IT TAKES TWO?

Exploring the Manual Handling Myth

In partnership with:

hfh Consulting
Experts in Care

Contents

Executive Summary

The objective of this report is to investigate and question the prescription of double handed care (the use of two carers) with clients who require manual handling. There are significant implications of single versus double-handed care and therefore it is imperative that we fully understand the relevant key drivers that determine which care package is right for the client. Offering double handed care unnecessarily for example has a major cost implication and, within the current context of an increasing number of clients and ever tightening budgets, it is more important than ever that we challenge and fully understand our decision making process.

Our research shows that misconceptions regarding moving and handling, insufficient knowledge of specialist equipment and an often outdated and inflexible approach has led to too much generalisation regarding the perceived need for two carers as opposed to one. This has led to a culture of 'proving' the case for one carer rather than the other way around. Furthermore making the correct choice has major implications not only in terms of cost but also the number of carers required, the impact upon the client's privacy and their general well-being.

Add to this the increasing difficulty of recruiting and retaining carers and the proven long term cost benefits of providing suitable equipment for the client's needs and the argument for thoroughly challenging the perceived need for double-handed care is strong.

In order to conduct a balanced, holistic study of the subject matter we have involved a number of sector experts, all of whom have contributed their different experiences and opinions. We feel that this input from a range of specialists has been extremely beneficial and has given the report a thorough and rounded argument. The case studies included as Appendices I-IV are

examples of independent pieces of project work unrelated to this study but all of them draw the same conclusions about the need to re-evaluate the perceived need for double-handed care.

We hope that the breadth of research contained within this report and the conclusions that we have drawn will serve to challenge the status quo and seriously question our current thought processes ultimately to the benefit of carers, clients and cost.

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Introduction

Manual handling relates to the moving of items either by lifting, lowering, carrying, pushing or pulling (Health and Safety Executive, 2004 hereafter referred to as HSE). Within health and social care settings, manual handling (we prefer the term 'moving and handling') of people is an everyday occurrence to facilitate activities of daily living and it is this occupational task which can be a particular risk factor due to the unpredictable nature of the load (Bracher and Brooks, 2006). Moving and handling is one of the major causes of occupational injuries at work and is responsible for over a third of all workplace injuries which include work-related Musculoskeletal Disorders (MSDs) such as upper and lower limb pain/disorders, joint and repetitive strain injuries. The HSE report that in health and social care services, moving and handling injuries account for 40% of work-related sickness absence. Around 5,000 moving and handling injuries are reported each year in health services and around 2,000 in social care (HSE, 2013).

Moving and handling is a key part of the working day for most employees, from the moving of equipment, laundry, catering, supplies or waste to assisting residents in moving. Over 50% of injuries arise from the moving and handling of people (HSE, 2013).

Work-related moving and handling injuries can have serious implications for both the employer and the person/people who have been injured. Employers may have to bear substantial financial burden through sickness absence, costs of retraining, wages/overtime to cover for the absent person and potentially, compensation payments. The injured person may find that his or her ability to do their job is affected and there may be an impact on their lifestyle. In addition to this, where the 'load' concerned is a client, the impact

may be catastrophic, leading to loss of confidence, personal injury, impact on rehabilitation, occupational performance and psychological well-being.

Within the caring industry, homecare providers regularly assist clients with transfers to facilitate activities of daily living. Following assessment, if an individual is unable to stand and weight bear in order to perform a transfer, it is not uncommon for a mechanical hoist to be provided to assist with the moving and handling procedure. Hoists may be provided by the Local Authority or privately purchased and are suitable for use in most residential or care settings. A variety of manufacturers provide hoists and these may be mobile hoists, stand aids or ceiling track/gantry hoists. All have their place and all need to be prescribed following an individual risk assessment performed by someone who is trained and competent to do so.

Significant costs arise from the provision of care and these costs will obviously increase proportionately as the number of carers increase. Anecdotal evidence suggests that it is now generally accepted practice for care providers to insist that two carers are needed in situations where hoisting is required as a ‘Health and Safety’ issue. Reference to a ‘blanket policy’ is revisited later in this report when described by Mandelstam (2011), who advocates the importance of individual risk assessment as being paramount to meet the individual needs of the client. Blanket policies imposed by care providers could result in increased expenditure when not needed. In the current economic climate with the rising cost of health and social care provision, commissioners of services need to look at every opportunity to ensure their services are as cost-effective as possible.

This report outlines an extensive review of literature to determine any legislative recommendations for the prescription of double-handed care when using a hoist and identifies the possible cause of blanket policy application. Re-assessment of needs and adaptation of reduced care packages are investigated together with a discussion of possible advantages and

disadvantages for the client, the care providers and the commissioners of services.

Methodology and Literature Review

Our initial starting point was to conduct a thorough review of current literature, establishing any legislative recommendations and key assumptions by medico-legal experts regarding the prescription of double-handed care. This exercise led the authors to identify possible causes of a blanket policy application by care agencies - a policy that is costly, logistically challenging and potentially inappropriate.

We then investigated the re-assessment of client's needs, through risk assessments and adaptation of care packages and discussed the possible advantages and disadvantages of single-carer provision for the client, the care providers and the commissioners of services.

An extensive literature review was undertaken using health and social care databases (CINAHL, Medline, AMED and ASSIA) with the following keywords: Occupational Therapy, enablement, equipment provision, single-handed care, manual handling, independence, support packages and assistive technology.

A systematic approach was used when reviewing articles and documents using the PRISMA checklist (Moher et al, 2009). After reading all the articles, the legislation and case law, it was apparent that no current specific reference exists as to the number of carers required when hoisting a client.

In addition to the literature review, the authors of this report contacted the United Kingdom Home Care Association (UKHCA) and the Skills for Care Organisation to investigate the advice they offer to their members with regard to the number of carers required when hoisting clients. The UKHCA advised the authors to follow manufacturers' guidance, hoist instructions and whatever

the risk assessment has identified. They went on to say that the providers Insurance Company should also be consulted.

Skills for Care simply advised the authors to contact the HSE, as they had a great deal of advice and information. Interestingly, they commented that there were some good practice examples advising that two carers were needed when hoisting a client. They did, however acknowledge that this was considered 'good practice' but was not a regulation and they could not cite a reference to support this statement when questioned further.

Key Legislation

There is a range of relevant legislation which provides information and guidance to ensure good practice and safer systems of work. This includes:

- Health and Safety at Work Act (1974)
- Management of Health and Safety at Work Regulations (1999)
- Manual Handling Operations Regulations (1992 revised 1998 and updated 2004)
- Provision and Use of Work Equipment Regulations (1992)
- Lifting Operations and Lifting Operations Regulations (1998)
- Care Standards Act (2000)
- The Human Rights Act (2000)
- Health and Social Care Act (2008)
- Domiciliary Care National Minimum Standards Regulations (2003)
- Workplace (Health, Safety and Welfare) Regulations (1992)
- Care Quality Commission Requirements

- National Health Service Litigation Authority, Risk Management Standards (2012 - 2013)

All the legislation aims to protect both clients and carers when involved in moving and handling activities across a range of health and social care environments. This legal framework provides strategies to enable balanced decision making in the context of the moving and handling of people.

Essentially, this means balancing the safety of paid staff with the assessed needs of clients and the Human Rights of both parties. According to Mandelstam (2011, page 15): “In order to comply with this legislation the requirement of balanced decision making is inevitable. ‘Tunnel vision’, erring toward either only staff safety or only the rights of clients simply will not do.”

Risk Management

Effective risk control is based on risk assessment. The service provider or the employing agency has primary responsibility and a duty of care to ensure the health and safety of their employees, which involves managing any risk associated with their duties.

Regulation 3(1) of the Management of Health and Safety at Work Regulations (MHSWR, 1999), requires employers to make a suitable and sufficient assessment of all the risks to the health and safety of their employees while at work. When this general assessment indicates the possibility of risks to employees from the manual handling of loads, the provisions of Regulation 4 of the Manual Handling Operations Regulations (MHOR, 1992) comes into play. Regulation 4(1)(a) states that the avoidance of manual handling requires employers to ensure that their employees avoid manual handling operations where there is an identified risk of injury.

If handling loads has to be undertaken, mechanical means such as sack trolleys, lift trucks or powered conveyers should be used wherever possible. Where hazardous manual handling cannot be avoided, Regulation 4(1)(b)(i) relating to risk assessment is applicable and employers must make a suitable and sufficient assessment of the risks to the health and safety of their employees when undertaking manual handling activities. The risk assessment should consider the following points often referred to by the acronym TILEE:

- **Task** - Does it involve twisting the trunk or stooping, reaching upwards, pushing or pulling the load or carrying over excessive distances?
- **Individual** - Is the individual able to carry or lift the load?
- **Load** - Is it heavy, bulky, unwieldy and difficult to grasp?
- **Environment** - Does it involve different levels of floors? Is the ground uneven or slippery? Is the lighting poor?
- **Equipment/Other** - What equipment is required or available or what other factors which might influence the manoeuvre?

In a health and social care environment providing care packages to support clients, significant time should be invested in appropriate and effective risk assessment to establish the level of care needed whilst managing any identified health and safety risks. The MHSWR (1999) require the commissioning organisation to inform the service provider of any information with any implications for health and safety identified during the care assessment. This should be done in a timely fashion to inform the preparation of the initial care plan. Without this information the service provider cannot complete a suitable and sufficient risk assessment. This in turn may result in care workers being exposed to unreasonable risk.

The National Health Service Litigation Authority (NHSLA, 2012) has produced risk management standards for NHS organisations providing acute,

community or mental health and learning disability services, and non-NHS providers of NHS care. All of these standards have been designed to address organisational, clinical, and non-clinical or health and safety risks. All members of the NHSLA schemes that provide healthcare must be assessed against the relevant standards. Particular emphasis with regard to risk assessment within moving and handling can be found in Standard 4 criterion 5 (NHSLA, 2012, p. 33).

According to Johnson (2011, p. 18; AS/NZS 4360:2004) the risk management process can be defined as; "The systematic application of management policies, procedures and practices to the tasks of communicating, establishing the context, identifying, analysing, evaluating, treating, monitoring and reviewing risk." The process must be continuous and is reliant on open and effective communication with the service provider. This becomes a priority when commissioners are dealing with multiple care providers to ensure that health and safety issues are managed in a consistent manner.

Fig. 1 below illustrates one possible risk management structure.

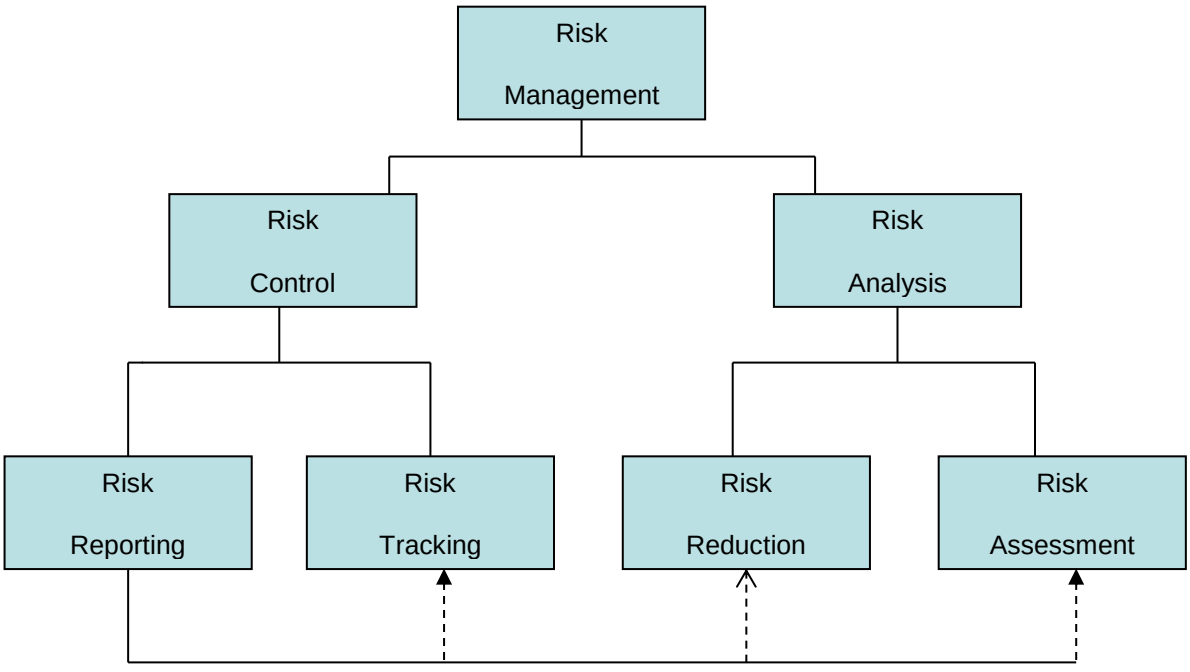

Fig.1. Thomsett (2004) Possible Risk Management Structure (Adapted Johnson 2011)

Moving and Handling Risk Assessment

In any caring situation poor moving and handling practice can lead to discomfort and a lack of dignity for the client as well as injury to the client and/or the carer. In order to minimise these risks when moving and handling people, effective and robust individual risk assessments and care plans are essential.

It is important that care strategies are devised in relation to assisting people with reduced mobility which are acceptable to the person concerned and are also safe for the care and support workers involved. Guidance on manual handling in homecare situations is available in the HSE manual; Handling Home Care (2001).

Advice from HSE (2001) describes the most useful assessments as those which are set out in a simple format, so that it is possible to assimilate quickly what equipment, techniques and number of staff are appropriate for a client's needs. A good plan will cover both daytime and night-time care, focussing on key issues, including:

- Identification of the client's height and weight
- The extent to which the client can support his or her own weight
- Relevant factors such as condition, disability, spasm, fatigue, tendency to fall and apprehension (anxiety associated with being handled)
- Comprehension problems and co-operative behaviour
- Recommended methods of movement for sitting, toileting, bathing, transfers and movement in-bed and details of equipment needed
- The minimum number of staff required
- Other relevant risk factors (HSE, 2001, p.6).

Further advice is given that there should be no blanket solutions routinely applied to all clients (HSE, 2001). Lord Chief Justice Mumby re-enforced the importance of an individual moving and handling assessment, when in referring to the judicial review of the East Sussex case, he stated: "…the assessment must be focussed on the particular circumstances of the individual case. Just as context is everything so the individual assessment is all" (Mandelstam, 2011, p.4).

The court went on to state that blanket no-lifting policies would be highly likely to be unlawful. This is because such policies would pre-judge the outcome of a moving and handling risk assessment (Mandelstam, 2011).

Risk management is an ongoing process with any risk assessment document (generic or individual) being reviewed whenever there is a significant change to any environmental or personal circumstances. This could include a change of living accommodation or a deterioration in the client's condition or the provision of a new piece of furniture or equipment that will impact moving and handling or personal care. The key issue to note is that a risk assessment should not be viewed as a static, immovable document. People change and so does the management of risk within their personal circumstances.

The National Minimum Standards Regulations for Domiciliary Care (2003) outline the criteria by which the National Care Standards Commission determines whether an agency is providing care to the required standard; they arose following the Care Standards Act (2000). Key standards 11 and 12 within the document make reference to health and safety and, in particular, to the specific guidance for an individual risk assessment addressing moving and handling needs:

"12.4 The registered person ensures that a separate moving and handling risk assessment is undertaken by a member of staff who is trained for the

purpose, whenever staff are required to help a user with any manual handling task, as required under the Manual Handling Operations Regulations 1992."

"12.5 A comprehensive plan to manage the risks including manual handling and the risks to clients is drawn up in consultation with the client, their relatives or representatives, included in the client plan and kept in the home of the client for staff to refer to. A copy is also placed on the personal file kept in the agency. The risk management plan is implemented and reviewed annually or more frequently if necessary."

(National Minimum Standards Regulations for Domiciliary Care (2003, p. 24)

Following completion of the risk assessment, the guidance continues with standard 12.8, which may be the underpinning standard often misinterpreted by care providers:

"12.8 Two people fully trained in current safe handling techniques and the equipment to be used are always involved in the provision of care when the need is identified from the manual handling risk assessment."

(National Minimum Standards Regulations for Domiciliary Care (2003, p. 24)

What is important to note within this standard is the wording: "when the need is identified from the manual handling risk assessment*."* This could be the key to the misinterpretation and the subsequent application of blanket policies imposed by care providers who are using the guidance incorrectly.

These key directives from the National Minimum Standards (2003) apply the Care Standards Act (2000) and they exist to monitor and ensure the sound provision of health and safety practices for domiciliary care services with Section 29 stating:

"A contravention or failure to comply with regulations 4 to 6 and 11 to 25 shall be an offence under the Care Standards Act (2000)."

Andrew Lupton is the Manual Handling Advisor at National Star College which accommodates and educates in the region of 150 young adults with severe disabilities. On interview regarding risk assessment he commented:

*"*All moving and handling facilitation must be negotiated with the client and is subject to risk assessment findings. If a thorough risk assessment is completed and all variables are considered and managed then there is no necessity to use two staff or carers as standard procedure*."*

He went on to say that*: "*Risk cannot be eliminated and we have no duty to eliminate it." He also posed the following questions: *"*Has the assessment considered the choice, dignity and wants of the client? Has the assessment considered the capabilities of all carers?*"*

A copy of the Manual Handling Care Plans used at National Star College is given in Appendix IV as an excellent example of how risk can be well managed and documented in a simple and reliable form for clients and carers.

Equipment Provision

With the recent changes towards personalisation, self-directed support and personal budgets (Social Care for Excellence, 2011), appropriate equipment solutions can improve productivity, enhance comfort, reduce costs and increase client independence (Sturman-Floyd, 2011). Working in partnership to adapt a disabled person's environment in order that they can remain in his or her own home can reduce the need for complex care packages and daily visits. Adaptations that remove or reduce the need for daily visits pay for themselves in a time span ranging from a few months to three years and then produce annual savings. A review of such cases, (Heywood and Turner, 2007), identified that these savings could range from £1,200 to £29,000 per year per client. In addition to the reduction in costs for home care, the review

goes on to say that home modifications can help to defer entry into residential care. The cost of residential care ranges from £700 to £1,200 per week, which is over £400,000 over a 10 year period. One year's delay in admission to residential care will save £26,000 per person, less the cost of the adaptation with an average estimated cost of £6,000.

Equipment solutions may include housing adaptations, such as stair lifts, level access showers and overhead ceiling track hoists. With moving and handling issues in mind these adaptations can reduce the need for some daily visits therefore reducing the costs of providing home care whilst maintaining client and carer safety and dignity.

It has been estimated that just one year's delay in providing an environmental adaptation for an older person costs up to £4,000 in extra homecare costs (Audit Commission for Local Authorities, 1998). This lack of timely provision of equipment and adaptations was identified (Heywood and Turner, 2007) as resulting in costly physical health problems for disabled people. This could include an increased risk of falling, contractures, pressure ulcers and infections. Interventions of adaptation and equipment are highly effective in preventing these physical health problems whilst also improving the physical and mental health of the carers by improving the environment and reducing stress levels (Heywood and Turner, 2007).

Glendinning et al. (2006) advocate the importance of maintaining a client-centred approach when prescribing equipment for a client in his or her own home. The client must be acknowledged as the centre point of any healthcare professional's assessment of necessary equipment. Regular re-assessment and problem solving of manual handling situations can identify where a reduction in care is possible, therefore maintaining an individual's level of function whilst minimising additional care and associated costs (Mickel, 2010).

The Audit Commission has stressed the urgency and value of investment in equipment and adaptation to prevent unnecessary and wasteful health costs (Audit Commission, 2002). This is supported by Mann et al. (1999), Allen et al. (2001), Hoenig et al. (2003), and Goodacre et al. (2008) all of whom have written that some adaptations can reduce the need for care visits or reduce the number of carers having to attend. Indeed, equipment services have the potential to make or break the quality of life for many older or disabled people (Audit Commission, 2002).

According to a study by the College of Occupational Therapists, exploring the relationship between provision of equipment and reduction in care package costs and residential care, it was found that over an 8 week period, cost savings to care packages through the provision of equipment were over £60,000 (Hill, 2007). Heywood and Turner (2007) cite the example of two people who became wheelchair users following accidents and were able, following the adaptation of suitable properties, to leave residential care that had been costing the local authority a total of £72,800 per year. Similar cases occurring once or twice in every Housing Authority across England could produce savings of £10 million each year, growing incrementally.

Essex County Council established the Double-handed Care Project in July 2011 (see Appendix II). Its aim was to provide clients with the tools to remain as independent as possible, as well as choice and control in the way their care is delivered (Robinson and Arnold, 2012). When reviewing clients care packages, this study identified that reviewers required essential key skills of assessment, activity analysis and risk assessment together with underpinning specialist knowledge of manual handling techniques and equipment.

Utilisation of these core occupational therapy skills was key to the success in a project undertaken by Somerset County Council to seek to reduce double handling in the community by providing additional moving and handling equipment (see Appendix I). Smith and Orchard (2009) identify an “invest to

save" potential and report that 37% of clients who were re-assessed are now assisted by one carer (instead of two), citing the additional benefits of maintenance of dignity and comfort together with the increased flexibility derived from the provision of only one carer.

The average initial investment of equipment within this project was £763 per client. The breakeven point was estimated at 16 weeks, potentially reducing Somerset County Council costs by £300,000 per annum (See Fig. 2).

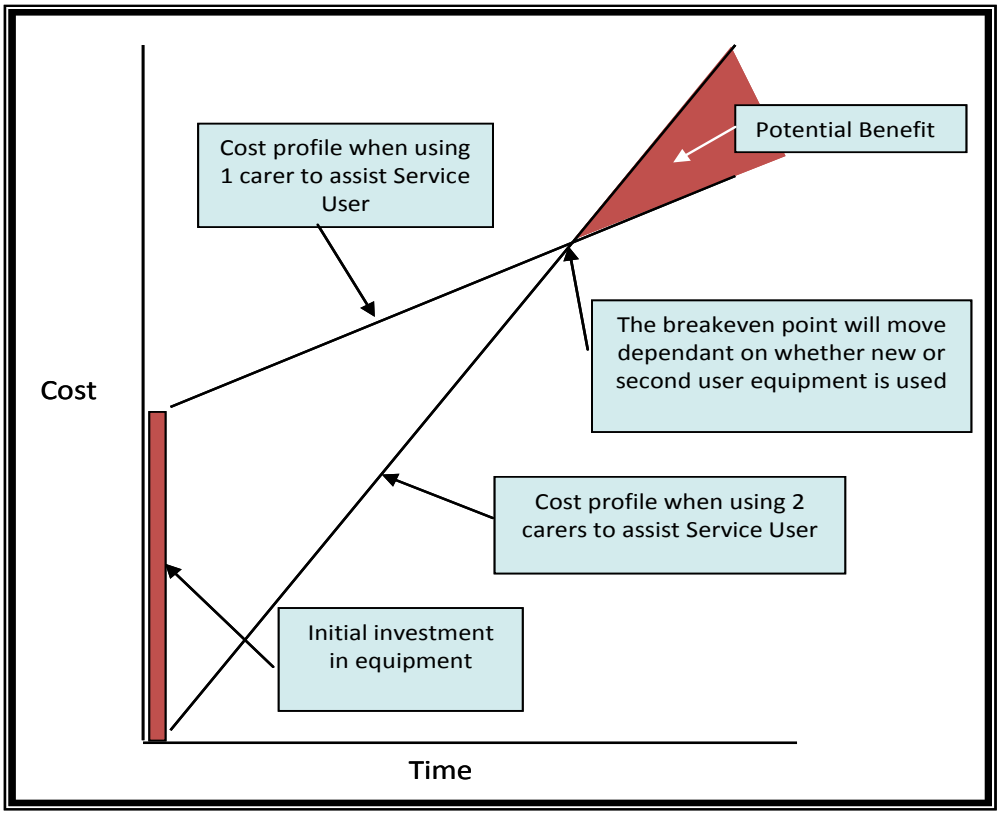

Fig. 2 Smith and Orchard, 2009

Beds are key items of equipment within hospital and community life, yet the importance of providing the right bed for the client and the carer is sometimes overlooked. An electric profiling bed does help overcome many of the difficulties that carers associate with the positioning and mobilisation of clients. Well-designed electric profiling beds offer many advantages, including reduced risk of injury to staff and clients, increased patient independence,

faster recovery from illness and improved cost-effectiveness in providing care (Corr, 2005).

Electric profiling beds also have a number of benefits for clients associated with the ability for them to alter the bed profile. Earlier upright positioning and mobilisation of a client can help reduce the risk of pressure ulcer development and allow the client more control, promoting a client-centred approach whilst also reducing other potential costly complications of immobility. This in turn can have a beneficial effect on major body systems, including:

- Improved lung function
- Reduced cardiac workload and improved cardiac output
- Improved urinary drainage and reduced infection risk
- Improved gut mobility and nutrient absorption
- Reduced muscle wastage, while maintaining joint flexibility

(Bro Morgannwg NHS Trust and the Health and Safety Executive, 2005)

A study by Bro Morgannwg NHS Trust and the Health and Safety Executive, in 2005 demonstrated that there was a 62% reduction in the number of manual handling operations carried out per patient through the provision of electric profiling beds. Staff at Neath Port Talbot Hospital conducted on average only nine manual handling operations per patient, compared to 21 in The Princess of Wales Hospital where patients did not have electric profiling beds. The study used the REBA (rapid entire body assessment) ergonomics tool (McAtamney and Hignett, 1995) to indicate the level of risk of musculoskeletal injury posed by the selected manual handling operations.

The reduction in nursing time taken up by manual handling operations with the implementation of profiling beds was calculated at nearly 120 hours over the 7 day study period. Annually, the theoretical time saving was calculated to be 1,619 nurse days (HSE 2011).

As well as a four section profiling bed the introduction of an in-bed management system will enable clients to be moved safely by a reduced number of care staff. Utilising an effective system on the bed enables handlers to reposition their clients with the minimum of disruption (Sturman-Floyd, 2011). Implementing the use of approved and flexible 'in-bed' positioning systems can also provide the following benefits for organisations:

1. There is strong evidence that the systems can reduce and improve the incidence of pressure ulcers.
2. Organisations are under pressure to reduce staffing costs and the use of in-bed systems for some clients can reduce the number of carers required for manual handling tasks.
3. Clients also benefited from the systems because shearing and friction was reduced and they could be repositioned by their family members in between carer visits.
4. Carers reported a reduction in physical exertion (using the Borg Scale of perceived exertion) when using the in-bed systems and found the systems useful for clients who were bariatric, frail, or had tissue viability problems and for clients who were expressing physically challenging behaviour.

According to Sturman-Floyd (2011, p.11), "estimated cost savings by reducing visits from two carers to one carer (by using an in-bed management system) for twelve clients is £270,990.72 - £148,686.72 = £122,304.00 representing a reduction in staff costs of 45%."

If a person is no longer able to stand to transfer safely, they will require a hoist to transfer them from one place to another. A mobile (or portable) hoist is often the first type of hoist to go into the person's home, as it can be issued easily and can provide an immediate solution.

Advantages of a mobile hoist:

- Lower cost
- Speed of delivery
- Ability to move from room to room if required
- Potential to transport between locations

Disadvantages of a mobile hoist:

- It can require two carers to position and manoeuvre the client in the hoist.
- It can be difficult to manoeuvre within the home, particularly on carpets
- The environment may make it difficult to move the hoist around, such as narrow doorways, tight turns and small or cluttered rooms.
- The battery requires charging between uses.
- It can be difficult to store.

The alternative to a mobile hoist is the provision of a ceiling track hoist that is fitted onto the ceiling and consists of a track with a motor and hanger. This is a permanent fixture for as long as the person requires it and can be removed when no longer in use. If the ceiling is not suitable, it can be fitted to the walls, or a gantry hoist (free standing) can be used. Often a hoist is fitted over the person's bed, and then the client can be hoisted on to a mobile commode or wheelchair, which then facilitates movement from one room to another. If the client has an armchair with wheels, he or she can be transferred into this under the hoist.

If the client has a static armchair in the living room, or a fixed shower seat in the bathroom, another piece of ceiling track may be required. It is not uncommon for tracking to be fitted to transport the client from bed to bathroom

in one simple movement allowing access to toilet and showering/bathing facilities, therefore reducing the number of transfers required.

Advantages of a ceiling track hoist:

- It is out of the way as it is fixed to the ceiling, so it does not have such an impact on the environment
- It requires far less physically demanding manoeuvring
- In most circumstances it can be operated by one carer and in some instances by the client themselves (a risk assessment would need to determine if this is safe)
- The majority of models will always be charged and ready to use (where the boom does not need removing to charge)
- It is invariably much easier and quicker to use than a mobile hoist

Disadvantages of a ceiling track hoist:

- Higher cost
- It does have to be a fixed piece of equipment while required
- It will only allow for movement within one environment and cannot be transported.
- Not all properties are suitable for the use of a ceiling track hoist and major alterations or relocation may be required.

Often, if care is being provided by the local authority and a ceiling track hoist would reduce the number of carers required, this equipment would be strongly recommended as it reduces costs of care over the long term (Cant, 2011).

In order to use the hoist a sling is needed. Recent research by Mellson and Richardson (2012) reported that people with restricted mobility who use a hoist to transfer are at high risk of gluteal pressure ulcers. Current guidelines

recommend the removal of hoist slings between transfers to reduce this risk but evidence supporting this is lacking and anecdotal evidence suggests that people are often left sitting on hoist slings for the ease of the carers, due to time restraints or at the request of the clients themselves. There is no objective evidence on the effects of sling materials on gluteal pressures to support or refute these recommendations.

Following investigation of the impact of three commonly used hoist sling fabrics on the gluteal interface pressures in a healthy population, findings suggest that being left seated on slings alone may not increase pressure ulcer risk. In fact, if a sling has to be left in situ, spacer fabric is more likely to minimise risk of pressure ulcer development than either 'slip-fit' or polyester fabrics. This research is currently being repeated with a mobility disadvantaged population with early findings supporting the results from the published study (Melson and Richardson, The American Journal of Safer Patient Handling and Movement Volume 2, Number 3, 2012).

This contradicts current advice (Thomson and Jevon, 2009; Cooper and Grey, 2005) to *always* remove a sling following transfers and may go some way to providing an evidence base to assist clinicians with their clinical decision making when prescribing slings which may need to remain in situ. Again, this practice could impact on the number of carers required if deemed appropriate following an individual risk assessment.

With regard to equipment provision in relation to moving and handling, Andrew Lupton states: "There is a raft of equipment available today that could be explored and employed. This equipment could allow the client's care needs to be met with only one carer at no more risk than employing two carers."

PRISM Medical is one of the UK's largest medical equipment suppliers and like other suppliers of disability equipment they are involved in the research and development of equipment to enable the safe and efficient care of clients

with manual handling needs in the community. The number of items on the market specifically designed with one carer in mind has increased dramatically over the past few years and examples of some of these items and the ethos behind their development are given below. It may be of interest to note that many of the single carer items have originally hailed from Scandinavia.

Gantry Hoists

Gantry Hoists were designed in response to the need for a portable hoist system which was able to support a more effective transfer system than the traditional mobile lift in circumstances where a ceiling track hoist could not be fitted. They provide ease of use for the single carer, as the transfer of the client takes place without the friction of castors on the floor. They embrace a lightweight and economical design and the Free Stand Systems come ready to use and are easily assembled by one person in minutes. Free standing gantry systems do not require installation, mounting or pressure fit, making them ideal for rental situations or where ceiling lift and permanent track installations are not possible or are too difficult. They are easily transportable, allowing clients to use them in holiday accommodation. They can provide a cost-effective solution for both temporary and permanent applications.

In-Bed Repositioning Systems

In-bed systems such as the Biotechsis or Wendylett systems were designed to help prevent back injuries to carers while repositioning patients in bed. It is accepted that it is essential for carers to use safe patient moving and handling techniques when moving and repositioning a client, but that they also should ensure that the patient's body stays well supported and in alignment to prevent injury to the client. With the use of bed repositioning devices, care givers are provided with a medium which reduces the amount of friction that occurs between the bed surface and the patient throughout the manoeuvre.

With the reduction of friction, care givers are required to use less strength to reposition the client, resulting in less strain and injury to the care giver's body and an increase in the overall safety and comfort of the client. The design of in-bed systems means that they do not need to be removed from under the client again reducing friction and shearing forces which may be applied if using slide sheets or hoists.

All-Day or In-Situ Hoist Slings

These slings were designed in response to the fact that slings were increasingly being left under clients for prolonged periods of time causing discomfort and potentially causing pressure wounds. Hoist slings are left in situ for a variety of reasons - it may be quicker for the carer the next time the client is to be hoisted (no fitting of the sling); it might be the client's request (he or she may wish to reduce the amount they have to be handled) or invariably, it could be due to a lack of staff available to assist in the application of slings to clients without the ability to assist in the process. In-situ slings are constructed from a fabric which has four-way stretch; thus, as a client is being hoisted down onto a chair, the fabric stretches and increases the surface area in contact with the seat. It is accepted that the larger the surface area the lower the surface pressure and this has been proven to reduce the risk of developing pressure wounds as well as reducing shearing forces applied in changing slings.

The Client at the Centre of the Assessment

The HSE (2011) advocates that when providing care, services should meet the individual's expressed wishes and needs for independence and autonomy, whilst having due regard to the safety of all involved in their care. Reduction in the number of carers - whilst facilitating independence could be

seen to sit within the remit of a re-ablement service, however, this is often time limited with specific recorded outcomes. Re-ablement is often described as an “approach” or a “philosophy” within homecare or NHS services which aims to encourage clients to maintain or develop their level of independence.

Heywood and Turner (2007) identify significant improvements in the quality of life for clients and their carers in their report “*Better Outcomes, Lower Costs*”. Specifically, the provision of adaptations improve the quality of life for around 90% of recipients contributing to “reduced pain, reduced anxiety and fear and being less dependent on others (with consequently less strained relationships).” (Heywood and Turner, 2007, p. 85).

Some evidence can be found to support the experiences of some older people who receive homecare services and feel they have little sense of control (Aronson, 2002). Adaptations or changes in provision of services to restore or promote autonomy offer a better quality of life whilst engaging the client in their service provision. These findings are similar to those discovered by Glendinning et al, (2006) when interviewing older people to confirm the benefits of re-ablement services. They reported significant improvements in clients confidence and morale as well as their physical functioning. These improvements were attributed to the fact that these services were delivered in ways that maximised users’ choices and control.

In addition to this, carers often report deterioration in their own health when caring for their loved ones when services or adaptations are limited. The combination of adaptations and equipment with some formal support can reduce burdens on carers. This in turn can help to reduce the increased strain on relationships, providing the support necessary for them to continue in their caring role (Heywood and Turner, 2007). Caring for a disabled person without the necessary equipment can lead to physical injury of the carer and any physical or mental deterioration may lead to the breakdown of informal care, increasing the cost to health and social care significantly. Boyd and Stevens,

(2009) describe the quality of life improvements resulting from provision of equipment due to the equipment reducing the number of physical tasks required or acting as an additional carer.

Reduction in the number of carers to support people with their daily living activities introduces opportunities for more flexibility with the provision of their care packages. Rather than co-ordinating working shifts for two carers to attend, resulting in a fixed time slot of availability, working diaries may become more flexible with the client having more control over what time his or her appointment is arranged. For example, a fixed time for a 'back to bed service' needing two carers may have to be scheduled earlier where this is the only time two carers can be co-ordinated. However, with the introduction of a suitable piece of equipment, following a risk assessment, there may only be need for one carer, allowing a more acceptable and client-centred 'back to bed service' at a later time. Alternatively, provision of suitable equipment may enable an informal carer (i.e, one of the client's family members) to assist with transfers and be the second carer. It is important to note that this should only be considered when the family member is able and willing to assist, and should not be seen as a substitute for appropriate provision by a care agency.

People's homes now dominate the landscape of long-term care, as increasing numbers of the chronically ill and disabled are cared for outside institutional sites. While care in institutions is provided in the relatively standardised spaces of hospitals and nursing/residential care homes designed around professional care practices and equipment needs, there is invariably no such common characteristics in individual's home in which long-term care is provided.

Care is provided in spaces designed for other purposes, of varying sizes and conditions, and where there are strong associations with the notions of privacy and family life (Dyack et al, 2005). An additional factor to be considered is how the client may feel about the presence of two carers impacting on their

privacy and family life several times a day. The use of two carers also makes it more likely that the client may not see the same members of staff every time.

Whilst availability of staff should never be a reason for reducing the number of carers performing manual handling procedures, it is accepted (and evidenced in the provision of care by the HFH Group), that providing double-up care in the community is fraught with difficulty in terms of the timings of calls and availability of staff.

It should also be noted that according to official estimates (HM Government, 2008, 2009) in the next 20 years the number of people over 85 in England will double and the number over 100 will quadruple. In 20 years, there could be a funding gap of at least £6 billion for the provision of community care (this figure is calculated on the costs of current service provision which has been criticised for being of insufficient quality and flexibility). Thus, the numbers of trained carers will be an even more serious issue than it is currently.

With regard to the provision of complex care in the community, we asked some UK providers for details of the current numbers of clients with manual handling needs and how many of those required double-up care. We wanted to know who stipulated the level of care, how risk assessments were conducted and whether the availability of equipment that can be used by a single carer was imperative. We also asked them what variables to consider when deciding on levels of staffing and when clients were deemed to need two carers.

We spoke to The Complete Care Group, who provide care to a number of catastrophically injured individuals and they reported the following in June 2013: out of 154 active clients, 127 (82.5%) currently had need of regular manual handling. Out of these 127 clients, 71 (46.1%) required double-up care for these tasks. They went on to explain that almost 50% of those 71

clients required two carers due to physical issues such as a need for regular repositioning or due to their inability to assist or comply with transfers. Thirty two percent needed two carers for clinical reasons such as the presence of a ventilator, 8% had unpredictable physical symptoms such as spasms or seizures and some 4% were bariatric. None of these clients required two carers for manual handling due to the unavailability of suitable equipment or lack of staff training.

Within HFH Homecare, out of 510 active clients who comprise mainly elderly clients, some 30 require double-up care for manual handling. All of these clients have two carers at the request of the commissioning body and as a result of its risk assessment procedures and clinical policies.

It is undeniable that many catastrophically injured and severely disabled individuals live fulfilling lives in the community with just one carer available to assist them with their personal and mobility needs. This is evidenced by the published testimonials from clients of The Complete Care Group as an example. The authors of this report, as nurses and occupational therapists have treated many clients with severe brain injury, high level spinal cord injury, progressive neurological conditions and profound orthopaedic disability over the past 20 years and are aware of how a significant number of them often prefer to have the minimal amount of intrusion by care staff in their homes.

For many young, spinally injured individuals, the model of live-in care suits them, as the carer is able to be flexible in their hours and are able to attend all work and leisure pursuits outside the home with them. The provision of the latest equipment for use by a single carer and suitable accommodation is of course imperative in these instances.

Many individuals with progressive conditions such as Multiple Sclerosis wish to remain as independent as possible for as long as possible and will often self-hoist or participate fully in their own manual handling for as long as they

are able to. The provision of tracking hoists, all-day slings, powered wheelchairs and appropriate bathroom equipment is also paramount in these instances.

Training of the Carer

Generic training in ‘Moving and Handling’ or ‘Manual Handling’ is currently a mandatory element of induction for all new care staff employed by Statutory Services, and an annual update is recommended to retain competencies.

Kate Lovett, Director of EDGE Services, one of the UK’s leading providers of training and consultancy on the handling of people, was asked to comment on the provision of appropriate manual handling training and the supervision of care staff involved in these tasks and we have précised her thoughts in this regard.

The term ‘training’ has been defined as “the acquisition of knowledge and competencies as a result of teaching vocational or practical skills” (Reece and Walker, 2007). The term ‘supervision’ has been defined as “being overseen or regulated to ensure high quality practice is undertaken and maintained” (Minton, 2005).

Much of the key legislation previously detailed in this paper as well guidelines from professional bodies such as the National Back Exchange, The Royal College of Nursing, The Chartered Society of Physiotherapy and The College of Occupational Therapists emphasise the need for regular effective training and workplace supervision to ensure that people handling activities are undertaken as safely as possible at all times, and for all concerned.

People handling training can be delivered in a classroom setting or in the workplace ‘on the job’ style. A training needs analysis should identify the best format for an organisation. There is strong evidence to suggest, however, that

the most effective training strategies are those that are *work specific* or in the case of one-to-one carers in the home, *client specific*. Training should be tailored to the learner's needs as we all learn differently. It should also be relevant to the handling tasks that the learner undertakes utilising the equipment that they use in the workplace. In short, training needs to be relevant.

However, effective training always needs to work alongside appropriate levels of workplace supervision. This will ensure that staff can be identified as competent and compliant to instruction and that this is being maintained throughout their undertaking of people handling activities in the workplace. Any training programme that does not also include workplace supervision will be vulnerable to criticism.

Work specific training in the handling of people should include a thorough assessment of the client's needs, the environment in which handling tasks occur, the equipment in use, the carer's abilities and the handling activities being undertaken. If the optimum circumstances are present in the home setting it is not uncommon for one trained carer to be utilised for these handling tasks. It is imperative in these instances that the carers involved are trained and appropriately supervised in all aspects of safe handling in the activities they will be undertaking.

Finally, in terms of the level of training provided, much has been written about the duration, frequency and number of delegates per trainer in the professional press and professional texts. In my experience, people handling training is commonly conducted from between 3 to 12 hours (depending on whether it is an induction event or a refresher/update event) often annually, and with between six to ten delegates per trainer. Once again the training needs analysis will help determine what works best within any given organisation/setting. The current cost of providing this type of high quality, bespoke training programme ranges between £75 and £150 per hour.

Conclusions

The cost of providing care to disabled individuals in the community is rising. Government figures suggest that provision is already lacking and that with our ageing population and the numbers of individuals now surviving catastrophic injury, appropriate provision will only decline further. Care planning and good risk assessment is therefore imperative.

Questions have arisen both within statutory services and private care provision since 2008 as to when there is an identified need for two care staff to undertake manual handling procedures. The moving and handling of people is governed by a variety of legislation but evidence suggests that many NHS trusts and private care agencies have adopted 'blanket policies' in this regard in the past, always erring on the side of caution and providing double up care when a hoist is needed regardless of carer capability, adaptation of the environment, equipment provision or client choice.

The importance of good risk assessment has been highlighted in recent years in an attempt to reduce the number of work related injuries to carers involved in the handling of disabled individuals. The development of moving and handling equipment which is easier and safer to use has been imperative and the market now offers many items which require only one carer to use. Statutory service reviews conducted over the past five years have evidenced how care costs have been dramatically reduced with the right equipment provision and well trained care staff. The number of injuries to staff has not risen. The private care sector is also able to demonstrate good practice in this regard, although over provision of care is still a significant problem.

This study has provided an extensive review of the current available manual handling legislation and considered local policy. It has sought to draw together the evidence within the statutory costing reviews across the UK and has

explored some of the equipment available and the evidence of its benefit to the client and carer in terms of cost, comfort, reduced risk and convenience.

Qualitative data has been difficult to access with regard to the clients themselves but the authors of this document have extensive clinical experience in risk assessment, equipment provision and hands-on care for the types of disabled individuals we have considered. Real life evidence has proven that thousands of these individuals are able to manage well with lone carers and prefer the flexibility this provides. Many clients wish to participate in their care and enjoy the one-to-one relationship that single carer packages afford them.

The findings of our research are consistent and all point toward current practice often being out of step with what is actually required by the client. A policy that encourages unnecessary caution and over provision in the workplace has huge cost implications against a backdrop of persistent pressure to reduce the burden of cost of social care. A dwindling carer workforce only serves to exacerbate this situation.

Appendix I

Case Study – Somerset County Council

Reducing 'Double Care' in the Community

Background

Somerset County Council, in common with other local authorities, provided double handed care for clients in the community. They embarked on a project to 'reduce double care in the community' with detailed implementation activities agreed by a range of stakeholders with block care providers and other interested groups included in the consultation.

The project took place between September 2011 and February 2012. Benefits such as administration and an improved skill base were highlighted to the care service, with joint training with Occupational Therapists (OTs) and independent moving and handling specialists taking place.

Considerations

- Maintaining a person centred approach
- Moving and handling may not be the only reason for a double handed package of care
- Tailoring to the needs of the client – changes to the package of care
- Supported reduction of care
- Acknowledging the level of skill, experience and training required by the carer
- Communication

Benefits to the Client

- Improved dignity
- Less stressful and invasive, physically and socially

- Improved flexibility in care routine
- Empowering

Challenges and Learning Points

- Implementation has been affected by OT staff shortages
- Time must be allowed for care providers to disseminate the training to their care workers
- Training packs for care providers
- Employing an OT to concentrate on existing packages appropriate for reduction
- Promoting double handling practice

Progress since Implementation

- Of the clients assessed, 25% have been converted with another 31% identified as being potentially suitable for conversion.
- The forecasted savings for the next financial year is £270k.
- The practice is now embedded in standard care with single carer provision commencing on discharge rather than 'reducing later'.

Appendix II

Case Study – Essex County Council

Background

Essex County Council established the double handed care project in July 2011, which formed part of an overarching 'Ensuring Independence' programme. The aims were to provide clients with the tools to remain as independent as possible, for as long as possible, as well as ensuring they have choice and control in the way care is delivered.

- Historically, double handed care was provided
- In many cases double handed care is not required when the right equipment is provided and the staff suitably trained
- OTs were identified to review and provide a new approach as they are able to provide thorough and comprehensive assessments of function

The Re-ablement Review

There were eight OTs in total involved in the project working across Essex. They reviewed clients over the age of 65 in their homes and observed a care visit - this enabled the OTs to observe the client's level of function and the amount of input from carers for any given task.

Why Occupational Therapists?

OTs already have in their 'tool boxes' a variety of assessment skills. Therefore a better understanding of the level of support required to meet clients' outcomes was gained. Skills used included; functional reviewing /assessment, specialist knowledge of moving and handing, ability to analyse tasks / activities, negotiation skills, risk management skills and specialist knowledge of the relevant equipment.

Specialist knowledge of the equipment was essential, as it enabled the team to determine other solutions that may be more suitable for each client. The OTs needed an awareness of the range of options available to enable clients to gain greater independence. However, as the project progressed, they found that less specialist equipment than first anticipated was required.

Benefit and Impacts

- Clients provided with a more tailor-made, personalised level of support
- Independence maximised
- The sustainability of support provision addressed

Implications

Not only were packages amended to reflect clients' actual needs, but a huge financial saving was made. Around 500 cases were reviewed in 6 months, of which 44% had packages reduced, saving 3,618 domiciliary support hours. This saving enabled the authority to continue to provide support where it was most needed.

Caroline Robinson and Zoe Arnold, senior practitioner OTs at Essex County Council, concluded:

*"*We hope that by bringing this new way of working to the attention of fellow OTs, it could inspire those who work with double handed care to look at reviews in a very different way*."* (Double Handed Care: A leading Role for OT, OT News 2012 (20) p.28)

Appendix III

Case Study – Havering Borough Council

Double to Single Handed Care

Background

Havering Borough Council established the double handed care project between January and February 2012. An assessment by a manual handling specialist of all clients who are hoisted and in receipt of double handed care was established to ascertain whether their care could be reduced to single handed care.

Methodology

The following is a summary of the methodology employed during the project phase:

- Review of every care package for clients who received double handed care
- Manual handling training provided to all care provider agencies by an external consultant
- Risk assessments conducted by the Council's specialist OT and a representative from provider agency
- Monthly meetings with provider agencies and review and development of performance information
- Development of a process map detailing the whole process pathway
- Employment of a specialist manual handling OT during the life of the project
- Delivery of training to provider agencies on safe delivery of single handed care
- Installation of community equipment solutions to support the safe delivery of single handed care

Findings

- Of the 142 clients assessed, 59 people (42%) were assessed as being suitable for a reduction, 77 (54%) were deemed unsuitable and an increase in care package was recommended for six clients.
- Single handed care can be successfully delivered as a safe form of practice for clients who are hoisted and in receipt of double handed care.
- Where appropriate, with the right type of equipment, clients can be successfully hoisted with single handed care.
- Most people who need hoisting require some type of equipment. Future mainstreaming of single handed care will require an investment in the existing community equipment budget.
- Clients have reported that service delivery is more personalised, flexible and responsive to their needs.

Savings

The projected savings for the next five years are shown in the table below.

	Cost avoidance (from new cases)	**Cost of equipment purchase and maintenance**	**Estimated total annual savings**	**Cumulative annual savings From 2012/13**
2012/13	£108,030	£28,800	£79,220	**£79,220**
2012 to 2014	£108,030	£30,600	£77,430	**£156,650**
2012 to 2015	£108,030	£32,400	£75,630	**£232,280**
2012 to 2016	£108,030	£34,200	£73,830	**£306,110**
2012 to 2017	£108,030	£37,800	£70,230	**£376,340**

Appendix IV

An Example of Single Carer Handling

Author: Andy Lupton, Manual Handling Advisor,
National Star College, Cheltenham

I have experience of circumstances where in which with careful planning, training and assessment, one can use such specialised equipment to allow a client to have their needs met just as safely and effectively by one carer as by two.

Student X is a powered wheelchair user who has Cerebral Palsy. X has no weight bearing ability and no independent balance in sitting. X is reliant upon having all personal care needs met and facilitated on their bed by carers. X has no independent mobility or movement in their lower limbs and is hoisted for all transfers. X requires turning and repositioning regularly during personal care facilitation and during the night.

X communicates verbally, has full cognitive understanding and can self-direct their needs to carers. X therefore has a certain amount of autonomy in their care but further equipment and assessment will give X more empowerment.

Sling insertion and retrieval is difficult with X as X has fitted seating in their wheelchair. Sling insertion by one carer would not allow for safe working posture or recognised handling practice; therefore, an all-day sling can be introduced.

This does not have an impact on X as X has to be hoisted to the bed for all care needs to be met. The introduction of an all-day sling in conjunction with an overhead tracking hoist allows one carer to hoist X from wheelchair to bed

and vice versa thus avoiding the need to insert a sling each time X requires transferring, and consequently reducing the risks.

An overhead hoist reduces the need to push or pull a mobile hoist and with the mast of a mobile hoist out of the way, the risk to the carer is reduced further still.

Employment of a bed system with integral slide sheets will allow a carer (with correct and sufficient training) to move and position X on the bed on his or her own. Further employment of a turning aid that attaches to the overhead hoist will allow one carer to turn X from supine to side lying safely and effectively.

X can comfortably remain in side-lying on the bed, allowing the carer to apply the bed rails and move to the opposite side of the bed to facilitate any personal care needs, such as washing, dressing or sling insertion.

This practice can for some clients be more comfortable, dignified and less intrusive than having a second carer holding them in side-lying and adopting statically held working postures that will undoubtedly lead to back discomfort or injury.

I therefore conclude that with good training, thorough risk assessment, and employment of specific equipment and planning, a client could be safely and effectively supported with one carer in situations where previously it may have been presumed that two carers were necessary to control the risks involved.

However, I cannot stress enough the importance of considering the individual capabilities of the carers, and a generic approach is not sufficient here. All of these decisions must be made through risk assessment, negotiation and consideration of all variables. Your findings will inform your decisions.

Note: I use the term carer in reference to someone in an employed status who is delivering care to clients or residents. A carer may also be viewed here as a support worker or enabler.

Manual Handling Plan

NSC
National Star College

Student			Communication	
Diagnosis			Cooperation	

	Bath/shower	Toileting	Bedtime/transfers	Comfort/repositioning	Pool change handling
Staff req'd for transfers					
Staff req'd for facilitating					
Equipment					
Method					

Sling 1	
Shoulder	
Middle	
Leg	
Other	
Additional Sling	
Shoulder	
Middle	
Leg	
Other	

Special considerations	Handling constraints/ additional information

Travel

◉ Transfers
○ Remains in chair

Can bridge in chair

○ Yes ○ No

Last review/assessment		Date	
Reviewed by		Date	

Accommodation day

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