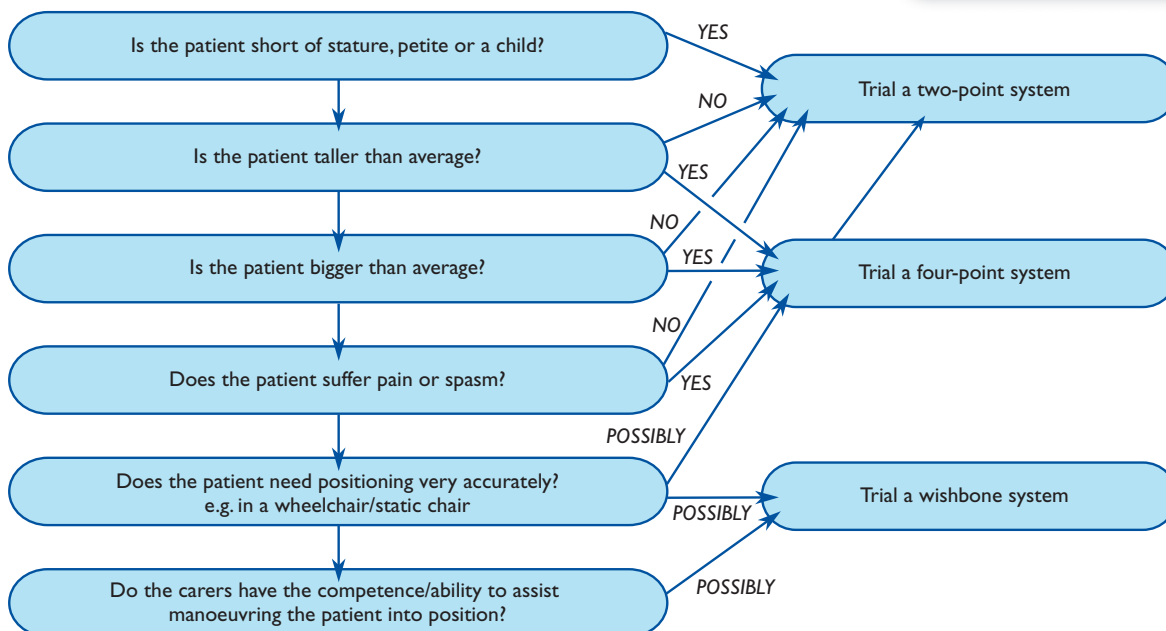
## 2:2 SPREADER BAR

Spreader bars fall into three different categories:

- Two point
- Four point
- Single handed tilting frame

Generally speaking the greater the number of points of suspension for the loops of the sling onto the spreader bar, the easier it will be to position the patient comfortably and to take account of any pain, spasm or other involuntary movement.

Suspension points that are closer in width and/or depth afford improved support, decreased pressure around the periphery of any commode aperture, reduced risk of patient 'jack knifing' and reduced tendency for the patient to be in a reclined position when being transferred.



Wider suspension points offer reduced risk of discomfort, respiratory problems on hoisting, pressure on legs and shoulders, and reduced tendency to pitch forward whilst in the sling.

It will be necessary to trial several different loop positions onto the spreader bar before the most comfortable and posturally appropriate position is identified. Once identified, it is advisable to mark the loops in some way to ensure that all carers use them correctly. It should be noted that a patient with a changing condition may well need this modifying, dependent on how they are presenting at any given time. For example, if there is an increase in spasm it may be necessary to shorten the leg support a little, relative to the shoulder support, in order to lift the patient in a position that reduces hip flexion, thus reducing the effect of that spasm.

### 2:3 HOIST SELECTION

Hoists can be categorised in to the following:

*Mobile hoists:*

- Hydraulic operated
- Electrically operated

*(In this category there are sling compatible mobile hoists, standing/toileting hoists, seat hoists and stretcher hoists)*

*Overhead Tracking Hoists:*

- Manual traverse
- X-Y tracking system
- Free standing gantry system

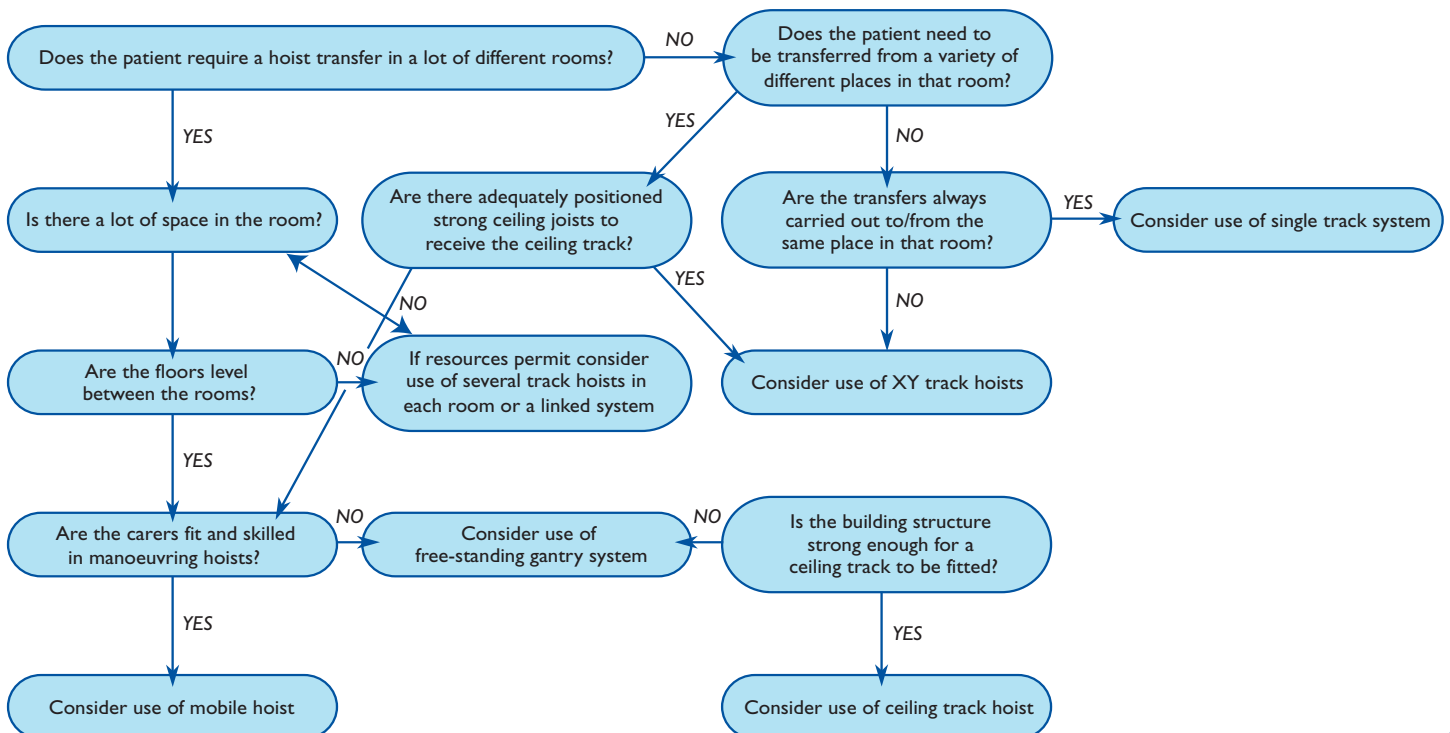


#### Mobile Hoists

It is important to ensure that mobile hoists are used to assist the safe and effective transfer of a patient. It is not advisable to transport patients in them over a longer distance. The recommended minimum required turning space is 1.20m<sup>2</sup>. Selection of the most appropriate hoist will take account of all the key risk assessment elements as detailed above.

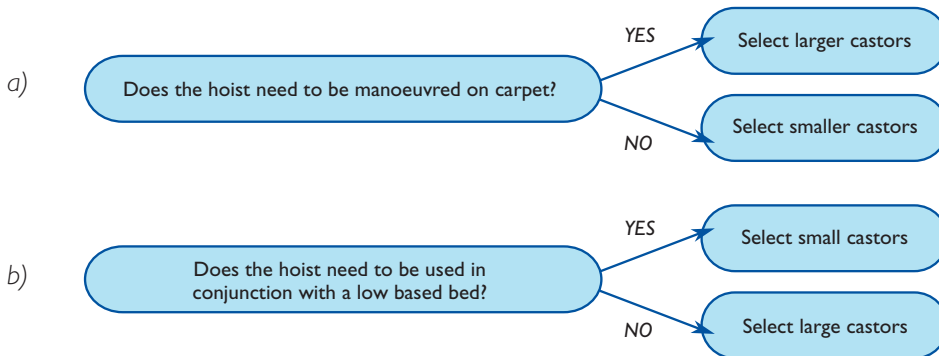
#### Tracking Hoists

These are used to take maximum advantage of environmental space but cannot be used in an infinite range of transfer positions. They are physically easier to use as the carer is not required to physically move the hoist with the weight of the patient in it as the power of the system performs that task and, indeed in some instances, the patient themselves can carry out or assist in the transfer process. Generally speaking where a patient's weight exceeds 100kg tracking hoists are the recommended option.

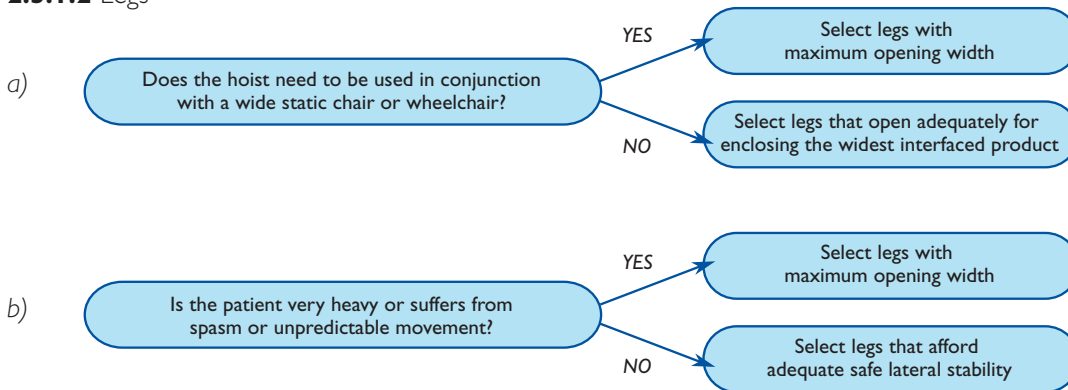


## 2:3:1 SELECTION OF MOBILE HOIST FEATURES

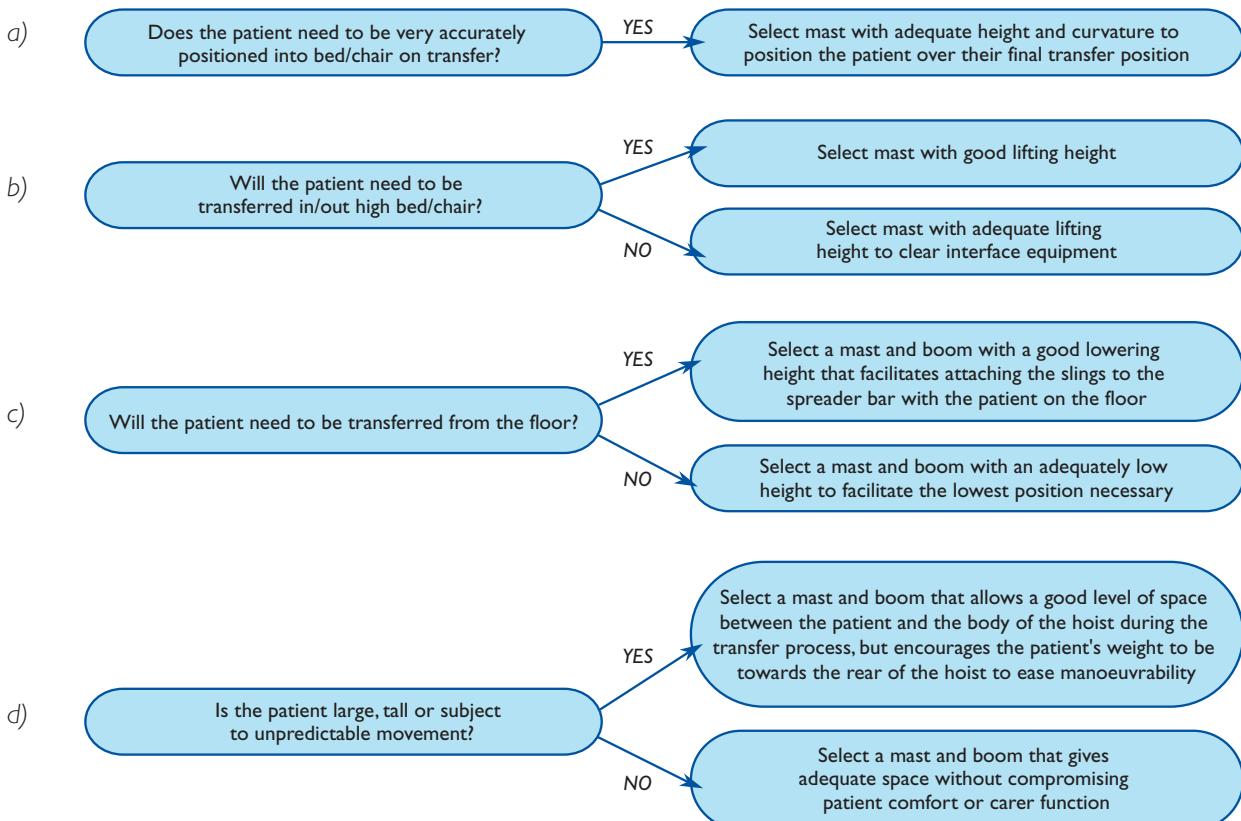
### 2:3:1:1 Castors



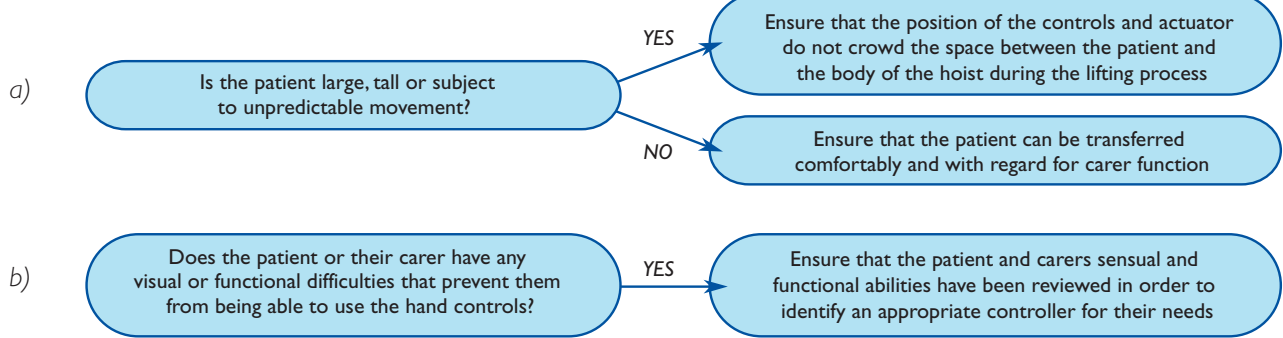
### 2:3:1:2 Legs



### 2:3:1:3 Mast and boom



### 2:3:1:4 Controls/Actuator Position



### 2:3:2 SELECTION OF TRACKING

Hoist tracks can be installed in order to allow a patient to be moved from one point to another in any area of a house or institution with dedicated accessories relative to specific environmental needs.

*Single track systems* take a patient to and from fixed points along a single straight, angled or curved track (this can also be mounted on a gantry A-frame system for temporary use).

*X-Y systems* are where one track is positioned between two other parallel tracks thus allowing for infinite pick up/lowering points within the range of both tracks.

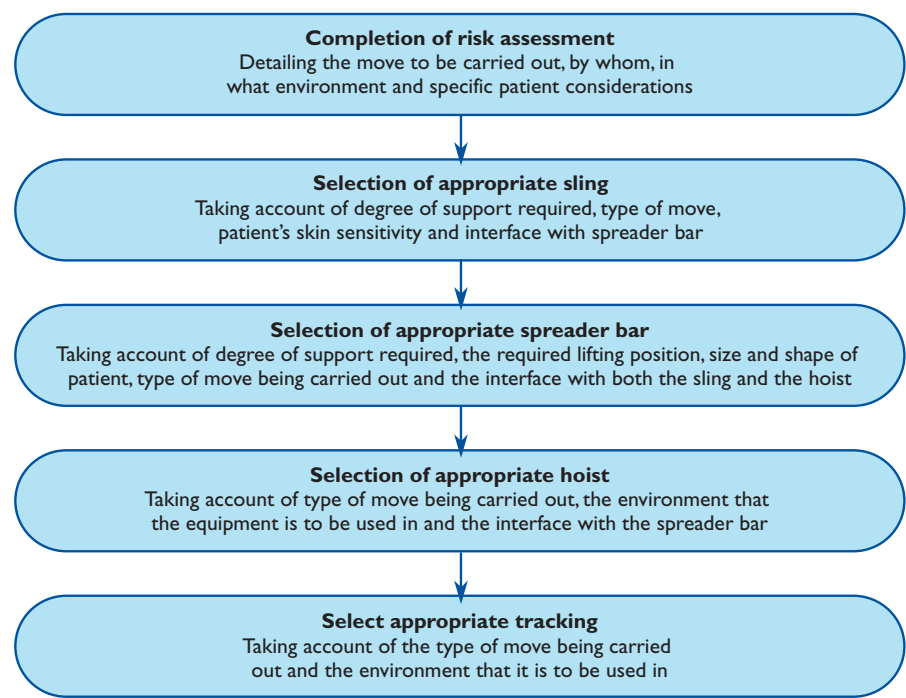
Shunting allows the patient to be moved from one track in one area to another in an adjacent area in a choice of two different directions.

Ceiling track hoists are a permanent fixture which always requires a structural survey to be completed to ensure that the tracking can be safely and securely fitted. Powered options can be:

- Powered raise/lower with manual traverse
- Powered raise/lower with powered traverse

### ESTABLISHING A SPECIFICATION

In order to establish the required specifications of the necessary moving and handling products, a logical sequence of problem solving can be carried out.



# Section 3

## AN OVERVIEW

### Therapeutic Application of Invacare® Moving and Handling Products

Having established the product features required to fulfil the patient's and carer's needs, selection of a specific product is the next step.

#### 3:1 SLINGS - SLING STYLE

##### 3:1:1 TOILETING SLING

###### Advantages

- Easy application
- Time efficient application
- Will position patient into good postural position when applied correctly. Lifting the patient in a very slightly recumbent position to reduce the risk of falling through
- Easy personal access for e.g. dressing, personal hygiene etc.
- Increased ease of personal patient independence

###### Disadvantages

- Safe use requires good patient head control
- Safe use requires patient ability to position arms outside of sling during transfer
- Safe use requires good patient trunk balance
- Requires good patient compliance to ensure safety
- Patient tolerance of waist strap
- Low level of support for patients with poor muscle tone

Typical diagnostic applications: Elderly frail, early multiple sclerosis.

*NB. Because of the low level of support the dress toileting sling is potentially dangerous if misused, so it should always be used with caution.*



Dress toileting sling



Universal standard sling



Universal High sling

##### 3:1:2 UNIVERSAL SLING (Available with/without integral headrest dependent on selection)

###### Advantages

- Easily applied in both sitting and lying
- Requires less client compliance
- Range of options/applications available e.g. head support, head support spines, leg support application methodology as identified by risk assessment (i.e. crossed centrally, individual leg support uncrossed, bi-lateral leg support)
- Increased patient comfort and support as increased fabric spreads patient load

###### Disadvantages

- Difficulties in removing clothing when sling in-situ
- Less easy personal access than toileting sling

Typical diagnostic applications: Mid-stage multiple sclerosis, tetraplegia, stroke (all advisedly with leg support in crossed position).

**3:1:3 COMFORT SLING** (Available as 'Easy Fit' style with divided leg support and commode aperture, full body comfort with commode aperture and full body comfort without commode aperture. The latter two are sometimes known as 'bathing/amputee' sling)

*Advantages*

- Provides maximum support for the very dependent user
- Maximum fabric provides for maximum comfort
- Enhances pressure re-distribution
- Particularly supportive for floor transfers
- Leg application options (Easy Fit style)

*Disadvantages*

- Sling application process tends to be extended because of increased fabric to position around the patient
- Poor (Easy Fit or Hammock with commode aperture) or impossible (Hammock without commode aperture) personal access
- Full body comfort styles can only be applied/removed with the patient in lying position

Typical diagnostic applications: Advanced multiple sclerosis, head injury, Parkinsons disease, high amputees.

**3:1:4 STRETCHER SLINGS**

These are available to be used with the Invacare® Robin and Robin Mover.

*Advantages*

- Improved ease of transfer for patients requiring to be transferred in a lying position
- Can be used with patients with minimum compliance
- Can be used with patients who are on e.g. IV drips
- Can be transferred directly on to shower trolley

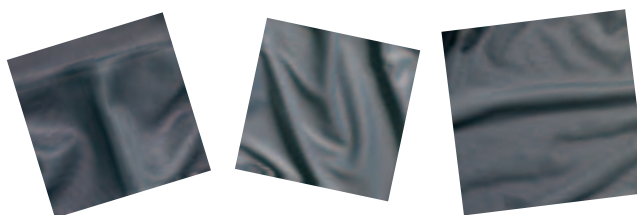
*Disadvantages*

- Weight loading is wide so need to minimise transfer distance for both patient and carer safety
- Must be used with a hoist that is appropriate and can give good lateral stability

**3:2 SLING FABRIC**

The three available options are:

- Spacer fabric
- Solid
- Net



**3:2:1 STRETCH 'SPACER' FABRIC**

*Advantages*

- Increased comfort
- Enhanced pressure re-distribution thus reducing risk of tissue trauma
- Moulds to the shape of intimately moulded seating supports
- Reduces skin shear during lifting process
- Bio-compatible
- 95° washing temperature with good drying
- 200kg (30st) maximum user weight
- CE marked
- TÜV approved

*Disadvantages*

- Stretching of fabric necessitates the patient being lifted slightly higher to clear lifting surface
- Increase thickness of fabric slightly reduces ease of application/removal

Typical diagnostic applications: Multiple disability such as cerebral palsy with custom contoured seating product in use, multiple sclerosis with risk of tissue trauma.



Invacare® Limited, South Road, Bridgend Industrial Estate, Bridgend CF31 3PY  
Tel: 01656 647327 Fax: 01656 649016 Email: [uk@invacare.com](mailto:uk@invacare.com) Web: [www.invacare.co.uk](http://www.invacare.co.uk)

Invacare® Ireland Ltd, Unit 5 Seatown Business Campus, Seatown Road, Swords, County Dublin, Ireland  
Tel: +353 1 8107084 Fax: +353 1 8107085 Email: [ireland@invacare.com](mailto:ireland@invacare.com) Web: [www.invacare.ie](http://www.invacare.ie)

### 3:2:2 SOLID POLYESTER FABRIC

#### Advantages

- Ease of application/removal
- Moderately easy drying time when laundered
- Rigidity of fabric for positioning
- Features of binding strip and fabric compatible thus increasing rigidity
- Bio-compatible
- 95° washing temperature with good drying.
- 200kg (30st) maximum user weight
- CE marked
- TÜV approved

#### Disadvantages

- Increased drying time during laundering
- Increased rigidity of fabric increases risk of sling pleating during use
- Can increase surface skin temperature if left in-situ for a period of time

Typical diagnostic applications: Patient with low risk of tissue trauma or with intact sensation who can report any perceived discomfort.

### 3:2:3 NET FABRIC (Polyester)

#### Advantages

- Does not retain moisture so ideal for bathing transfers
- Easy application/removal
- Open cell structure reduces insulation tendencies of slings
- Speedy drying time
- Bio-compatible
- 95° washing temperature with good drying
- 200kg (30st) maximum user weight
- CE marked
- TÜV approved

#### Disadvantages

- Reduced fabric rigidity reduces comfort level for patient
- Increased risk of skin shear during lift for vulnerable patients

Typical diagnostic applications: Transfers in/out bath/hydrotherapy pool for patients who have no evidence of tissue trauma.

### 3:3 SLING SIZE

Slings are colour coded with different coloured edging binding to denote their size:

- Extra small (XS) **Red**
- Small (S) **Orange**
- Medium (M) **Yellow**
- Large (L) **Blue**
- Extra large (XL) **Black**

### 3:4 SPECIAL SLINGS

Where a standard sling does not address a particular patient need it is possible to select a 'Special Sling' which is individually made to order. 'Special Slings' are special by virtue of:

- Alternative sizing specifics e.g. longer in the body, smaller commode aperture
- Fabric used e.g. lining specific parts of the sling with fleece fabric
- Loop modification e.g. alternative size, alternative position
- Additional safety features e.g. waist strap

To successfully identify and order a special sling it is advisable to use the 'Special Sling' prescription forms to record information gathered during the assessment process. It is advisable whenever possible to start with a known sling that is offering a best fit and then to mark on the form clearly where the adjustments need to be made to the finished product. As in all patient related activity the keeping of accurate records is crucial, especially to aid any future re-ordering and to ensure that the final product delivered is as per the request.

### 3:5 SPREADER BARS

The Invacare® Birdie hoist allows for easy interchangeability of large and small, two and four point spreader bars. This ensures, particularly where a product is used by more than person, that the most appropriate spreader bar can be selected based on risk assessment findings and according to individual patient need.

#### 3:5:1 TWO POINT SPREADER BAR

##### *Advantages*

- Quick and easy to apply the sling straps as they are close together
- Can be used for a chair to chair transfer as facilitates a more aggressive sitting position
- Assists management of patient's with spasm or high muscle tone because of closed postural position

##### *Disadvantages*

- Reduced comfort for some patients
- Poor (Easy Fit or Comfort with commode aperture) or impossible (comfort without commode aperture) personal access

Typical clinical applications: Wheelchair to commode transfer; particularly for smaller patients.

#### 3:5:2 FOUR POINT SPREADER BAR

##### *Advantages*

- Easy to position taller/bigger client
- Easier to attach sling loops when doing a floor lift
- Easier to position to middle of larger bed
- Accommodates tall/large patients more easily

##### *Disadvantages*

- Can exacerbate spasm because of more 'open' postural position
- Difficult to position in a chair in a 90° angle

Typical clinical application: Floor to wheelchair transfer particularly for larger patient.

#### 3:5:3 SINGLE HANDED TILTING FRAME

##### *Advantages*

- Accurately positions patient particularly when being placed into a seated position
- Increased comfort because of more natural and supportive sitting position

##### *Disadvantages*

- Can ONLY be used with specific, but very supportive, sling designed to fit shape of spreader bar
- Sling needs to be more rigid to effect the supported seated silhouette creating application difficulties
- Carer needs to be physically strong enough to manoeuvre patient in tilt frame

Typical clinical application: Armchair to wheelchair transfer for patient requiring a good level of comfort.

### 3:6 BIRDIE AND BIRDIE COMPACT

A mobile hoist with a selection of options to allow the specific application of product for patient need.

#### *Features*

- Longer boom design
- Foldable design
- Magnetic snap lock pin locking mechanism
- 2 or 4 point spreader bar in range of widths
- Quickly interchangeable clip on spreader bars
- Emergency stop
- Emergency lowering
- Manual leg opening
- Electrical leg opening

#### *Clinical Applications*

- Allows a 360 degree range of movement
- Provides more room for clients legs, reducing the risk of injury
- Ideal for compact storage when space is limited
- Ensures optimal security
- Allows spreader to be selected in relation to type of lift to be carried out
- Allows use for a range of clients and a number of type of lifts - no tools required
- Allows the lift to be halted quickly and safely
- In the incidence of power failure the lift can be lowered to a safe position
- Base can be adjusted with a simple foot pedal mechanism
- Allows finer adjustment of the base - operated with the hand control

### 3:7 ROBIN AND ROBIN MOVER CEILING HOIST

A versatile ceiling track hoist offering a range of interface track options.

#### Features

- Appearance
- No spreader bar required
- Raising and power traverse
- Manual traverse option
- Powered traverse option
- Hand controls
- Tracking options
- Safety features

#### Clinical Applications

- Domestically acceptable and discreet against the ceiling of patient's home thereby improving patient and care compliance
- Allows better client/carer interaction. Allows a wide range of lifts to be carried out.
- Adds to comfort, confidence and reduces the risk of motion induced spasm for the patient
- Specific positioning of patient
- Facilitates detailed positioning of the patient during transfer process. Can also be used to facilitate independent transferring where patients are able to
- Comfortable handhold of control pendant with touch controls ensures that the patient and/or carer can operate easily even with limited hand function
- Can be fitted on to straight track, X-Y track or gantry system to be used in a variety of situations either temporarily or permanently and to facilitate use in a wide range of rooms, even if very small
- Increases patient and carer confidence in the daily use of the system and therefore encourages compliance. The hoist can be lowered with the manual or electric lowering system and there is also a centrifugal stop. The hoist can be stopped immediately by the emergency stopping system with double safe micro switches to control the lifting range. There is also both audible and visual alarms indicating system status. An electronic overload cut-out system prevents misuse

#### ! For guidance only

This document provides general opinion and advice. However it does not deal with specific individuals or situations. A practitioner should always seek appropriate and specific advice from a suitably qualified professional before attempting to use methods outlined in the above.

No liability whatsoever shall be incurred by Invacare® Ltd. In respect of any representation made by Invacare® or its agents in respect of this document where such representation related or referred in any way to the suitability of the content of this document.

Invacare® Ltd. cannot accept responsibility for any loss or consequential loss occasioned to any person acting or refraining from action as a result of this material.

