SECTION 4

Techniques for moving and handling people

Contents

4.1 Overview of moving and handling techniques

This section covers a number of techniques commonly used in moving and handling people. These techniques are applicable to most settings where people are moved. A key aim has been to present a generic set of moving and handling techniques that are consistent with best practice. Most of the techniques in this section have photo sequences illustrating the specific moves.

There are several systems for categorising the common types of client movement. In this section, we use four main groups of transfers: (a) sitting and standing, (b) moving in bed, (c) lateral transfers between surfaces at similar heights and (d) using hoists.

Of all the topics covered in moving and handling, views about what are considered safe and unsafe techniques generate the most comment and debate. Numerous techniques are used for moving and handling people. The techniques included in this section are consistent with current accepted practices internationally and are based on research literature and advice from experienced moving and handling educators in New Zealand. The list covered is not complete. It presents examples to illustrate some aspects of best practice in moving and handling.

We have used the generic term 'clients' throughout this section to refer to people being moved, to distinguish them from the carers who move people. Although many healthcare facilities use the term 'patients', these Guidelines also cover residential and community-based care.

All the techniques outlined require that: (a) carers receive appropriate training, (b) risk assessments are conducted, and (c) suitable equipment is available. We do not expect that carers will be able to learn the techniques solely from these Guidelines. Training by a qualified educator is essential before using the techniques.

Protocols and specific procedures for dealing with aggressive, combative and uncooperative clients require additional consideration. Section 3 Risk assessment has more information about assessing uncooperative and aggressive clients.

4.2 Preparations for moving and handling people

There are several types of preparation to take into account before moving clients. In this section, preparations for caregivers are covered first. This is followed by: assessment of client mobility, risk assessment, preparation for a specific transfer, communication among carers during the transfer, communication with clients, cultural and religious considerations and the post-transfer assessment.

Preparations for caregivers

Pre-manoeuvre

- Make sure clothing and footwear are appropriate for the task. Clothes should allow free movement and shoes should be non-slip, supportive and stable
- Choose a lead carer: If more than one carer is involved when moving or handling a client, identify who should be the lead carer during the move by giving instructions (e.g. 'ready, steady, move'). The lead carer checks the client profile and coordinates the move
- If there is to be a change of position for the client, decide what it is before approaching them.

General practice

- Know your limits: Know your own capabilities and do not exceed them. Tell your manager if you need training in the technique to be used
- Seek advice: Talk to your manager or the moving and handling adviser if you need advice on the techniques and equipment you should be using.

Risk assessment

Most of the techniques described in this section apply to clients who cannot move themselves, or who need some supervision or assistance during movement. The transfer technique needed will vary depending on the level of client ability and dependency. Before deciding which specific technique is most appropriate to transfer a client, it is necessary to assess the client's level of mobility, cognitive ability and need for assistance.

Prior to using any technique, there should be an assessment of the client's current mobility and any other factors that affect the safety of the planned movement of the client. These assessments are described in Section 3 'Risk assessment' (see Risk assessment and Table 4.3).

The mobility assessment should cover the client's ability to move, sit and balance, and any other relevant factors. The assessment should lead to a decision on the number of carers and equipment needed to transfer the client. This assessment is particularly important in community settings where sole carers are working in isolation. If the assessment indicates that more than one person is required to move

the client or operate equipment, that is what should happen. A robust assessment is essential and carers must use moving and handling techniques consistent with the risk assessment. The risk assessment should determine the number of carers needed, equipment or modifications of the environment. It should be seen as a cost-effective process.

Preparation for a specific transfer

Prior to moving a person, check the following aspects of the planned transfer:

- Check the client profile and carry out a pre-movement risk assessment (see 'Pre-movement risk assessment' in Section 3 Risk assessment)
- Plan the movement, including the order of specific tasks and who will carry out each task
- Get equipment ready: If equipment is to be used, ensure the equipment is available in good order with any required accessories in place and ready to use
- Prepare the environment: Position furniture, check that route and access ways are clear and that the destination is ready
- Prepare the client: Tell the client what will happen, gain their permission, and let them know what they are expected to do. Ensure that the client's clothes and footwear are appropriate for the task, and that they have any aids they need.

Communication among carers during the transfer

Ensure that all instructions and commands used are consistent throughout the organisation. For example, use a clear command such as, 'Ready, steady, stand'. One reason for accidents is the lack of coordination between carers, and a lack of shared understanding within an organisation or facility of what terms or phrases mean when moving clients. Consistent, clear commands help to coordinate carers and minimise risks for these tasks. Carers making eye contact with each other is key to synchronising when more than one carer is involved. Ending the instruction with a word that the client understands ('ready, steady, stand') will also facilitate client confidence in and understanding of what is about to happen.

Communication with clients

Effective communication between carer and client is part of moving and handling. Plan to inform clients and their families about your organisation's moving and handling policy on admission (see Section 11 Communication).

A client may be resistant to being moved or handled in a particular way if they have not been consulted. Explain to the client what you are about to do, and ask their

permission. If they have any concerns about things like safety, modesty issues and gender and religious considerations, address them. Tell them of the benefits of the procedure to be used. As they are being moved, talk them through the steps and ask if they are okay. Ask them how they feel after the transfer, as client feedback is useful to verify that they were comfortable with the move, or whether improvements could be made. Some clients may resist being lifted using a sling and hoist, because they feel their dignity and safety may be compromised. Communicating the benefits for the client – particularly in safety and dignity – may allay those fears and increase client confidence.

BOX 4.1

Telling patients about hoists

When there is poor communication, patients can be very negative about being moved by hoists. We had a patient like this so I had her carer come to training and explained why a hoist is better for the patient. The carer went back and spoke to her patient and the patient allowed her to use the hoist. In my experience, these situations can often be avoided if nurses or caregivers get properly trained and take the time to explain things to patients and reassure them that it will be safer for them. Patients need to be reassured and understand why, and the barriers usually come down.

Source: Manual handling coordinator

Besides noting if a client has hearing difficulties or cognitive impairment, you may need to take into account language and accent issues. Often someone may say 'Yes' simply to give an answer, or 'Yes' meaning 'I hear you but don't understand or want to do it that way'. One way to get agreement to or an understanding of what is to be done with the client is to ensure that what you say is simple language and not health jargon. Alternatively, demonstrate the move with another person reassuring the client and seeking their agreement at the same time. Also, speak slowly (not louder unless the client has a hearing problem) if the client has difficulty understanding your accent.

Cultural and religious considerations

Client moving and handling requires nurses and carers to touch clients even when mechanical aids are used. Some techniques also necessitate close body contact. In some cultures and religions, it is considered inappropriate to touch a person or have physical contact between men and women. When presented with such cultural or religious issues, communication is essential to overcome these barriers to moving and handling.

Explain to the client how you are going to move them, emphasising that it is for their safety. Look for solutions to any individual issues, and if you are unable to fix them, try to compromise. Ask them if they have any questions. It may also be useful to provide an explanation of the move to family members who are present. Alternatively, seek advice from local experts.

Post-transfer assessment

- Assess how well the transfer technique worked. Could the transfer have been done better? Add your comments to the client profile.
- Is the client's dependency status accurate? Are any changes or qualifications needed on the client profile?
- If you identify issues that affect client handling, report them to your manager and add them to the workplace plan for moving and handling clients. This will provide evidence for changes that are needed and may benefit all carers and clients in the organisation.

4.3 Sitting and standing

The techniques in this section cover client movements related to sitting and standing. The section also covers what to do with a falling client and assisting a fallen client. For particular moves, such as sitting to standing, several techniques can be used and some examples of these are described. The particular technique used will depend on the client's mobility and the availability of carers and equipment.

Assisted walking is sometimes included with sitting and standing. If a client requires assistance with walking, they should be assessed by a competent person (e.g. a physiotherapist). If needed, a correct walking frame or aid should be selected. The carer can assist in reducing risks by checking that the walking area has a suitable floor surface and is clear of clutter and that the client is wearing suitable footwear. Carers assisting a person with walking should have basic moving and handling training and specific instruction on assisted walking.[1] Note that providing physical support for a client while walking encourages the client to lean on, or be propped up by, the carer. This increases the load on the carer. For this reason, assisting clients to walk can be a high-risk activity for carers.

Preparation for repositioning a client

As part of the pre-transfer risk assessment, assess the client's weight-bearing capacity. Confirm the client's weight-bearing status by asking the client and the client's nurse or family, and checking the client's profile and mobility status. One way to reduce the risk if no information is available is to ask the client to lift and straighten their legs one at a time from the knee, then place your hand flat on each shin and tell them, 'Don't let me push your leg down', so you are controlling the resistance. The client being able to hold their leg against some pushing is a reasonable indicator of the ability to bear weight. If they are unable to do this, consider hoisting them.

Basic techniques for carers

Two basic techniques with which carers need to be familiar for most of the techniques covered in this section are the lunge position and instructing the client to look in the direction of the movement. These are shown in Figures 4.1 and 4.2.

FIGURE 4.1

Lunge position for carers

FIGURE 4.2

Instructing client to look in direction of move

1. Brooks & Orchard, 2011, pp. 164-167.

Technique 1 Supervised repositioning in a chair

For this technique the chair should be of suitable height (not too low), and have armrests. A slide sheet can also be used to assist repositioning in a chair.

Ask the client to:

1. Put their feet flat on the floor with their feet apart and tucked slightly under the chair – the chair height must allow the client to place their feet firmly on the ground
2. Keep their hips and legs at a right angle
3. Lean forward so their upper body is over their knees
4. Stand up and move as far back into the seat as possible, or
5. Slide back into the seat by pushing back using the armrests and their feet.

FIGURE 4.3

Supervised repositioning in a chair (Technique 1)

1. Put feet flat on floor, slightly apart	2. Lean forward so upper body over knees	3. Slide back in seat by pushing back using armrests and feet
		

Technique 2 Supervised sit to stand

This technique is only suitable if the client can weight bear.

1. Ask the client to put their hands on the armrests of the chair
2. Ask the client to lean forward in the chair and move towards the front of the seat
3. Ask the client to put their feet flat on the floor. The feet should be hip width apart and under their knees
4. Ask the client to lean forward while still sitting, so their upper body is above and over the tops of their knees ('nose over toes')
5. If needed, gently rock the client backwards and forwards to build up momentum to help them stand, while instructing, 'ready, steady, stand'
6. On 'ready and steady' tell the client to rock gently forward on each word
7. On the command 'stand', the client pushes themselves up to a standing position using the armrests or surface on which they were sitting.

Hand blocks or a bed lever can provide support for a client who is standing up from a bed or other firm surface.

FIGURE 4.4

Supervised sit to stand (Technique 2)

1. Client to lean forward and move to front of seat	2. Client's upper body is above the top of their knees, feet hip width apart
	
3. On 'ready and steady' the client rocks gently forward on each word	4. Client pushes themselves up to a standing position
	

Technique 3a Sit to stand with one carer

Before helping the client to stand, check there is enough space around the chair for the carer.

1. Ask the client to put their hands on the armrests of the chair
2. Ask the client to lean forward in the chair and move towards the front of the seat
3. Ask the client to put their feet flat on the floor. The feet should be hip width apart and under their knees
4. Ask the client to lean forward while still sitting, so their upper body is above and over the tops of their knees
5. Carer to stand in the lunge position, facing forward at the side of and behind the client
6. Outside hand is flat on the front of the client's shoulder, inside arm across lower back around the hips, not the waist
7. With weight on the carer's back foot, rock forward with client, same verbal cues ('ready, steady and stand'), stand up with client and bring inside leg through to step in tight to client's side. The carer's hip should be touching the client's side
8. Check client's arms are free and in front of them.

From standing to sitting

1. Ask the client to feel for the chair (or bed) with the backs of their legs, reach for the arms of the chair and gently lower themselves.
2. Encourage the client to bend forward at the hips to facilitate a better position for sitting. Either say 'lean forward and bend at your hips' or place the carer's hand in front of the client's hip.

FIGURE 4.5

Sit to stand with one carer (Technique 3a)

1. Client has hands on armrests and looking straight ahead

2. Carer standing in the lunge position, inside arm on client's hip

3. Ask client to lean forward so upper body is above knees

4. Rock forward with client, on 'ready, steady and stand'

5. Client stands

6. Back view of client standing with carer

Technique 3b Sit to stand with two carers

1. Before helping the client to stand, check there is enough space around the chair for the carers
2. Ask the client to put their hands on the armrests of the chair
3. Ask the client to lean forward in the chair and move towards the front of the seat
4. Ask the client to put their feet flat on the floor. The feet should be hip width apart and under their knees
5. Ask the client to lean forward while still sitting, so their upper body is above and over the tops of their knees
6. Both carers to stand in the lunge position, facing forward at the side of and behind the client
7. Each carer's outside hand is flat on the front of the client's shoulder, inside arms across lower back around the hips, not the waist
8. With weight on their back feet, both carers rock forward with client, with lead carer using the verbal cues ('ready, steady and stand'), stand up with client and bring inside legs through to step in tight to client's side. Each carer's hip should be touching the client's side
9. Check client's arms are free and in front of them.

FIGURE 4.6

Sit to stand with two carers (Technique 3b)

1. Client has hands on armrests and looking straight ahead

2. Carers standing in the lunge position, inside arms on client's hips

3. Ask client to lean forward so upper body is above knees

4. Rock forward with client, on 'ready, steady and stand'

5. Client stands

6. Completion of stand

FIGURE 4.7

Sit to stand with two carers – bariatric client (Technique 3c)

1. Client has hands on armrests, sitting on edge of seat, looking straight ahead

2. Carers standing in the lunge position, inside arms on client's hips

3. Ask client to lean forward so upper body is above knees

4. Rock forward with client, on 'ready, steady and stand'

5. Client stands

6. Completion of stand

Technique 4 Sit to stand with a standing hoist

A standing hoist is only suitable if the client can:

1. Weight bear through at least one leg
2. Cooperate and understand instructions
3. Balance and control their upper body
4. Explain to the client how the standing hoist will help them to stand, and preferably demonstrate how it works – this will also help to reassure them it is safe
5. Apply hoist sling to client. Make sure that the sling is the correct size for the client, tight enough to stop the sling riding up under the arms, but still comfortable
6. Wheel the standing hoist into position and adjust the hoist legs to fit around the furniture
7. Position the hoist's sling bar
8. Ask the client to put their feet on the footplate
9. If the hoist's kneepads are adjustable, adjust them to suit the client, making sure the kneepads are below their patellae (kneecaps)
10. Attach the leg strap around the back of the client's knees, if required
11. Attach the sling to the standing hoist, with the nearest loop reachable without pulling the client forward
12. Ask the client to place hands on the hand grips (depending on hoist type) and stand themselves up as you raise the sling bar. They can lean back slightly into the sling
13. Reposition the standing hoist to where the client is to be seated
14. Lower the standing hoist once the client is positioned over the surface to which they are being moved
15. Encourage the client to bend at the hips or assist with the bend, and lower themselves along with the movement of the sling bar.

Note: It is recommended that the hoist brakes not be on at any point during the procedure, but wheelchair, bed or commode brakes should be on. Exceptions to this recommendation should have adequate risk assessments. It is acknowledged that some instructions from hoist suppliers differ from this recommendation.

If the sling is positioned properly and still rides up, it may indicate that the client is not able to reach a standing position or that the sling is not sized correctly. Do not use this technique if the client is unable to stand; use a full sling hoist instead.

If the client is being moved to sit on a bed so they can lie down, but cannot do this independently, you will need to use a profiling bed and/or handling equipment.

Extra care is needed if transferring a stroke client with a standing hoist, as support may be needed for the stroke-affected arm to prevent damage to the shoulder. Some hoists have arm slings attached for this purpose. Standing hoists are often not suitable for stroke clients with painful shoulders.

FIGURE 4.8

Sit to stand with a standing hoist (Technique 4)

1. Apply hoist sling	2. Position standing hoist
	
3. Position sling bar and attach sling straps to hoist	4. Instruct client to stand
	
5. Reposition hoist	6. Instruct client to sit
	

Assisting a fallen client

The risk of falling depends on many factors. Many healthcare organisations have falls prevention programmes that help them to identify clients at risk so they can develop appropriate strategies.

Preventing falls is far more effective than trying to manage a fall in progress, or managing the after-effects. Prevent falls by identifying any risks, then eliminate, isolate or minimise those risks. If you have a falls prevention programme, the fall risk and brief details of the care plan should be noted on the client profile.

Falls prevention and moving and handling programmes work well together. By creating strategies to reduce the risk of falls, for instance by reviewing medication that causes dizziness, strengthening weak muscles, and improving balance and correcting visual problems, you also improve clients' ability to move more safely.

Sometimes falls result in injury to clients, or occur following a stroke or heart attack. Dealing with emergency situations is covered at the end of this section.

Managing a fall in progress

While trying to encourage independence and mobility, there is always a risk that a client could fall. When a client is falling, it is recommended that the carer not try to stop the fall or try to hold the client up. It is impossible to 'control' a fall by lifting or bearing the weight of the client (see Box 4.2). The emphasis should be on prevention.

BOX 4.2

Why you should not try to catch a falling client

Physiotherapist and ergonomist Dr Mike Fray calculated that the force required to catch a falling client is 480 kilograms (kg) for a 60kg person. This means that if you were to catch a 60kg falling client you will have a force equivalent to 480kg to hold by the time the patient falls to the floor.

Source: Smith, 2005, p. 272

Managing a fallen client

It is important that clients are aware of the moving and handling policy you use, so that they do not expect to be lifted by carers after a fall. If you find a fallen client, you need to assess the situation carefully to ensure that the client does not experience additional harm while you are trying to help them. This affects the method you use and the choice of equipment. Give the client time to get calm, assess the situation, then either coach the client to get up or use equipment to get them up.

Assessing a fallen client

Assess the client's airway, breathing and circulation, and maintain according to CPR guidelines and the client's care plan.

1. Call for help
2. If you are able, make sure that the area around the client is safe and that no further harm can occur; for example, clear any spills or objects away

3. Continue the assessment as needed, using approved first aid procedures, and decide if the client can be moved
4. If the client is injured, make them comfortable on the floor and seek further medical advice
5. If they are uninjured, stay with the client and stay calm; do not hurry them to get up. This will help the client to stay calm and relaxed
6. Choose the right technique to help them up, explain the procedure and talk with them throughout the move to provide reassurance
7. Remember, moving them without assessing the situation carefully could cause injury to you and the client.

The following techniques (Techniques 5 and 6) are relevant to assisting fallen clients without or before the use of a hoist. The use of a hoist to assist fallen clients is described later in Technique 30.

Technique 5 Supervising a fallen client who is conscious and uninjured

Firstly, do not panic; they cannot fall any further. Check the immediate environment for risks, such as a wet floor.

1. Ask the client if they are hurt anywhere. Did they bang their head?
2. Do they remember falling? If they appear unhurt, ask staff not required to leave
3. Place a pillow under their head for comfort – remember touching the head can be taboo in some cultures, so always talk to the client and explain what you are doing
4. Cover them if required
5. Ask if they think they could stand themselves up with instruction
6. Ask client to roll on to their side then get on to hands and knees
7. When they have done this, ask if they are dizzy or feeling worse – if they are, get the client to lie down and hoist them instead
8. Once they are on their hands and knees, place a chair as close as possible to the client's hip. Ask them to use the chair to lean on with their closest hand, and using their nearest leg get them to put their foot flat on the floor then push up into a sitting position using their leg and arm
9. Alternatively, the client may prefer to use their furthest leg and foot to provide extra balance, particularly if the client is large
10. If the client cannot get onto the chair, get them to lie down again and hoist them.

This technique can be taught to some clients who have a history of falling to reassure them that they can get up from the floor independently, particularly pre-discharge from a hospital or care facility. They will need to crawl to a stable piece of furniture that they can use to push themselves up.

FIGURE 4.9

Supervising a fallen client who is conscious and uninjured (Technique 5)

1. Assess client	2. Ask client to roll on to their side and push up with their hands
	
3. Ask client to roll on to their hands and knees	4. Place a chair at the client's side, close to hip
	
5. Client leans on chair with their closest hand	6. Client pushes up to sitting position, sliding bottom into chair using both legs and arms
	

Technique 6 Moving a fallen client in a restricted space using slide sheets

If a client has fallen in an area where a hoist cannot be used (for example, between a toilet and a wall), the preferred option is to slide them to an area where you can use a hoist. For this technique, you need at least two carers and two slide sheets. Sole carers working in the community may need to call an ambulance.

1. Assess environment and safety for you, then the client
2. If the client cannot get up, use two slide sheets, positioned under knees or in small of back depending on how they have fallen. Or you can roll them in the usual way – ensure the slide sheets are under the hips, but do not worry if you cannot get under their shoulders as well
3. With two carers on their hands and knees, or with one knee up, move the client onto the top sheet by sitting back onto your heels. Keep your arms straight and use the momentum of sitting back onto your heels to move the client – it usually takes a few small manoeuvres to straighten the client if they need to come through a doorway
4. Move the client far enough out so they are in a space large enough to be hoisted
5. Where possible, a third person should look after the client's head – the two carers moving the client must work at the speed with which this third carer can safely move
6. Be aware that the client's elbows and feet are at risk of being knocked during this procedure
7. When the client is stable, hoist them to a bed or trolley (see Technique 30 Hoisting from the floor).

FIGURE 4.10

Moving a fallen client in a restricted space using slide sheets (Technique 6)

1. Assess client and environment

2. Make client comfortable

3. Prepare slide sheets

4. Position slide sheets under client

5. Carers prepare to slide client using slide sheets

6. Carers slide client out of restricted space

4.4 Moving people in bed

The techniques in this section cover movements related to moving or repositioning a client when they are in a bed. Prior to using any technique, there should be a risk assessment that includes the client's current mobility and any other factors that affect the safety of the planned movement of the client and carer.

It is important to preserve the pressure-relieving properties of mattresses by minimising unnecessary layers underneath the client, such as surplus bedding. Air mattresses are designed for bed linen to be loose fitting and often have clips to stop linen moving around.

There are a number of ways to help eliminate or reduce the amount of client handling. If repositioning in bed is needed, here are some things to consider:

- The easiest way to reposition a client in bed, if they are able, is to get them up and off the bed, move along the bed and get back in
- Profiling beds reduce the repositioning of clients in bed because these beds can be adjusted easily. Use the knee brace position. It can reduce the likelihood of the client sliding down the bed
- Position the client in an appropriate bed to avoid the need for frequent handling
- Use pillows to support and prop the client and to help stop them becoming uncomfortable
- Encourage the client to move up the bed by 'hip hitching'.

Technique 7 Supervised turning or rolling

Encourage the client to turn using verbal prompts. Ask them to:

1. Turn their head in the direction of the turn or roll
2. Move their inside arm out from the side of their body or place it across their chest to stop them rolling onto it. Flex their outside knee so they are ready to push off with their foot in the direction of the roll
   Note: If they cannot bend their knee, they probably need more than supervision
3. Put their outside arm across their chest in the direction of the roll, so they are ready to reach over or hold on to the edge of the mattress (or hold on to a bed lever, bed pole or cot sides if available)
4. Roll over by pushing off with their outside foot and reaching across their body with their outside hand (or by pulling on the lever, rail or pole with their outside hand).

FIGURE 4.11

Supervised turning or rolling (Technique 7)

1. Ask client to turn head in direction of roll

2. Client flexes outside knee

3. Client puts outside arm across their chest in direction of the roll

4. Client rolls over, pushing with outside foot and reaching across body

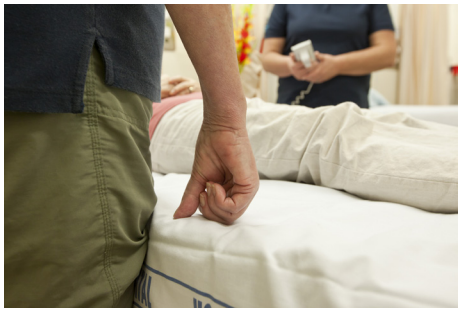
5. Client completes roll

Turning or rolling in bed

Repositioning clients in bed is a high-risk activity for carers. Any client requiring repositioning should be on an electric profiling bed or a bed that is height adjustable. Perform all client handling tasks on a bed with the bed positioned to the correct working height. The mattress should be at the carer's hip level so that the carer's knuckles can rest easily on the bed (see Figure 4.12). If a bed is not height adjustable, some of the techniques may need modification.

FIGURE 4.12

Adjust the bed height before moving a client



Before rolling the client, check the client's condition. Consider extra measures if they:

- Are confused, agitated or uncooperative
- Have multiple injuries or pathology
- Are attached to medical equipment
- Have frail shoulder, hip or knee joints
- Have had recent hip surgery (if so, immobilise the hip joint with strategically placed pillows)
- Are obese.

Always turn the client towards you. Direct the turn or roll with your hands on the client's outside shoulder and hip. These are the key points of contact. Make sure the client is not too close to the edge of the bed before turning.

Technique 8a Turning with one carer

This technique can be conducted with one carer, but only if it is appropriate for the client and a risk assessment has been conducted.

1. Adjust bed height for shortest carer; carer's knuckles should easily reach the mattress
2. Stand on the side of the bed towards which the client will turn
3. Turn the client's head in the direction of the roll if they are unable to turn their head without assistance
4. Position the client's inside arm out from the side of their body or put it across their chest to stop them rolling on to it
5. Help the client to flex their outside knee
6. If the client can't flex their knee, cross their legs at ankle level
7. Place hands on client's shoulder and hip and get into a lunge position with all weight on carer's front foot:
   - 'Ready' – 'Steady' – verbal prompts to prepare the client
   - 'Roll' – transfer weight on to back foot, maintaining straight arms so that carer is using their lower body and not arms to roll client over.

FIGURE 4.13

Turning with one carer (Technique 8a)

1. Client crosses arms	2. Client flexes outside knee
	
3. Carer in lunge position and places hands on client's hip and shoulder	4. Carer rolls client on to their side
	

Technique 8b Turning with two carers

Two carers may be required because of the client's size and condition (Figure 4.14). Bed linen or a repositioning sheet may be used if the client is too large to reach their hips and shoulder. Keep your movements slow and smooth to reassure the client. Where three carers are required, the second carer stands beside the first, placing their hands farther past the shoulder and hip with their left arm crossing over or under the first carer's right arm (Figure 4.15).

FIGURE 4.14

Turning with two carers (Technique 8b)

1. Client flexes outside knee	2. Carer in lunge position and gives oral prompts – 'ready, steady, roll'
	
3. Carer rolls client	4. Client rolled awaiting pillows
	
5. Second carer places pillows	6. Pillows applied and maximising comfort and pressure relief
	

FIGURE 4.15

Turning a bariatric client with three carers (Technique 8c)

1. Client flexes outside knee	2. Carers use sheet to roll client
	
3. Carers roll client	4. Roll completed
	
5. Third carer places pillows	6. Client stabilised with pillows, bed railings raised
	

Technique 9 Supervised sitting up in bed

This technique is only suitable for clients with adequate upper limb strength and trunk stability.

Ask the client to:

1. Raise their head
2. Raise their upper body so they are resting on their elbows and lower arms
3. Place their hands flat on the bed beside their hips
4. Push themselves up into a sitting position using their arms.

There are several types of aid that can help a client to sit up in bed, such as bed blocks, bed levers and overhead poles. Clients who require frequent bed repositioning should be provided with electric beds with profiling operations. These aids are described and illustrated in Section 7 Equipment for moving and handling people.

FIGURE 4.16

Supervised sitting up in bed (Technique 9)

1. Ask client to raise head	2. Client places both hands flat on bed and raises upper body using arms
	
3. Client pushes up from the bed using arms	4. Client holds themselves in an upright position
	

Technique 10 Supervised hip hitch movement up the bed

This technique is only suitable for clients with adequate upper limb strength and trunk stability. With hip hitching, the client 'walks' up the bed on their buttocks. They gently rock to one side, lifting the other buttock and moving it up the bed, then they repeat the action on their other side. This technique is especially useful for people who cannot easily weight bear on their arms.

1. Ask the client to sit up in bed (see Technique 9)
2. Ask them to make their hands into closed fists and put their fists just behind their hips
3. Ask them to bend their knees and dig their heels into the bed, ready to push themselves up the bed
4. Ask them to push themselves up by pushing through their heels and fists at the same time, to lift and move their bottom up the bed.

Hand blocks may be useful for this technique.

FIGURE 4.17

Supervised hip hitch movement up the bed (Technique 10)

1. Ask client to sit up in bed	2. Client puts hands in closed fists behind hips
	
3. Client bends knees and digs heels into the bed to push up the bed	4. Client lifts and moves their bottom up the bed
	

Technique 11 Supervised sitting to the edge of the bed

This technique is only suitable for clients with adequate upper limb strength and trunk stability.

Before starting, lower the bed to the appropriate height for the client if possible. Ask the client to:

1. Bend at the knees
2. Roll on to their side by turning their head in the direction of the roll, placing their outside arm across their chest and rotating their flexed knees in the direction of the roll
3. Push up into a side-sitting position by placing their outside hand flat on the bed to push and getting their inside arm to push up using their elbow, putting their legs over the side of the bed at the same time
4. At this point the client can put their legs over the side of the bed, and with feet flat on the floor move themselves sideways up the bed or stand up and walk with or without a walking aid.

A slide sheet could help the client to move their feet to the edge of the bed at Step 3.

A bed lever could help the client to push themselves up to sitting at Step 4.

If the client is in an electric bed, raising the head of the bed can assist with sitting up.

FIGURE 4.18

Supervised sitting to the edge of the bed (Technique 11)

1. Client pushes with legs and turns on to their side facing carer	2. Client puts legs over edge of bed
	
3. Client uses hand and elbow to push up while lowering legs to the floor	4. Client in sitting position on edge of bed
	

Using slide sheets for turning or moving up the bed

The next group of techniques involves turning using slide sheets. Prior to describing these techniques, instructions on how to put slide sheets into position and remove them are provided. Slide sheets can be useful for tasks requiring multiple turning or rolling, such as a bed bath for a client. They reduce friction so less force is needed to move the client. Slide sheets are for temporary use and should not be left under a client.

Technique 12 Placing slide sheets

Always place slide sheets under a bed sheet to protect skin integrity (see Box 4.3). Using a spare, flat bed sheet is most helpful. Tuck slide sheets under the client's neck, the hollow in their back and under their knees, pushing down on the mattress.

1. Place slide sheets underneath a bed sheet
2. Keep the edges of the slide sheet to the edge of the bed as a guide, providing enough slide sheet to cover the rest of the mattress in a single or standard hospital bed
3. If the bed is large, consider large slide sheets or using more of them
4. Roll client on to their side, pull sheet out other side and straighten.

BOX 4.3

Protect client with a bed sheet over slidesheets

A patient from another hospital came to us with friction burns down one side of his torso. When asked what had caused the burns he told us it was where staff had been inserting slide sheets under his bare skin. Although he tried to make sure his pyjamas were protecting him, it was much more comfortable when slide sheets were used underneath a bed sheet.

Source: Nurse manager

FIGURE 4.19

Placing slide sheets (Technique 12)

1. Place slide sheets underneath a bed sheet

2. Keep edge of slide sheet to edge of bed

3. Push slide sheet through under client, pushing down on the mattress

4. Roll client on to side and pull through slide sheets

Technique 13 Removing slide sheets

1. Tuck in both sheets from one side, preferably the least exposed side so less is left to pull out, then from the other side, remove bottom sheet first.
2. Use lunge position and aim diagonally towards the small of the back from one end then the other. Pull out from hollow of back.
3. Tuck the second sheet under itself so it can slide on itself.
4. Only pull the slide sheets to the point of resistance. If there is some resistance, slide the sheets on to themselves so they continue to slide – do not tug or you will risk taking the client's weight or moving them out of position.

FIGURE 4.20

Removing slide sheets (Technique 13)

1. Tuck in both sheets on one side	2. From other side, use lunge position to pull out
	
3. Pull slide sheets diagonally so client is not moved	4. Remove sheets and place ready for next use
	

Technique 14 Assisted movement up the bed using slide sheets with one carer

This technique can be done with one carer only if appropriate for the client and following a risk assessment.

1. Place an extra pillow against the bedhead to avoid the client banging their head if too forceful
2. Apply slide sheets; for this technique apply from the buttocks up as the client's thighs will not be on the mattress. This allows more of the pillow to be on the slide sheets to assist in the movement
3. Client to bend knees and place feet flat on mattress. Ensure their feet are not on slide sheets or loose bed linen
4. Hold client's ankles firmly to anchor feet to mattress. The reason the feet are not held is because they need to be able to dorsiflex (flex feet at ankle joint) with the movement or it will cause pain and hyperextension
5. Tell client to push using their feet, sliding themselves up the bed, ensuring they do not lift their hips off the bed
6. Remove slide sheets.

A pillow over the client's ankles can be used if they are frail or have delicate skin.

FIGURE 4.21

Assisted movement up the bed (Technique 14)

1. Place an extra pillow against bedhead	2. Apply slide sheets
	
3. Hold ankles firmly to support client	4. Client pushes up bed using their feet
	

Technique 15 Turning client on to their side using slide sheets and two carers

(This technique can be performed with one carer following a risk assessment and only if it is appropriate for the client. Three carers may be needed for a bariatric client.)

1. Decide which way the client will face before getting to the bedside
2. Apply the slide sheets
3. Laterally slide the client towards the edge of the bed they will be facing away from, keeping your knuckles on the mattress during the procedure – this is to ensure that the carer is aware of the edge of the bed and reduces the risk of pulling the client off the bed
4. Once the client is near the edge, have the second carer tuck the slide sheets under the client on the opposite side
5. The second carer then rolls the client towards them, leaving the first carer to remove the slide sheets from the bed
6. Ensure the client is comfortable, apply pillows to support the client if necessary, and check that their arms are free.

FIGURE 4.22

Turning client on to their side using slide sheets and two carers (Technique 15)

1. Apply slide sheets (see Technique 12)	2. Using slide sheets, slide client to side of bed they will be facing away from
	
3. Second carer tucks in slide sheets	4. Second carer rolls client using lunge position
	
5. Slide sheets removed	6. Client lying on side is stabilised with pillows
	

Technique 16a Moving client up the bed with two carers using slide sheets

1. Place an extra pillow at the head of the bed
2. Move the bed away from wall, or furniture away from bed, if necessary, before moving the client
3. Adjust the height of bed to shortest person, one carer either side
4. Apply slide sheets, making sure the pillow is also on the slide sheets
5. Choose lead carer. Stand where you want the client's head to end up
6. Step forward with outside leg and place both hands at level of client's hip, keeping both arms straight and hands on the bed
7. Hold bed sheet and top slide sheet tightly and as near hip as possible
8. Practise first to ensure you are in time, say 'back on ready' and 'ready, steady, slide', and rock back on each word
9. Only go as far as the shortest person can comfortably manage. The procedure may take more than one movement. If so, reposition and repeat; keeping your arms straight will avoid twisting or rotating
10. Remove slide sheets, put bed back against wall and return furniture.

Note: Technique 16 (a and b) is one of several techniques that can be used to move a client up the bed using slide sheets.

Caution: Avoid tilting the bed to use gravity. This is dangerous in combination with slide sheets, has less control, and can be frightening for the client. Adding an extra slide sheet folded under the legs will minimise the dragging. If the client cannot lie flat for this procedure (e.g. if they have breathing problems), support with multiple pillows and apply slide sheets under pillows.

FIGURE 4.23

Moving client up the bed with two carers using slide sheets (Technique 16a)

1. Apply slide sheets	2. Place an extra pillow at the head of the bed
	
3. Lunge position ready to slide client	4. Client pushes up bed using their feet 4 Slide client up bed
	

FIGURE 4.24

Moving client up the bed with three carers using slide sheets – bariatric client (Technique 16b)

1. Apply slide sheets and pillow at top of bed	2. Flex client's leg
	
3. Lunge position ready to roll client	4. Roll completed, pull slide sheets through
	
5. Apply third slide sheet halved under lower limbs	6. Carers in lunge position to slide client up bed
	

4.5 Lateral transfers

The techniques in this section cover transfers from one surface to another surface at a similar height. Prior to using any technique, there should be a risk assessment that includes the client's current mobility and any other factors that affect the safety of the planned movement of the client.

Sitting-to-sitting transfers using transfer boards have not been included among the techniques for lateral transfers. A sitting-to-sitting transfer using a transfer board is an advanced technique that requires both an assessment of the client for adequate upper body strength and specific training in how to use the technique.

Technique 17 Supervised sitting-to-sitting transfer

If the client is stronger on one side (for instance if a stroke has affected one side), use the stronger side to lead the transfer. Wheelchairs and chairs with movable armrests should have the appropriate armrest moved out of the client's way to assist the manoeuvre.

Make sure the surface to which the client is moving is as close as possible and at right angles to the client's position. Then ask the client to:

1. Position themselves with their arms on the armrests and their feet flat on the floor, shoulder width apart
2. Lean forward in the chair and slide their bottom towards the front of the seat
3. Lean forward so that their upper body is over their feet
4. Put their leading foot in the direction they are going
5. Reach over and take the far arm of the other chair with their leading arm
6. Push up through their arms and legs, then move across or step around to sit in the other chair. Alternatively, they may find it easier to stand fully and transfer to a walker.

FIGURE 4.25

Supervised sitting to sitting transfer (Technique 17)

1. Client leans forward and slides their bottom to front of chair	2. Client puts their leading foot in the direction they're going
	
3. Client reaches over and takes far arm of the other chair	4. Client pushes up through their arms and legs
	
5. Client transfers to other chair	6. Client lowers self into chair
	

Technique 18 Sitting to sitting transfer using walking frame

In this technique the carer assists the client to move from one seated position to another with the client using a walking frame.

Wheelchairs and chairs with movable armrests should have the appropriate armrest moved out of the client's way to assist the manoeuvre. Make sure the seat to which the client is moving is as close as possible and at right angles to the client's starting position. The walking frame should be positioned directly in front of the client.

1. Ask the client to position themselves with their arms on the armrests and their feet flat on the floor, shoulder width apart
2. Ask the client to lean forward in the chair and slide their bottom towards the front of the seat
3. Carer helps them lean forward so their upper body is over their feet
4. Stand on 'ready, steady, stand'
5. Carer assists client to stand and client transfers hands to walking frame
6. Carer guides client while they use the walking frame to move into position with their bottom facing the chair to which they are moving
7. Client sits down.

FIGURE 4.26

Sitting to sitting transfer using walking frame (Technique 18)

1. With client sitting forward in chair, carer rocks forward with 'ready, steady, stand'

2. Client stands and transfers hands to walking frame

3. Client holds on to walking frame, guided by carer

4. Client moves around to other chair while holding on to walking frame

5. Client positioned in front of chair

6. Client sits down, first placing hands on armrests

Technique 19 Sitting to sitting transfer with one carer

This technique should only be used if the client can step from one seat to another. The carer must stay upright the whole time.

1. Position the seat or furniture so there is adequate room for both the carer and the client and the carer can be at the client's side the whole time
2. Make sure the item to which the client is moving is as close as possible
3. If using a wheelchair, the brakes should be on and the footplates removed
4. Help the client to stand up (see Technique 2 or 3)
5. Pause to allow the client to get their balance
6. Client sits down (see Technique 2 or 3).

If you are transferring a client to a toilet or commode, you need to consider how the client's clothes will be adjusted for toileting before you start the transfer. For instance, you might ask the client to support themselves using toilet handrails or commode armrests, so that your hands are free to adjust their clothing. If the client cannot support themselves with rails or armrests, you will need to use another technique.

FIGURE 4.27

Sitting to sitting transfer with one carer (Technique 19)

1. Assist client to stand (see Technique 3a)	2. Instruct client to walk or step to other chair
	
3. Instruct client to reach for the armrests	4. Client sits down
	

Technique 20 Lateral transfer using a transfer board and slide sheets

You can use a full-length transfer board (e.g. a PAT slide) with slide sheets for this technique. You will need at least four carers: two to use the slide sheets, one to manage the head and one to manage the feet. Other carers may be needed to manage any attached medical equipment or if the client is very large.

Check that the transfer surfaces are at a similar height. Using a transfer board can be unsafe if the height difference is too great. The manoeuvre should be done in two stages if it is bed to bed because of the longer distance than bed to trolley or stretcher. First, move to halfway, reposition carers then move the client straight across. Use one manoeuvre if the distance is short enough not to require the carers to climb onto the bed.

1. One carer rolls client on to side facing away from direction of transfer
2. Two carers position transfer board with two slide sheets underneath bed sheet
3. Client rolled back on to transfer board
4. Move second bed or stretcher up against first bed, ensuring the head will end up in the right position by lining up beds accordingly
5. With bed brakes on, have height of bed transferring on to slightly lower than original bed to use gravity to help
6. Two additional carers assist with head and feet
7. Kneel up on bed (if necessary) and carers cross their inside arms, sit back onto heels to slide client across part of the way
8. Slide client holding bed sheet and top slide sheet
9. Have a leader and stop halfway if necessary
10. The two main carers reposition themselves off the bed, lunge then slide the rest of the way.

FIGURE 4.28

Lateral transfer using a transfer board and slide sheets (Technique 20)

1. One carer rolls client on to side facing away from direction of transfer

2. Two carers position two slide sheets on transfer board underneath a bed sheet

3. Move second bed against first bed and bridge with transfer board

4. Two carers kneel up on bed and cross their inside arms, slide client halfway

5. Stop halfway and carers reposition into lunge stance

6. Slide client across to second bed

7. When move completed, remove transfer board and slide sheets

Technique 21 Transfer from a vehicle to a walking frame

Getting out of a car using a walker

For this transfer, have a walking frame ready. The procedure requires one carer and one slide sheet.

1. Slide the car seat back as far as it will go to allow maximum space to lift the legs out
2. Check the seat back is fully upright
3. Ensure the client's walker is close by but out of the carer's way
4. Ask the client to lift their legs out of the car. It is generally easier to move in small movements and move one leg at a time. If they have difficulty doing this, you can place a scrunched-up slide sheet under the buttocks to reduce friction
5. Get them to move forward until their feet are flat on the ground
6. The client will need to hold on to something as they stand. They can push using the car seat or backrest. Alternatively, wind the window down and the client can use the door for support while the carer uses their body weight to prop the door for safety*
7. Once standing, the client transfers their hands to the walker (with brakes applied)
8. If they are unable to stand and step around, another technique or aid should be considered. This will require the client to be referred to a therapist and have a technique tailored to them

* Advice on specially designed handles to help clients in and out of cars can be given by a health professional and they can be purchased if necessary.

Getting into a car using a walker

1. Slide the car seat as far back as it will go – if it is an electric seat, you can make it higher, or place a cushion on the seat if the seat is low
2. Ask the client to walk backwards until they can feel the car seat with the backs of their legs. Get them to put their hands on a suitable place on the car; if it is the door, prop the door with your body weight to keep it still and get them to sit as far back onto the car seat as they can
3. Move the walker out of the way
4. Get the client to move back into the seat as far as they can – you can use a scrunched-up slide sheet to reduce friction if needed
5. Ask them to lift their legs into the car – they may find it easier to get one in at a time. They can use a walking stick to push against the floor of the car to make it easier

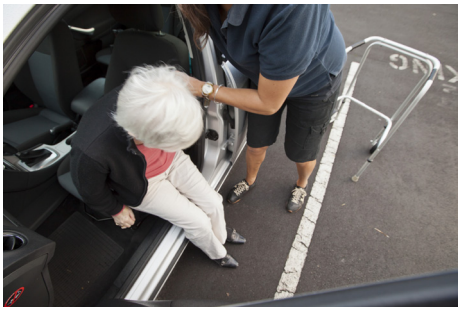
FIGURE 4.29

Transfer from a vehicle to a walking frame (Technique 21)

1. Place a scrunched-up slide sheet under client's buttocks to reduce friction

2. Ask the client to lift their legs out of the car

3. Client moves forward until their feet are flat on the ground



4. Carer positions walking frame in front of client

5. Client leans forward and stands up, pushing up from seat

6. Client moves hands to walking frame

Technique 22 Transfer from a vehicle to a wheelchair

Getting out of a car into a wheelchair

For this transfer, have a wheelchair ready. The procedure requires one carer and one slide sheet.

1. Slide the car seat back as far as it will go to allow maximum space to lift the legs out
2. Check that the seat back is fully upright
3. Ensure the client's wheelchair is close by but out of the carer's way
4. Ask the client to lift their legs out of the car. It is generally easier to move in small movements and move one leg at a time. If they have difficulty doing this, you can place a scrunched-up slide sheet under the buttocks to reduce friction
5. Get them to move forward until their feet are flat on the ground
6. Move wheelchair into position parallel to side of the vehicle (with brakes applied)
7. Client reaches across and places one hand on outer arm of wheelchair. They can push up with their hands on the car seat and the wheelchair arm
8. Client steps around to sit in the wheelchair.

Getting into a car from a wheelchair

1. Slide the car seat as far back as it will go – if it is an electric seat you can make it higher, or place a cushion on the seat if the seat is low
2. Remove wheelchair footplates before getting too close to the car – apply the brakes when in position, which should be parallel to the car and close in
3. Ask the client to stand and step around so in a position to be able to sit in the car – you can use the car seat or door as support while the client sits as described above
4. Alternatively, the client can reach across to the car seat for support, then stand and pivot ready to sit in the car. The inside leg should be forward and pointing towards the car – the client does not need to stand up fully for this transfer
5. If the client cannot stand and step around, another technique with assistance from one carer and specialised equipment (e.g. a slide board/banana board) can be used. The client would be assessed and trained in this manoeuvre by a therapist.

If a client is known to have difficulty getting in or out of vehicles, they should be referred to an occupational therapist or physiotherapist for assessment as soon as possible.

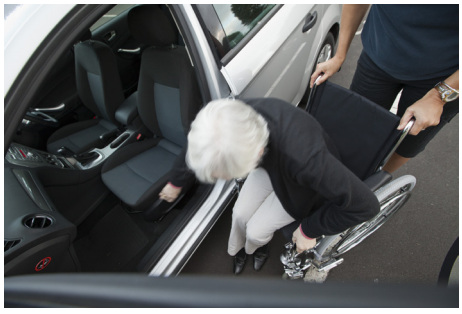
If the client is wheelchair bound and not very mobile, order a specialised taxi van. These vans use ramps to lift clients in wheelchairs into the vans, then they secure the

wheelchairs to the floor of the vans. For emergency retrieval, see the later section on emergencies (Section 4.7).

Some mobile hoists can be used for extracting clients from vehicles. This function would be useful for facilities with emergency departments.

FIGURE 4.29

Transfer from a vehicle to a wheelchair (Technique 22)

1. Place a scrunched-up slide sheet under client's buttocks to reduce friction	2. Ask the client to lift their legs out of the car
	
3. Client moves forward until their feet are flat on the ground	4. Carer positions wheelchair in front of client, parallel to side of vehicle
	
5. Client leans forward, puts hand on wheelchair arm, and stands up	6. Client moves across to sit in wheelchair
	

4.6 Using hoists

The techniques in this section cover client movements where hoists are used. The information about fitting slings covered in the first four techniques in this section is essential for all client movements where hoists are used.

As noted for the previous techniques, there should be a risk assessment prior to moving and handling that includes the client's current mobility and any other factors that affect the safety of the planned movement of the client. The risk assessment must also take into account how many carers are required to complete the task. This is particularly important in the community, where carers may be working in isolation.

If the risk assessment or client profile indicates that more than one person is required to hoist, that is what must happen. A robust risk assessment is essential and carers must use moving and handling techniques consistent with the risk assessment.

Points to consider with slings

- All slings must be checked prior to each use for rips or tears
- Check the safe working load, usually displayed as SWL, which must be written on the sling (SWL indicates the load to which the hoist will work)
- Check due date displayed for next maintenance check. Do not use if out of date
- Size – measure the length and width or girth of client. For length, move from the base of the spine upwards to check that the sling is long enough. For width/girth, check that the sling will reach past the client's arms to enclose them safely
- Once the sling size is known, write this in the relevant client notes and care plan
- For most sling types, the lower sling loops should be positioned so they cross over between the client's legs, which also helps to maintain the client's dignity
- Get the client to put their hands across their chest to reduce the risk of injury
- A disposable sling can be used many times with the same client before it is disposed of
- A shower sling can get wet
- If moving a bilateral above-knee amputee in a sling, use a specific amputee sling.

FIGURE 4.31

Standard slings

FIGURE 4.32

Fitting of sling so lower loops cross between client's legs

FIGURE 4.33

Client in sling with loops attached to hoist sling bar

Technique 23 Applying a sling using two rolls

1. Place a pillow under the client's head
2. Select the correct sling; for example, the client's head may need supporting
3. Roll the client on to their side, roll the same half of the sling and place along spine lengthwise behind them, position from base of the spine upwards
4. Roll the client back the other way, so now they are on one half of the sling
5. Unroll the rest of the sling, then roll the client back on to their back
6. Check that the client is correctly positioned on the sling, ready for hoisting
7. You may need to adjust the head support for comfort.

FIGURE 4.34

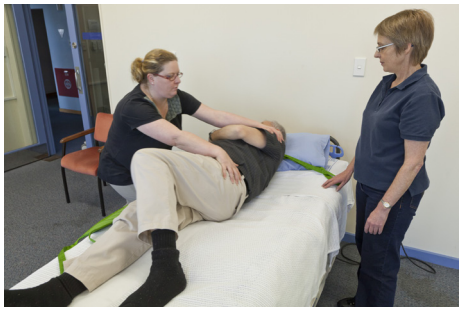
Applying a sling using two rolls (Technique 23)

1. Roll client on to their side and position sling

2. With top half of sling rolled into position, roll client on to their back

3. Prepare client to roll on to other side

4. Roll on to side so client is on top of sling



5. Second carer pulls through rolled half of sling

6. Sling straightened ready to roll client on to back

7. Client rolled on to back

8. Sling loops attached to hoist sling bar

Technique 24 Applying a sling using one roll

1. Roll the client on to their side
2. Fold sling in half with labels and handles on the outside
3. Position sling from the base of the spine upwards
4. If the sling has a neck seam, align seam with base of client's neck
5. There should be a gap between the sling and the client's body so that when they roll back their spine is in the middle of the sling
6. Take upper leg strap and feed the loop under the client's neck
7. Fold the upper shoulder loop/clip into the sling and roll entire upper portion of sling into space behind client's back. Roll client on to back
8. Take the loop or clip from under client's neck and pull smoothly towards you and down in the direction of the legs using a lunge; the sling should unroll underneath the client
9. Both carers pull the sling towards themselves to remove the creases
10. You may need to adjust the head support for comfort.

FIGURE 4.35

Applying a sling using one roll (Technique 24)

1. Roll client on to their side and fold sling

2. Position sling from base of spine upwards, feed upper leg strap under client's neck

3. Fold the upper shoulder loop/clip into sling and roll upper portion of sling into space behind client's back

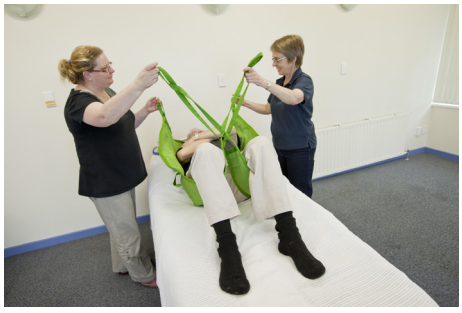
4. Flatten roll and turn client on to their back

5. Locate loop from under client's neck

6. Take the loop and pull smoothly towards you using a lunge

7. Both carers pull the sling towards themselves to remove the creases

8. Complete sling positioning, crossing leg loops between legs



Technique 25 Applying a sling to a client in a chair

1. Instruct the client to lean forward in the chair
2. Slide the sling down the back of the chair with the handles facing the back of the chair
3. If client cannot lean forward or is in a moulded chair, slide one slide sheet down their back and slide the sling in behind that to reduce friction and any damage to the skin
4. Ensure the bottom of the sling reaches the base of the spine. Remove slide sheets once the sling is in place. Do not have the client sit on the sling as they will drop lower during hoisting, which can be frightening and unsafe. Some slings have a pocket on the lower back that allows the carer to place a flat hand in it and position the sling appropriately
5. Put the leg straps under each leg one at a time. If the client is unable to lift their leg, either use a slide sheet to help slide the strap under or kneel in front of the client and place their foot on your thigh – this should ease the strap application
6. Bring hoist to the client, adjusting hoist legs to widen around the chair, and attach the sling to the sling bar preferably at sternum (chest) level
7. Ensure the sling bar is held and watched continuously so that it does not swing into the client's face
8. Hoist the client just high enough to be off the chair and encourage them to move slightly – this will alert the carer to any discomfort and enhance the client's confidence in the hoist. Check sling loops again at this point to ensure they are all on safely
9. Complete the hoisting process.

FIGURE 4.36

Applying a sling to a client in a chair (Technique 25)

1. Ask the client to lean forward in the chair

2. Place the sling behind the client

3. Ensure the bottom of the sling reaches the base of the spine

4. Check that the sling is positioned correctly

5. Put the leg straps under each leg one at a time

6. Bring hoist to the client

Technique 26 Applying a sling to a client on the floor

1. Roll client on to their side and position sling
2. Fold the upper loop into sling and roll upper portion of sling behind client's back
3. Push rolled half of sling under client
4. Roll client flat on their back and pull through rolled half of sling
5. Straighten each side of sling and locate loops
6. Ask client to bend their knees and pull loops through legs and across front.

FIGURE 4.37

Applying a sling to a client on the floor (Technique 26)

1. Roll client on to their side and position sling	2. Fold the upper loop into sling and roll upper portion of sling behind client's back
	
3. Push rolled half of sling under client	4. Roll client flat on their back and pull through rolled half of sling
	
5. Straighten each side of sling and locate loops	6. Ask client to bend their knees and pull loops through legs and across front
	

Using a mobile hoist

Mobile hoists are described in more detail in the 'Equipment for moving and handling people' section. Always check the manufacturer's or supplier's instructions for the specific hoist being used.

BOX 4.4

Parts of a mobile hoist

- **Boom** (goes up and down)
- **Sling bar**, spreader bar or yoke.
- **Legs** (move in and out)
- **Mast** – upright part of hoist
- **Handles** – for manoeuvring the hoist
- **Brakes** – only to be used for storage. Do not use brakes when hoist is in use as the hoist needs to find its own centre of gravity, otherwise it may tip over
- **Emergency stop button** (if hoist is not working, check it is not pushed in)
- **Emergency lower buttons** (you may need extra pressure to come down on older hoists)
- **Weight limit** (SWL)
- **Maintenance alert** – do not use if out of date.

Hoist brakes: Do not use the brakes on a mobile hoist at any point in a moving procedure, as the hoist needs to be able to move as a client is being hoisted, otherwise it may tip over.

Technique 27 Repositioning client in a chair using a hoist

You can use a mobile hoist or a mobile standing hoist to reposition the client in their chair. This technique usually needs two carers, one to operate the hoist and the other to make sure the client is lowered into a comfortable position. In a community setting, there may be some circumstances where one carer can manage. Only use a hoist if you have had training in how to use it.

Apply sling. Use slide sheets to assist with sling application if the client is unable to bend forward or is in a moulded chair or wheelchair. Make sure the client is sitting upright in the sling to eliminate or reduce the need for further repositioning.

1. Position the hoist and adjust the hoist legs to fit around furniture
2. Lower the sling bar over the client's sternum (chest)
3. Fit the shoulder straps on the shortest position and the leg straps on the longest position –these may vary depending on the sling design, the client's size and how upright they can sit
4. Hoist the client so they can be moved into the chair
5. Lower the hoist and at the same time guide the client into a comfortable position by:
    a. Standing behind the chair and using the handles on the sling (if available), or
    b. If the hoist has a tilting spreader bar, adjusting it to tilt the client into an upright position before you lower them into the chair
    c. Gently pushing back on the client's legs if appropriate
6. Detach the sling from the hoist and remove the sling.

FIGURE 4.38

Repositioning client in a chair using a hoist (Technique 27)

1. Apply sling to client and position the hoist	2. Check that hoist legs fit around chair
	
3. Lower the sling bar while holding bar to protect client's head	4. Attach sling loops to sling bar
	
5. Hoist client above chair	6. Ask client to bend their knees and pull loops through legs and across front
	

Technique 28 Sitting up in bed using a hoist

To use a hoist to sit a client, select the appropriate sling for the client and the task (e.g. mesh sling for bathing).

1. Apply the sling as described in Technique 22 or 23
2. Position the hoist over the bed and lower it so the sling bar is just above the client's chest
3. Attach the shoulder straps on the shortest position and the leg straps on the longest position (this may vary depending on the client's size and how upright they can sit)
4. Hoist the client to sit them up
5. Raise the back of the bed and position the client on the bed
6. Remove the sling.

FIGURE 4.39

Sitting up in bed using a hoist (Technique 28)

1. Apply sling and position hoist bar over client's chest	2. Attach sling to hoist bar
	
3. Raise the client so they are off the mattress	4. Raise the back of the bed
	
5. Position client on bed	6. Lower client and remove sling from hoist bar and client
	

Technique 29 Hoisting a client from bed to chair

1. Lie client as flat as can be tolerated
2. Apply sling, and record the size and type selected in the client's care plan
3. Ensure the path to chair is clear
4. Lower the sling bar to client's chest area; the sling bar must be managed at all times during the procedure to minimise the risk of the bar swinging into the client
5. Attach sling to the sling bar and slowly hoist the client just above the surface on which they are lying
6. Encourage the client to move around in the sling and get comfortable; this will facilitate confidence and comfort – check sling loops again at this point to ensure they are all on safely
7. Move the hoist over to the chair
8. When lowering, place one hand underneath the sling bar to protect the client from it. If the client is unable to reposition themselves in the chair, a second person must assist in positioning the chair while the client is being lowered
9. Remove the sling from the sling bar and take the hoist away before removing the sling
10. To remove the sling, reverse the steps in Technique 25. The sling must be removed to protect the client's skin integrity.

FIGURE 4.40

Hoisting a client from bed to chair (Technique 29)

1. Lower sling bar above client's chest	2. Attach sling to bar. Using hoist, slowly raise the client above the surface on which they are lying
	
3. Hoist client off mattress	4. Move hoist so client is over chair
	
5. Keep a hand on the sling bar whilst lowering the client	6. Remove the sling from sling bar and move before removing the sling from the client
	

Technique 30 Hoisting from the floor

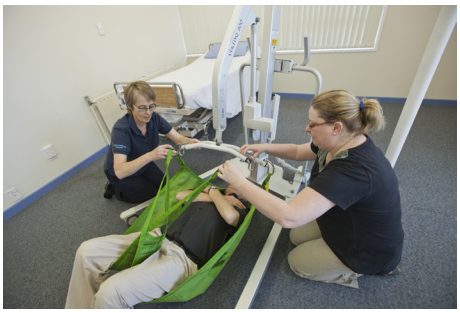
This technique uses a hoist (mobile or ceiling hoist) and a sling. If a mobile (floor) hoist is used, it must be suitable for lifting clients from the floor.

1. Move the hoist into position – it is best to bring the hoist in from the client's head end. If this is not possible, come from the feet end. The client's feet and legs will have to be lifted over the hoist legs so the sling bar can be positioned above the client's chest
2. Lower the boom to its lowest position so it is easy to attach the sling
3. Attach the sling
4. The client's bed should be brought to the area
5. Hoist the client from the floor and position them on the bed
6. Remove the sling by tucking as much as possible of the sling underneath the client on one side and either sliding it out from the other side or rolling client away from it.

A stretcher attachment may be needed (if available), depending on the client's condition or injuries, or alternatively an air-assisted jack can be used if available.

FIGURE 4.41

Hoisting a client from the floor (Technique 30)

1. Apply the sling to the client	2. Move the hoist into position
	
3. Lower the sling bar and attach the sling	4. Hoist the client from the floor
	
5. Move hoist to transfer client over bed	6. Lower client to bed
	

4.7 Emergency situations

Special considerations may apply for moving people in emergency situations. In this final part some specific points regarding emergency situations are outlined. Readers seeking more detailed information are encouraged to consult *The Guide to the Handling of People* (Chapter 13) and the report on *Guidance for Safer Handling During Resuscitation in Healthcare Settings*.[2]

FIGURE 4.42

Assessing an emergency situaton

Organisations should develop their own protocols for emergency situations. These protocols should be developed in conjunction with resuscitation specialists and other emergency staff to clarify when lifting clients is necessary. This might include a person having a cardiac arrest in a vehicle and other life-and-death situations. The protocols should define what situations are most likely to take place that require an emergency response, and situations where it is permissible for staff to lift clients (such as when there is smoke in a room or an earthquake). A fallen person is not necessarily an emergency, but the outcome of the fall could be. Use records of previous incidents, local staff and relevant experts to help identify the emergency situations that could happen. Even where there is no history of emergency situations happening, there is still a need to risk assess and plan for such events.

Planning for an emergency situation and developing a protocol that is known by staff will increase the likelihood of it being well managed, and ease panic when these situations occur (see Box 4.5). Moving and handling in an emergency situation must be risk assessed like any other moving and handling task. It is also important to include potential emergency situations in your local training.

Part of the preparation for emergency situations is the retrieval of clients. A recent report clearly documented the issues around the retrieval of clients who have fallen and particularly notes injuries caused by inappropriate moving and handling.[3] Lack of access to flat lifters and hoists was one of the problems noted for clients, with spinal injuries occurring as a direct result of inappropriate retrievals.

For example, if during a cardiac arrest a client falls to the floor, the arriving 'resuscitation team' may decide to lift the client onto the nearest bed. There is no clinical reason for this and the floor is in fact the better surface on which to commence CPR. However, a very difficult or unusual intubation could result in the need to lift the client to a higher surface to allow successful intubation or the client may not survive. The need to lift clients should be rare. If lifting is needed, use appropriate lifting equipment wherever possible.

2. See Sturman (2011) and Resuscitation Council (2009) in the references list.
3. See National Patient Safety Agency, 2011.

BOX 4.5

Planning for emergency situations

At Waitemata District Health Board all crash trolleys have slide sheets on them and are part of the daily checklist to make sure they stay on them. This means in an emergency situation staff don't have to look for equipment to move patients out of tight spots in order to resuscitate them and this has been viewed as a positive addition by the staff regularly attending arrests.

There is an emergency retrieval board in the hydrotherapy pool area and a training DVD has been made by us to educate staff on how to deal with an arrest in that area. Other areas we are looking at are birthing pools in maternity and getting people out of vehicles.

Source: Moving and handling coordinator, Waitemata District Health Board

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(describes high-risk techniques that should not be used).