

# **Joint Protocol for the provision of Childrens Equipment**

## **TRAINING PROGRAMME**

### **Children's Core Stock – MODULE B (Beds, Hoists, Slings and Sleepsystems)**

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## Assessment and Provision of Beds, Hoists, Slings, and sleepsystems

### Course Programme AM/PM examples

9.30am/1.30pm	Welcome and Introductions	
9.40/1.40pm	Session 1	Assessing for beds, mattresses and bed/side rails
10.45/2.45pm	Tea break	
10.55am /2.55pm	Session 2	Assessing for hoists and slings
11.50/3.50 pm	Session 3	Assessing for sleep systems
12.20pm/4.20pm	Summary and Evaluation	
12.30pm/4.30pm	Course end	

**Times are guidelines only and will be flexible depending on the needs of the group.**

<b>PROFILING BEDS</b>	
	<p><b>Description</b></p> <p>Profiling beds are electrically adjustable to enable the child's position to be changed without strain for anyone involved. The most common profiling beds have a three or four part bed base. Either type will allow the backrest / pillow area of the bed to be raised, enabling the user to be more upright, while also lifting an area under the knees, to stop the user slipping down in the bed. The bed is also height adjustable and reduces strain for carers while moving and handling users as well as lowering to an appropriate height for users to transfer from sit to stand easily. They have inbuilt side rails.</p>
<p><b>Weight restrictions</b></p>	<p><b>Safe weight limit – 140kg/ 22stones</b></p> <p><b>Check weight limits for usage as these can change</b></p>
<p><b>Alternatives</b></p> <ul style="list-style-type: none"> <li>• Bed raisers when variable height is not required for user or carers</li> <li>• Mattress elevator/ pillow lifter when the only requirement is the need for assistance from lying to sitting</li> <li>• Provide back rest / wedge where static pillow raise required</li> <li>• Attach rails to the bed</li> <li>• Provide free standing Lifting pole where no assistance is needed for the transfer in/out of bed</li> <li>• Bariatric beds for those users in this category.</li> </ul>	
<p><b>Criteria for provision</b></p> <p>..should meet one or more of the criteria.</p> <ul style="list-style-type: none"> <li>• Child has difficulty when attempting to change position or is unable to change position independently - by changing position without manual involvement, the risk of injury to the carer is eliminated, and the independence and dignity of the user are maintained.</li> <li>• It may make it possible for someone to get out of bed unaided, if they can raise themselves into a sitting position first.</li> <li>• Child has difficulty breathing or has circulatory problems - respiratory and circulatory difficulties can be eased.</li> <li>• Child is unconscious or remains in bed throughout the day</li> <li>• Child has chronic back problems</li> <li>• Child requires a hoist or receives personal care whilst on the bed - it makes using a hoist easier. Most profiling beds also have a height adjustment, so the carer can work at a safe height when giving treatments, etc.</li> <li>• Alternative options should have been considered and deemed to be inappropriate.</li> </ul> <p>In practice, standard profiling beds are prescribed for children when:-</p> <ul style="list-style-type: none"> <li>• <i>Personal care is carried out on the bed and the carer's needs are met by the rise and fall facility.</i></li> <li>• <i>The child's needs are met in relation to bed height for independent transfers but who also receive personal care on the bed</i></li> <li>• <i>Post- surgical procedures require children to be positioned in bed i.e. Spiker hip frame or following hip fusion</i></li> <li>• <i>They have breathing difficulties and cannot breath while supine</i></li> <li>• <i>Are positioned for over night PEG or naso-gastric feeding</i></li> <li>• <i>Need regular turning by carers over night</i></li> <li>• <i>The use sleep systems which need more space than smaller beds or cots can accommodate</i></li> </ul>	

- It must be noted that if the profiling mechanism is required, children should be of near adult height as the bed platform breaks for the profiling mechanism may be in the wrong position for smaller children.
- In a small number of cases where a child has highly specialist needs, a specialist Childrens bed may be required. The Partnership should have recommended products that staff should be directed to in these circumstances which have been selected based on cost-effectiveness, recyclability, as well as specialist functionality to meet the complex needs.

### Considerations prior to use

#### A mattress should be ordered separately from the bed

- If a specialised pressure relieving mattress is required, compatibility should be considered
- Access to the property needs to be suitable to allow safe delivery/fitting
- An electric socket is available where trailing leads will not create a tripping hazard
- The child if appropriate, and/or carer has the ability to manage the controls
- Adequate space is available to accommodate the bed
- Beds should usually be kept at the lowest possible height except when direct care is being given
- Bedrails should only be issued to reduce the risk of the child accidentally slipping, sliding, falling or rolling out of a bed. Issues of inappropriate restraint should be avoided
- Consideration should be given to ensure the carer can manoeuvre around the bed when direct care is being given
- Storage of the users own bed should be considered to avoid inconvenience for the user, carers or others living in the house.
- Manufacturer's weight limit guidance should be observed.
- Specific needs for children should be considered as they are of lower weight and size and also have designated guidelines related to bed rails/ cot sides etc
- If a bed is to be used in the same room as a gas fire, is there a local policy related to this with advice about carbon-monoxide emissions and relevant disclaimers.

#### Ref.

- **National Association of Equipment Providers – Guidance on the provision of beds and bedrails**
- **Health and Safety Executive – information and on-line training on provision of bedrails**

#### Installation of beds

- All beds are delivered and fitted by Store personnel

#### Maintenance

- Equipment should be cleaned in accordance with manufacturer recommendations.
- Beds will be maintained by the Store Services on a yearly basis under PUWER regulations

## PRESSURE RELIEVING MATTRESSES


Pressure relieving mattresses are used in the prevention and/or treatment of pressure issues in children. They can be static or dynamic in nature. They **must** be used in conjunction with other approaches to pressure care including repositioning, good hygiene, appropriate moving and handling techniques or medical/surgical intervention.

The provision of dynamic pressure mattresses should only be carried out by Nursing staff however static mattresses can be provided by staff who have the required skills to assess for and prescribe this equipment. All non-nursing staff have a role in prevention of pressure issues. Only nursing staff have responsibility for active treatment of pressure issues.

Further information related to selection of appropriate pressure relieving equipment can be found at the end of this document.

- Specific needs for children should be considered as they are of lower weight and size and also have designated guidelines related to mattresses/ pressure mattresses etc e.g. Specialist dynamic
- cell mattresses for children will have smaller cells.

<b>BED/SIDE RAILS</b>	
	<p><b>Description</b></p> <p>Linked beneath a single bed mattress for stability and security the two adjustable sides will operate independently to raise or lower. They are designed to reduce the risk of a child accidentally slipping, sliding, falling or rolling out... When not required the sides slide to the base of the bed. The strong framework is lightweight steel finished chrome. Bedrails used for this purpose are not a form of restraint. Bedrails will not prevent a patient leaving their bed and falling elsewhere, and should not be used for this purpose.</p>
<p><b>Weight restrictions</b></p>	<p>None specified but bedrails are <b>not</b> intended as a moving and handling aid and shouldn't be used as such.</p>
<p><b>When should this equipment be issued?</b></p> <ul style="list-style-type: none"> <li>• Child is at risk of accidentally slipping, sliding, falling or rolling out of a bed.</li> </ul>	
<p><b>Considerations</b></p> <ul style="list-style-type: none"> <li>• Side rails can pose a risk of serious injury, for example if part of the body gets trapped between them. Thus it is essential that care is taken when selecting, positioning and adjusting the rails and also when choosing or changing the type of mattress to be used in a bed with rails so as not to put the user at risk. The need for mattress in-fills may be considered to avoid gaps.</li> <li>• There may be a risk of entrapment between the bed and rail where drop down rails are used</li> <li>• Bumpers should be used for children who are assessed as requiring bedrails, but who are at risk of striking their limbs or of entrapment</li> <li>• Where 'Overlay' pressure mattresses are used it must be insured that the combined height of the standard mattress plus the overlay does not render the bed rail too low as to be ineffective against the user falling out of the bed.</li> <li>• Children may need rails with smaller gaps between the rails to ensure their safety.</li> <li>• Decisions about bedrails need to be frequently reviewed and changed</li> <li>• <b>Guidance is available from the Health and Safety Executive [HSE] on the safe use of bed rails.</b></li> </ul> <p>* For additional information on the use of bedrails and cot sides please refer to the National Association of Equipment Providers – Clinical Special Interest Group - Guidance on the Use of Bed Rails June 2011 [<a href="http://www.naep-uk.org">www.naep-uk.org</a>]</p>	
<p><b>Contra-indications</b></p> <ul style="list-style-type: none"> <li>• Bedrails should not be issued if the child is sufficiently agile and/or sufficiently confused, to climb over them</li> <li>• If the child lacks capacity, staff have a duty of care and must decide if rails are in the user's best interest.</li> <li>• A user who attempts to climb over the rails may fall from an even greater height.</li> </ul>	
<p><b>Installation</b></p> <ul style="list-style-type: none"> <li>• Bed rails are fitted by store personnel</li> <li>• The position of the rail should allow a gap between the top end of the bedrail and the head of the bed of less than 60mm or more than 250mm</li> <li>• The gap between the bottom end of the bedrail and the foot of the bed should be more than 250mm</li> </ul>	
<p><b>Maintenance</b></p> <ul style="list-style-type: none"> <li>• Equipment should be cleaned in accordance with manufacturer recommendations</li> </ul>	

MOBILE HOISTS MOBILE HOISTS	
	<p><b>Description</b> Manual or electrically powered lifting equipment which enables the carer to lift the child safely in a lying, semi reclined or sitting position. Slings are used and many designs are available depending on the user's needs and tasks being undertaken</p> <ul style="list-style-type: none"> <li>• Hoists should not be used when the child has reliable ability to weight bear [this can vary depending on the time of day]</li> </ul>
<p><b>Weight restrictions</b></p>	<p><b>Safe Weight Limits</b> Various depending on the specific hoist – Stores often have several stock hoists of different safe weight limits <b>Check Safe Weight Limits for usage as these can change.</b></p>
<p><b>Alternatives</b></p> <ul style="list-style-type: none"> <li>• Manual and electric versions</li> <li>• Bariatric versions</li> <li>• Stand aid for people with some residual weight bearing capability</li> <li>• Ceiling track hoist</li> </ul>	
<p><b>When should this equipment be issued?</b></p> <ul style="list-style-type: none"> <li>• The child has been assessed as non-weight bearing and/or carers are at risk whilst completing essential transfers</li> <li>• If the hoist is going to be used frequently by care staff or family then consideration should be given to the issue of an electric hoist.</li> <li>• The child and/or carer's needs indicate that a ceiling track hoist is not required, or the mobile hoist is a temporary provision pending installation of a ceiling track hoist.</li> <li>• Child's specific moving and handling profile should be recorded.</li> </ul>	
<p><b>Considerations Prior to use</b></p> <ul style="list-style-type: none"> <li>• Formal Carers should have attended statutory training and/or regular refresher training on general Moving and Handling [M&amp;H]procedures/policy and be deemed competent to use this equipment</li> <li>• Informal carers should receive demonstration and instruction on the use of this equipment from assessors and providers of this equipment. Some may require further M&amp;H training [see local arrangements for this]</li> <li>• An assessment has been carried out on an individual basis to determine the number of carers required. [Staff require to adhere to the recommendations within their own Partnership regarding numbers of carers required to use equipment]</li> <li>• The hoist is suitable for the environment, access for transfers, space to manoeuvre, height/space under bed/ chair and there is a suitable storage area</li> <li>• Type of activity and frequency of use has been considered</li> <li>• If the child's clinical condition presents further issues e.g. the pumping action may trigger a seizure, spasm or cause pain because of a pre-existing medical condition then, specification of an electric hoist should be considered to allow a smoother rise and lowering action.</li> <li>• Weight limit of the hoist should be considered in relation to the safe working load</li> <li>• The user must be familiar with the Manufacturer's operating instructions and competent in the use of the hoist</li> <li>• The hoist must have sufficient 'boom' height to allow the child to clear the surface they are</li> </ul>	

sitting/lying on when raised in the sling.

- Where clearance is marginal a sliding sheet can be used to prevent friction between the surface and the sling and to aid moving/turning the patient i.e. to get from bed to a chair alongside.
- The hoist must only be used for transfer, not transport, e.g. only from bed to chair within the same room
- Ensure sling is applied correctly[see information in next section]

#### **How to use the hoist**

- Ensure that the sling used is the correct one for the hoist. Hoists use specific slings with loop and/ or clip attachments and must be compatible with one another.
- It is the responsibility of anyone using the hoist, to carry out a visual inspection for any defects prior to use. i.e.
  1. Check the hoist and slings are safe and fit to use and there are no signs of wear and tear
  2. That it has been serviced within the legally required period before using it [serviced 6 monthly under LOLER regulations]
  3. Ensure wheels are running freely and brakes are in working order before use
  4. Check the battery is fully charged and operational
- Apply the slings to the child and then to the hoist as per training instructions
- Do not leave the child in the hoist for longer than necessary to lift and re-position the user in the bed/chair etc
- Do not leave the child un-attended while raised in the hoist

#### **Contra-indications**

- The child has unreliable weight bearing capacity
- The child's clinical condition presents further issues e.g. the pumping action may trigger a seizure, spasm or cause pain because of a pre-existing medical condition, which cannot be resolved by provision of an electrically powered hoist
- The child has cognitive issues or confusion which renders use of the equipment unsafe.

#### **Maintenance**

- Equipment should be cleaned in accordance with manufacturer recommendations.
- Will be serviced and maintained by the Store services under LOLER regulations



**SLINGS – basic shapes available**



**Access/toileting sling**  
Suits only 25% of users as they need to have good sitting balance and upper body control



**Quick fit/ universal sling**  
Suits up to 85% of users.  
Provides upper body support



**Full back sling**  
[Provides upper body support and head support]  
Suits 85-90% of users



**Long seat sling [hammock type support]** /Used with extender bars on the hoist to widen the attachment spacing]  
Suits frailer patients/ amputees/ spinal injuries



**Quick fit deluxe**  
Suits 90% of users and provides a more comfortable supportive lift particularly for those with skin integrity issues or who are heavier.

**Description**

A sling is an item of moving and handling equipment that is used with a mechanical hoist in order to facilitate the transfer of a patient. A sling comprises a specially designed and constructed piece of fabric that is placed under and around a child before being attached to the cradle/spreader bar of a lift to raise, transfer and lower the person. When selected and used correctly, a sling and hoist will achieve a safer transfer, reducing the risks associated with manual handling.

**Alternatives**

Different fabrics and designs available: - some are only available as non-stock orders

- Polyester
- Netting – mainly used for bathing
- Padded –for patients who have skin integrity issues, pain or are underweight and frail.
- Fleece edges - for patients who have skin integrity issues, pain or are underweight and frail.
- Long seats with commode aperture
- Reinforced to improve postural support i.e. for head or spine
- With **loop** attachments [**essential** that these are compatible with the hoist being used]
- With **clip** attachments [**essential** that these are compatible with the hoist being used]
- Integral sliding sheet to aid application – Specialised slings that are non-stock orders
- 'Glove' type slings that provide greater comfort and are easier to apply for those children with complex needs.

**When should this equipment be issued?**

- The child has been assessed as requiring a hoist for transfers.

**Considerations**

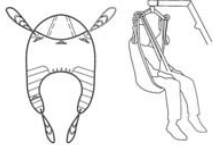
- A risk assessment must be carried out to ensure hoist/sling compatibility.
- The sling must meet the child’s needs with reference to model, size, fabric and design
- Careful consideration is required regarding choice of sling, in particular children with issues such as extensor spasm, seizures, low muscle tone, confusion, painful joints or amputation
- The user must be familiar with the manufacturer’s guidance for both the sling and the hoist being used, and be competent in their use
- A visual inspection for any defects should always be carried out prior to use.
- The sling must be securely attached to the spreader bar before attempting to lift the child
- The amount of time the child remains suspended in the sling should be kept to a minimum
- Manufacturer’s safe working load and laundry instructions must be observed
- The child should be reassessed on a regular basis or when there is a notable change to their physical and/or mental status
- NB Sling sizes are not consistent across manufacturers.

For further information please also refer to local arrangements for your Partnership.

Useful link: - The process of applying a sling to a child is specific to the chosen sling. Osprey Healthcare provides online videos demonstrating the application of their slings which can be useful as a training tool for less experienced staff. It must be noted that there could be some differences in the process in slings from different suppliers.

Web link - <http://www.ospreyhealthcare.com/digitalslingvideos.html>

**Further slings available as ‘Special order’ which may be more suitable for children**

<p><b>Light weight slings- high tensile fabric</b></p> 	<p>For use in tightly contoured moulded seats</p>	<p>Several varieties – Specification to be detailed on the order</p>	<p>No webbing handles attached to reduce pressure issues.</p>
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**Types of usage / Specific Issues] to consider when assessing**

**\* No standing tolerance**

**\* Standing tolerance required for active hoist [i.e. Standaid]**

<p>High/Low muscle tone</p>	<p>Contractures</p>
<p>[Upper Limb/ Lower Limb/ Core strength]</p>	<p>Reduced ROM</p>
<p>No sitting balance</p>	<p>Loss of sensation</p>
<p>No head/ trunk control</p>	<p>Pain [n.b. Exacerbation/ remission]</p>
<p>Ataxic movements</p>	<p>General frailty</p>

Muscle spasm [ie extensor spasm]	Tissue viability issue
Asymmetrical body shape	Poor compliance with instruction
Amputee	Poor cognition
Size of child [Weight/Height/proportion]	Sensory loss [Hearing Impairment/ Visual Impairment]
Seizures	Behavioural problems
Joint deformity	

**Support for daily living tasks**

Transfer from bed/chair/ bed

Re-positioning child in bed/ seating

Toileting

Bathing

Transfers in/out wheel chair

Tracking hoist

# Sleep Systems

Sleep systems provide a supportive symmetrical position. They are generally used in bed as part of a 24 hour postural management programme.

Why Sleep systems are used

- Minimise contracture and deformity
- Promote good positioning
- Utilise time spent in bed, in therapeutic manner (e.g. 10 hours each day = 3650 therapeutic hours)

## **SLEEP SYSTEM SELECTION**

The type of sleep system provided for a child is dependent on a number of factors and is based on clinical need. These include:

- Size of child
- Abilities/clinical presentation including contractures, muscle tone, head control
- Environment the sleep system will be used in
- Abilities of carers
- Method of transfer into & out of equipment (e.g. hoisted, transferred)

Initial provision of a child's sleep system will usually be carried out by a member of the paediatric physiotherapy staff this would include appropriate training to parents/carers. Issues which other staff/professions may be required to address may include:

- Recognition of poor alignment
- Recognition of discomfort & distress
- Recognition of growth and need for larger equipment
- Equipment fit for purpose

## Good lying posture - Supine

### Head

In midline

### Trunk

Midline position

Shoulders level and in line with pelvis

### Pelvis

Neutral pelvis

No obliquity



### Upper Limbs

Well positioned and comfortable

### Lower Limbs

Hips abducted

Knees apart

Patella pointing to ceiling

Lower limbs in a comfortable position with, pillows/wedges used to fill gaps.

## Good lying posture – Side Lying

### Head

In midline, with support if required



### Upper Limbs

Well positioned and comfortable

### Trunk

Midline position

Shoulders level and in line with pelvis

Supported to control rotation

### Lower Limbs

Hips abducted

Knees apart – supported with pillows/positioning equipment

Lower limbs in a comfortable position with, pillows/wedges used to fill gaps.

### Pelvis

Neutral pelvis

No obliquity



## Provision of beds for children - Recommendations and Guidelines

The following beds are recommended as suitable for prescribing to children.

*\*examples as at 2014*

1. **Invacare Etude Medley bed - Standard store stock**
2. **Sidhill Solite Lazer bed – Standard store stock**
3. **Insignis Comfort bed/ cot - Non-stock order**
4. **Scan Mobility Impression cot - Non-stock order**

The **Invacare Medley** and **Sidhill Solite Lazer [2]** beds are standard profiling beds but can be used for children who meet the standard criteria for provision of profiling beds. The criteria are as follows.

*The child has:-*

- Breathing difficulties and to manage chest excretions and reflux.
- Becomes exhausted with continual moving and handling due to breathing difficulties e.g. ventilated child.
- Has difficulty moving and attempting to change own position
- Continually slides down the bed therefore requiring further intervention for re-positioning.
- Remains in bed throughout day and night.
- Receives personal care while on the bed

**The examples above are not exhaustive but are common indicators that a profiling bed may be considered.**

In practice standard profiling beds are prescribed for children when:-



- Personal care is carried out on the bed and the carer's needs are met by the rise and fall facility.
- The child's needs are met in relation to bed height for independent transfers but who also receive personal care on the bed
- Post- surgical procedures require children to be positioned in bed e.g. Spica hip frame or following hip fusion
- They have breathing difficulties and cannot breath while supine
- Are positioned for over night PEG or naso-gastric feeding
- Need regular turning by carers over night
- The use sleep systems which need more space than smaller beds or cots can accommodate

\* It must be noted that if the profiling mechanism is required, children should be of near adult height as the bed platform breaks for the profiling mechanism may be in the wrong position for smaller children.



The **Insignis Comfort bed [3]** and **Scan Mobility Impression cot [4]** are built for children only. They provided:-



- A greater degree of safety in relation to secure cot sides with surrounding customised bumpers
- Have additional options in relation to larger sizes, panel material and height, bumpers, platform size, profiling [Insignis Comfort bed only]and tilting facilities. See Appendix 1 for details.
- Looks more like a child's bed in the domestic setting.


## X Partnership – Beds recommended for use with children - Specifications

Supplier	Product	Specification
<p>Inva care  <a href="http://www.invacare.co.uk">www.invacare.co.uk</a></p>	<p>Etude            Medley</p>	<div style="display: flex; justify-content: space-around;">   </div> <p><b>Specifications</b></p> <ul style="list-style-type: none"> <li>• 4 Section mattress base</li> <li>• Width outside: 102 cm Width inside: 90 cm</li> <li>• Length outside: 222 cm Length inside: 208 cm (+ 20 cm extensions)</li> <li>• Height adjustable: 33 - 73 or 40 - 80 cm [Double height positions on bed ends]</li> <li>• Mattress support dimensions 4 sectioned: 75 - 35 - 34 - 56 cm</li> <li>• 0 - 70° Backrest angle</li> <li>• Thigh angle: 0 - 29° Leg rest lift: 0 - 20°</li> <li>• 11° Tilt option* should only be used for patients under medical supervision.</li> <li>• Full length side rails available in a range of heights</li> <li>• Bed weight: 69 kg</li> <li>• Transport kit available for moving the bed</li> <li>• SWL 180 kg (28.5 stone)</li> <li>• Side rail bumpers are ordered separately</li> </ul> <p><b>n.b.</b></p> <ul style="list-style-type: none"> <li>• Due to recycling there are several beds available with slightly different specifications.</li> <li>• The bed must not be used by patients under 12 years of age, or by patients with body size equivalent to an average 12 year old or smaller.</li> </ul>



<p><b>Inva care</b>  <a href="http://www.invacare.co.uk">www.invacare.co.uk</a></p>	<p><b>Etude  Medley low</b></p>	<div style="display: flex; justify-content: space-around;">   </div> <p><b>Specifications</b></p> <ul style="list-style-type: none"> <li>• 4 Section mattress base</li> <li>• Width outside: 102 cm Width inside: 90 cm</li> <li>• Length outside: 222 cm Length inside: 208 cm (+ 20 cm extensions)</li> <li>• Height adjustable: 22 - 62 or 29 - 69 cm [Double height positions on bed ends]</li> <li>• Mattress support dimensions 4 sectioned: 75 - 35 - 34 - 56 cm</li> <li>• 0 - 70° Backrest angle</li> <li>• Thigh angle: 0 - 29° Leg rest lift: 0 - 20°</li> <li>• 11° Tilt option*</li> <li>• Full length side rails available in a range of heights</li> <li>• Bed weight: 69 kg</li> <li>• Transport kit available for moving the bed</li> <li>• SWL 180 kg (28.5 stone)</li> </ul> <p><b>n.b.</b></p> <ul style="list-style-type: none"> <li>• The bed must not be used by patients under 12 years of age, or by patients with body size equivalent to an average 12 year old or smaller.</li> <li>• Can be used with a floor mattress for safety: The part number for the foldable mattress is 1494608.</li> <li>• Please note that the tilt function should only be practised for users under medical supervision.</li> </ul>
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<p>Sidhill  <a href="http://www.sidhill.com/">http://www.sidhill.com/</a></p>	<p>Solite Laser  4 section  Profiling  Community  Care bed</p>	 <p><b>Specifications</b></p> <ul style="list-style-type: none"> <li>• Variable height range: 31.5cm to 72cm</li> <li>• Width: 94.5cm</li> <li>• Length</li> <li>• Electrically profiling bed</li> <li>• Infinitely variable tilt and reverse tilt positioning (Trendelenburg)</li> <li>• Maximum user weight is 180kg (28st)</li> <li>• Safe side mesh sides rails available</li> <li>• Safe side Profiling mattress infill's available</li> <li>• Folds up for transport</li> </ul>
<p>Scan Mobility  <a href="http://www.scanmobility.co.uk/">http://www.scanmobility.co.uk/</a></p>	<p>Impression  cot</p>	 <p><b>Specifications</b></p> <ul style="list-style-type: none"> <li>▪ Mattress platform sizes- 1700x700mm or 1900x900mm</li> <li>▪ Cotsides and end panel heights – 600mm or 800mm</li> <li>▪ Side panel material options – Beech bars or perspex</li> <li>▪ Removable full height padding – Attached with Velcro- oil cloth covers [basic colour blue/other options available at an additional cost.</li> </ul>

		<ul style="list-style-type: none"> <li>▪ Comes in 8 pieces for ease of delivery</li> <li>▪ Electric back rest</li> <li>▪ Electric height adjustment – 40cm-80cm platform height</li> <li>▪ 2 way Electric tilt</li> <li>▪ Bi-fold doors – both sides of cot – safety catches on folding doors</li> <li>▪ 12.5cm braking caster wheels.</li> <li>▪ SWL – 150kg/ 23stones</li> </ul>
<p>Insignis Ltd  <a href="http://www.insignisltd.co.uk/">http://www.insignisltd.co.uk/</a></p>	<p>Comfort bed</p>	 <p>The Comfort bed is safe and strong with secure doors made from wood, polycarbonate or with bars. All comfort beds can be raised or lowered electrically.</p> <p><b>Specifications</b></p> <ul style="list-style-type: none"> <li>• Choice of size - Any length and width available</li> <li>• Size of doors and fixed side - from minimal to 100 cm in height ( or more with change of design )</li> <li>• Strong sides</li> <li>• Tilting facility [Profiling bed base as an option ]</li> <li>• Padding as an option - Extensive range of fabrics</li> <li>• All 4 sides - can be built with bars, perspex or wooden panels - or combination</li> <li>• Lower to ground if required.</li> </ul>

### **Mattress issues related to children's beds**

- Children often nursed in an adult sized bed approx. 1000mm x Length 2100mm
- Child sized beds are commonly approx. 1300mmx670mm.
- Quality of mattress is important in Pressure Ulcer Prevention
- Children's beds need to be capable of taking child's pressure relieving mattress when required.
- Adult size **alternating cell** pressure mattresses are often unsuitable as the air cells are too wide [120mm] for children. When each cell is deflated the child can fall down the gap and as a result is lying on the bed base until the cushion re-inflates. Children's mattresses have 50mm cells [i.e. Transair Paediatric AC Mattress]
- Possibility that a **Low Air loss** pressure relieving mattress would be more appropriate as this holds a constant pressure over the mattress surface.

Adult pressure mattresses often have a lower weight limit which children can fall below. This can affect the optimum efficiency of the mattress with regards to pressure distribution.



# BED ASSESSMENT TOOL

# APPENDIX 2

<b>SECTION 1: DETAILS OF CHILD AND ASSESSORS</b>			
<b>CHILD NAME:</b>		<b>DOB:</b>	<b>CHI:</b>
<b>ASSESSOR</b>		<b>POSITION &amp; BASE:</b>	
<b>CONTACT TEL 1:</b>		<b>DATE COMPLETED:</b>	
<b>ASSESSOR</b>		<b>POSITION &amp; BASE:</b>	
<b>CONTACT TEL 2:</b>		<b>DATE COMPLETED:</b>	
<b>ASSESSOR</b>		<b>POSITION &amp; BASE:</b>	
<b>CONTACT TEL 2:</b>		<b>DATE COMPLETED:</b>	
<b>ASSESSOR</b>		<b>POSITION &amp; BASE:</b>	
<b>CONTACT TEL 4:</b>		<b>DATE COMPLETED:</b>	

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<b>SECTION 2: MEDICAL HISTORY</b>

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<b>SECTION 3: ASSESSMENT</b>
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<b>1. BREATHING &amp; AIRWAY SUPPORT</b>		<b>Yes</b>	<b>No</b>
<b>Airway Breathing</b>	Obstructive airway requiring changing of position		
	Artificial airway - tracheotomy nasopharyngeal		
	Supportive ventilation e.g. CPAP or BIPAP		
	Dependent on mechanical ventilation when asleep or unconscious		
<b>Apnoea</b>	History of apnoea		
<b>Suction</b>	Suction needed		
<b>Oxygen therapy</b>	Oxygen therapy used		
<b>2. MOVEMENT &amp; MOBILITY</b>		<b>Yes</b>	<b>No</b>
	Does the user have ability to move limbs purposefully and intentionally		
	Does the user have ability to move limbs without purpose, intention or control		
	Does the user have ability to role independently		
	Does the user have ability to move up/down/around bed independently		
	Does the user have ability to sit up from lying independently		
	Does the user have the ability to pull up from kneeling on the bed		
	Does the user have ability to pull up into standing on the bed		
	Does the user have ability to get out of bed independently		
	Does the user have the ability to use a hand control		
<b>Notes:</b>			

3. PERSONAL CARE		YES	NO
Does the user have any continence issues			
Does the user have any tissue viability issues			
Does the user require oral/internal feeding (bolus or continuous pump feeds)			
Notes:			
4. MANUAL HANDLING		YES	NO
Will tracking hoist be used now or in future			
Will mobile hoist be used now or in future			
Will pressure relief be required			
Is a profiling action required			
Is variable height required			
Is trendelenburg required			
Is there a max/min height of bed			
Is the bed for more than one occupant			
Will side rails be needed			
Will a grab hand be fitted			
Is low access needed			



Notes:

<b>5. SAFETY/RISK</b>	<b>YES</b>	<b>No</b>
Is the user under 12 years of age		
Is the user of a similar proportion to a 12 year old		
Are bed rails required		
Is there a risk of injury by falling in bed		
Have any injuries occurred in bed previously		
Is padding required		
Is visual supervision required		
Are there any other children in the home		
Is an isolation of the hand control required		
Is there a risk of asphyxiation		
Can you identify any further entrapment risks		
Is rapid access required e.g. urgent interventions required		
Does the person experience epilepsy		
Does the user have awareness of own danger		
<b>Notes:</b>		

<b>6. CARERS NEEDS</b>	<b>Yes</b>	<b>No</b>
Is variable height required to assist you		
Is profiling required to assist you		
Will hoisting be required		
Are there any specific needs other than the above		

**Notes:**

<b>7. ADDITIONAL CARE REQUIREMENTS</b>	<b>Yes</b>	<b>No</b>
Does the user have any visual impairment		
Does the user have additional equipment e.g. communication aid /environmental control		

**Notes:**

**SUMMARY**

**KEY NEEDS/RISKS**

**KEY RECOMMENDATIONS**

**RECOMMENDED PRODUCT**

**Note: Have you considered a standard hospital bed? If this is not suitable detail why.**

**REFERENCES**



**Sleepsystems PowerPoint Presentation slides**

## Sleep Systems

- Postural support for use in lying
- Generally used in bed as part of a 24 hour postural management programme
- Provide a stable, supportive, symmetrical position
- Can be used in supine & side lying
- Minimise progression of contracture and deformity
- Utilise time spent in bed, in therapeutic manner eg. 10 hours each day = 3650 therapeutic hours

## Assessment for Sleep Systems

- Consider the following:
  - Muscle tone – high/low, and tone patterns
  - Joint contractures & muscle length
  - Deformity - including hip subluxation/ dislocation, scoliosis etc
  - Position for sleeping – supine/side lying
  - Height & length of body segments
  - Other medical problems – epilepsy, overnight gastrostomy feeding, vomiting, respiratory health, temperature control

# Lecky Sleepform



- Age 0 – 18 years
- Complexity: Mild to complex
- Available in sizes 1-4, for cot or single bed
- Postural management for supported lying during sleep/rest
- Parts include:
  - Mouldable mattress
  - Airflow mattress
  - Cushioned chest, hip and knee supports
  - Knee pillow &/or roll
  - Temperature control sheet
  - Waterproof mattress protector