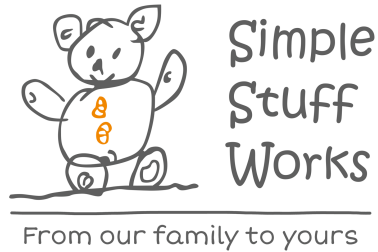


Therapeutic Lying Resource Booklet



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www.simplestuffworks.co.uk

Clinical scenario resources:

- Assessment and documentation
- Building a case for therapeutic lying as part of the 24 hour approach
- What do we want to achieve through therapeutic positioning: person centred outcome measures and objective measures
- Planning a positioning strategy (to include practical demonstration of equipment)
- Safety planning
- Clinically justifying the need for equipment
- Review

Clinical Scenario

Edward

Edward is a lively 25 year old Leicester City fan. He went to a special school and then a residential college. He has now been back home living with his parents for 3 years.

Edward uses an attendant push wheelchair. He stays in his wheelchair for most of the day. At the day service his routine includes lying on the 'massage mat' for an hour after lunch. As soon as he gets home he asks to get down onto the living room floor where he wriggles around and appears to enjoy the freedom of movement. At night he always sleeps on his right side. In this position he can face his bedroom door. Once asleep he moves very little until he wakes up in the morning. Edward does not use words to communicate but people who know him well are able to understand him.

Over the last year his parents and support workers have been finding it harder to carry out Edward's personal care. It is getting harder to part his legs and Edward appears to find this distressing. In addition to this he has had, unusually for him, 4 chest infections requiring antibiotics. Edward is becoming less bubbly and more withdrawn and his support workers feel that going to a local football match is now 'too much for him'.

Assessment –

Working out if the person needs therapeutic positioning in lying

1) A typical 24 hours

What does the 24 hour period look like? How long does the person spend in lying? What other positions and equipment does the person use? What are their experiences in each of these positions? (i.e. comfortable / painful?)

2) Mattress

What kind of mattress does the person sleep on? If they lie down elsewhere during the day what is the supporting surface; floor, mat, sofa, recliner etc.?

3) Medical

What is the person's past medical history? What is their current medical status?

We know that supine is the most therapeutic position so we need to determine whether there are any medical reasons why the person must not lie supine:

- Decrease in respiratory function
- Risk of aspiration
- Tissue viability
- Epilepsy

Also determine whether the person has

- Ability to thermo-regulate physiologically and behaviourally
- Circulation problems
- Incontinence

Assessment –

4) What is the person's habitual position in lying?

This information needs to be gained through a conversation with the person or carer, observation and palpation. The information can then be recorded in the following ways:

- Word description
- 'Posture analysis of lying posture' Goldsmith et al 2015 – see page 6
- Photograph (consent gained?)
- Drawing – see page 7

(all to include description of head, spine, ribcage, pelvis, legs, feet)

5) Why does the person choose to be in this position?

- Is the position related to function (e.g. watching TV?)
- Are there sensory reasons
- Is the person obliged to lie in this position (severity of body shape changes, medical reasons, past events?)
- How does muscle tone contribute to posture? (Passive movement of limbs necessary to determine tone)

6) Can the person be supported to lie more therapeutically?

Support the person to lie in a more therapeutic position.

- What body parts are 'fixed' and what can be re-aligned
- Look at range of movement as necessary
- Record as above – see page 8 for drawing

Note: Ideally a postural assessment will establish the person's 24 hour needs – i.e. what is their seating ability, what do they need from their wheelchair / static seating? The assessment in lying would therefore need to explore hamstring length, ranges of movement in hip, knee and ankle.

Ideally we are looking for a symmetrical position in supine. If this is not possible how can we support the posture to be more therapeutic and less destructive, what compromises do we need to consider?

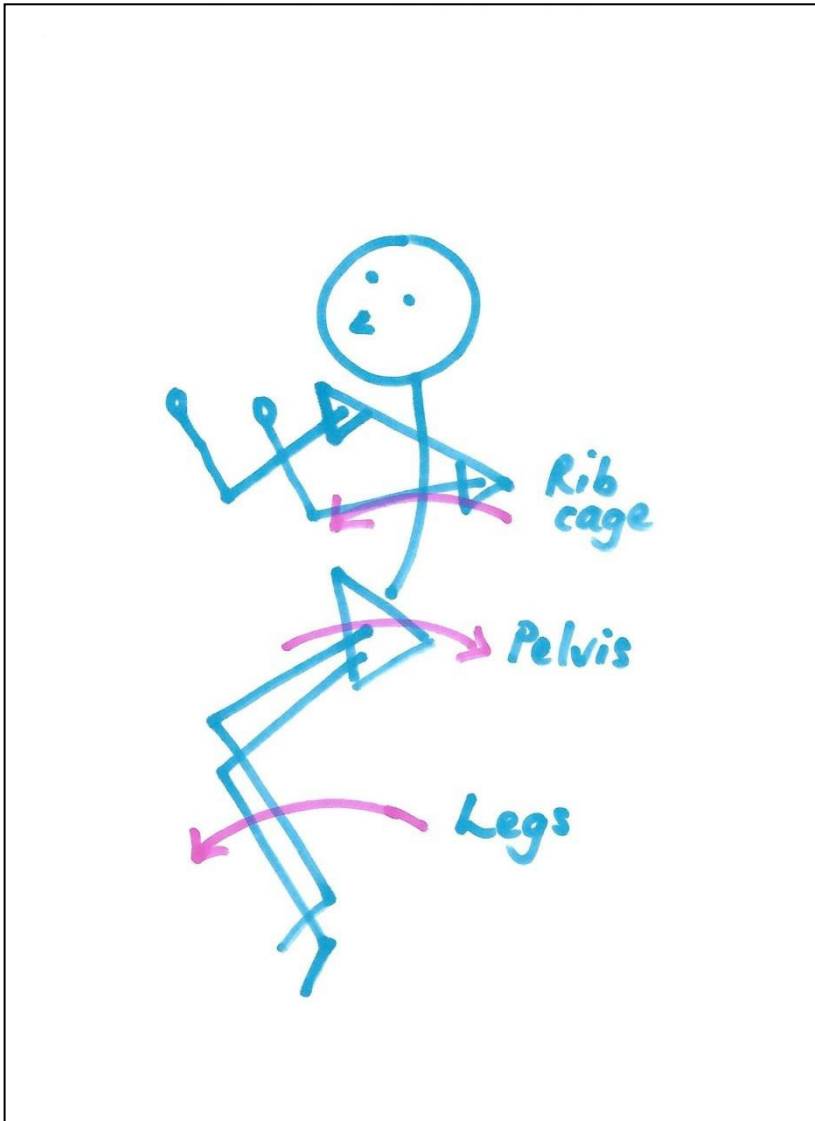
Simple Stuff Works Posture Analysis

John and Liz Goldsmith, Sarah Clayton, Polly Mears, Anna Waugh 2015

| This is about the position of the body in lying:- | Yes | No |
|---|-----|----|
| Is the head in mid line and free to move to both sides? | | |
| Is the position of the shoulder girdle symmetrical? i.e. the position is the same both sides? | | |
| Is the right arm free to move? | | |
| Is the right arm in a functional position? i.e. a position in which the arm could be used easily | | |
| Is the left arm free to move? | | |
| Is the left arm in a functional position? i.e. a position in which the arm could be used easily? | | |
| Are the spine and sternum in line vertically or horizontally? | | |
| Is the gap at the waist, between the lower ribs and top of the pelvis even? If not, is it bigger on the right or the left? | | |
| Is the front of the pelvis facing the same way as the front of the chest? | | |
| Is the lumbar spine in a neutral position? i.e. neither arched nor slumped backwards | | |
| Is the right leg in a neutral position? i.e. neither turning in nor out | | |
| Is the right knee nearly straight? | | |
| Is the left leg in a neutral position? i.e. neither turning in nor out | | |
| Is the left knee nearly straight? | | |
| Total ("Yes" = good "No" = destructive) | | |

Unsupported / habitual / destructive posture

(Clinical scenario 1 – Edward, age 25)



Right side – lying

*Head: supported on 2 pillows,
neck flexed and rotating to left*

Rib cage: rotating anticlockwise

Pelvis: rotating clockwise

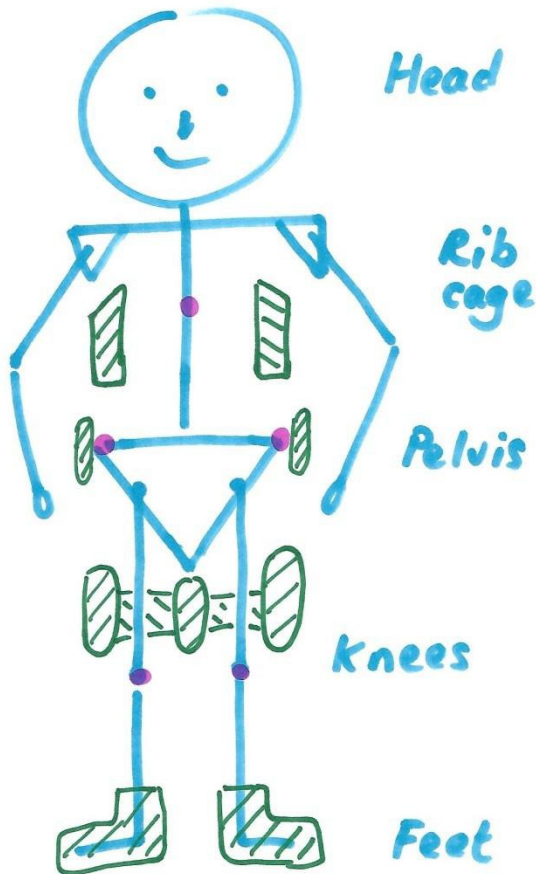
Legs: wind sweeping to right

Additional comments

Increased tone ULs right and left

Increase tone Left LL

Supported / therapeutic posture (Clinical scenario 1 – Edward, age 25)



Supine

*Head: midline, free to move.
Requires 2 pillows due to neck flexion – may be able to progress to one pillow as posture improves*

Rib cage: sternum central, used of 2 medium, wide wedges

Pelvis: symmetry achieved, no obliquity, rotation, A-P neutral, used 2 medium padded laterals

Legs: degree of fixed hip and knee flexion, able to align symmetrically and midline (knee caps to ceiling), used size 4 supine stabiliser

Feet: able to achieve plantigrade at ankles with toes to ceiling, used size 2 foot supports

Additional comments

Reduced tone

Appeared content, fell asleep during assessment

Building a case for therapeutic lying as part of the 24 hour approach

1) Describe current posture

Is the person's body shape changing over time; deteriorating, improving?
How do we know this?

2) With our knowledge of biomechanics what can we anticipate overtime if we do nothing? (i.e allow the person to continue to adopt destructive / habitual posture)

Describe anticipated effects of prolonged positioning and gravity on

- Head position
- Ribcage and spine
- Pelvis
- Hip joints
- Upper limbs
- Lower limbs

Reference: Hill (Clayton), S. and Goldsmith, J., 'Biomechanics and Prevention of Body Shape Distortion', *The Tizard Learning Disability Review*, Vol.15, Issue 2, pgs. 15-29, 2010

Describe how this can affect the person physically, psychologically and socially

See table, p 10 'Physical, Psychological and Social Effects of Body Shape Changes'

See flow chart p11 'Failure to provide postural care: the sequence of events'

Clinical Justification for Simple Stuff Works equipment

<http://www.simplestuffworks.co.uk/wp-content/uploads/2016/10/Clinical-justification-V4.pdf>

Physical, Psychological and Emotional Effects of Body Shape Changes

| Physical | Psychological | Social |
|---|---|--|
| <p>Pain Sleep affected Joints damaged / dislocated Reduced mobility Reduced function Need for surgery Difficulty positioning Respiratory problems Eating and drinking problems Digestion problems Constipation Oxygen therapy Tracheostomy PEG Pressure sores Increased need for equipment Increased need for medication Increased hospital admissions Increased dependence on others</p> | <p>Fatigue Depression Decreased confidence Dealing with attitudes of others Isolated Helplessness Loss of control</p> | <p>More healthcare workers involved – increased risk of fragmentation of care Level of skill required by carers increases Decreased opportunities for employment Decreased opportunities for 'normal life; Transport issues Changing places in community needed Every event needs to 'be planned</p> |

Failure to provide postural care: the sequence of events

Child / adult with movement difficulties has preferred sleeping and sitting positions



Preferred positions adopted regularly and over time: parents / carers position child / adult in preferred position or allow child / adult to adopt position of choice



Body shape changes begin (lack of movement / effects of gravity / neurological factors).



Child / adult unable to move out of preferred position. This is now a destructive posture. Progression of body shape changes.



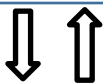
Lack of positioning options



Effects on physical and mental health



Decreased opportunities to function



Further changes in body shape

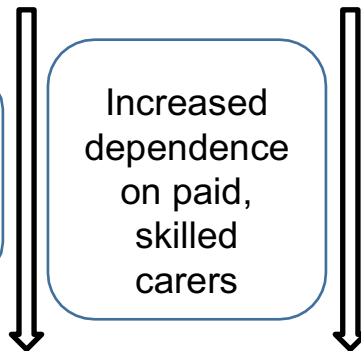
Increased equipment needs

Increased dependence on family carers

Increased dependence on paid, skilled carers

Increased no. of HCPs involved

Increased hospital admissions



Premature Death

What do we want to achieve through therapeutic positioning?

1) Develop person centred outcome measures

What matters to the person

- Pain,
- Dignity
- Sleep

What matters to the carers

- Increased ease of caring role
- Improved sleep
- Avoidance of need for equipment / home adaptation

The outcome measures could be very specific. Sometimes these can be formed very easily through conversation. At other times skilled questioning is needed and the used of person centred thinking tools are useful.

See www.helensandersonassociates.co.uk

2) Objective measures

Goldsmith Indices of Body Symmetry Measures:

- Degree of rotation of chest
- Chest depth width ratio
- Wind sweeping Index of hips
- R and L hip abduction / external rotation

Goldsmith, L. Golding, RM. Garstang, RA. Macrae, AW. *A technique to measure windswept deformity*. *Physiotherapy*. 1992; (78) 4; 235-42.

Planning a positioning strategy

1) Practical demonstration. How can Simple Stuff Works equipment be used to position Edward therapeutically in:

- Supine (most desirable if safe and acceptable to Edward)
- Side lying if necessary

2) What will work for Edward?

- Using 'Important to / Important for' – see p 14

3) What will work for Edwards parents, support workers at home and support workers at the day service?

- Using What's working / What's not working – see p15

4) What will work for the other HCPs involved with Edward?

- Using What's working / What's not working – see p15

5) What is everyone's competence and confidence in carrying out the postural care plan?

- Training
- Supportive documents
- Demo video clips

6) How can parents and support workers be supported to use equipment safely, humanely and appropriately?

| Perspective | What's working | What's not working |
|--------------------------------|-----------------------|---------------------------|
| Edward | | |
| Parents | | |
| Support workers at home | | |
| Support workers at day service | | |
| Postural Care Physio | | |
| Respiratory Physio | | |
| OT | | |
| TVN | | |
| Other | | |

Where there is conflict – a compromise needs to be developed

Important to / Important for: we need to get this right if the strategy is going to be followed and the equipment used in the long term. Further person centred planning tools can be found at www.helensandersonassociates.co.uk

| Important to Edward | Important for Edward |
|---------------------|----------------------|
| | |

Safety Planning

It is important to include everyone that is involved with the individual as each supporter will have different experiences and insights to potential risks and how to ensure the person is as safe as possible.

The Safety Planning Checklist

If you decide you need to make changes to the sleeping position, work with those around you to introduce the changes gently and carefully. Most of us have established habits and have experienced disturbed sleep due to changes of circumstances, take a long term view and time to adjust. Analyse safety and risk by answering the following questions and commenting in the space provided. Continue on extra pages if necessary.

| Question | Yes | No |
|---|-----|----|
| Is the person comfortable with regards to temperature? Think about difficulties with controlling temperature and using different materials | | |
| Risk factor | | |
| Safety planning | | |

| Question | Yes | No |
|--|-----|----|
| Can the person breathe safely? Think about the position of the head and neck and the long term effect of the combined force on the chest, consider the possibilities and consequences of aspiration, reflux etc. | | |
| Risk factors | | |
| Safety planning | | |

| Question | Yes | No |
|--|-----|----|
| Is the person happy? If they are not happy it may affect their ability to sleep which will be damaging to them | | |
| Risk factors | | |
| Safety planning | | |

| Question | Yes | No |
|--|-----|----|
| Does the person have epilepsy? Think about the type of seizures, when they are likely to happen and if the person's safety would be affected by their position | | |
| Risk factors | | |
| Safety planning | | |

| Question | Yes | No |
|--|-----|----|
| Are there any new pressure areas resulting from a change in body position? Think about where the weight of the body used to be taken habitually and where it is taken in the new position. Is there any pressure or friction as a result of spasm or bony prominences? | | |
| Risk factors | | |
| Safety planning | | |

| Question | Yes | No |
|--|-----|----|
| Are there any problems with circulation? Think about the position of the limbs and how the circulation can get through. Think about the effect of gravity on the limbs | | |
| Risk factors | | |
| Safety planning | | |

| Question | Yes | No |
|---------------------------------|-----|----|
| Are continence issues resolved? | | |
| Risk factors | | |
| Safety planning | | |

| Question | Yes | No |
|---|-----|----|
| Are there any other issues which need to be thought about in order to make sure any change of support will be introduced safely and humanely? | | |
| Risk factors | | |
| Safety planning | | |

Clinical Justification of funding request for equipment

1) Department of Health recommendations

- Mansell, J., 'Raising Our Sights: services for adults with profound intellectual and multiple disabilities' page 24. Tizard Centre, University of Kent. March 2010
- Michaels, Sir J. 'Healthcare for All, Independent inquiry into access to healthcare for people with learning disabilities' July 2008. Page 19

2) CIPOLD

- Heslop et al: 'Confidential Inquiry into the Premature Death of People with Learning Disabilities: Final Report.' Norah Fry Research Centre, March 2013

<http://www.bris.ac.uk/cipold/>

“CCGs must ensure they are commissioning sufficient and sufficiently expert , preventative services for people with learning disabilities regarding their high risk of respiratory illness. This would include expert, proactive postural care support...”

3) CECOPS

4) Safeguarding

5) Assessment findings

Clinical Justification of funding request for equipment

6)What the equipment does

Edward's equipment

| Equipment | How is it used | What is it's benefit |
|-------------------|----------------|----------------------|
| Lateral supports | | |
| Fibre wedges | | |
| Supine stabiliser | | |
| Foot supports | | |
| Mesh | | |
| Topper | | |
| Sheet | | |
| Side lyer | | |
| | | |
| | | |
| | | |
| | | |

Review

Use the following checklist to structure reviews:

- 1) Has postural care been made difficult by any of the following issues?
 - With established body shape changes?
 - With difficulties regarding tone and movement?
 - With any other health issues?
 - With lack of equipment?
 - With the family's / PA's / support workers difficulties?

- 2) How might postural care be improved?
 - How can time spent in destructive postures be decreased?
 - How can time spent in therapeutic postures be increased?
 - How can the lying posture be made less destructive?
 - How can the lying posture be made more comfortable?
 - How can all the sitting postures be improved?
 - How can the standing posture be improved if appropriate?
 - How can transfers be made safe and easier?
 - How can problems with body shape be worked around?
 - How can problems with tone and movement be reduced?