

# Safe Patient Lifting Guide



# Mangar Health

**Established in 1981, Mangar Health is a world leader in the design, manufacture and supply of inflatable moving and handling equipment. We are an award-winning company that serves a global healthcare market.**

Our inflatable lifting cushions, called Camel and ELK, are used in healthcare settings and emergency services across the UK, Europe, the USA, Canada and Australia.

Moving people who have fallen is a regular part of the working day for many healthcare professionals and the repetitive nature of the work can cause serious back injury or musculoskeletal disorders.

## **Who uses Mangar Lifting Cushions?**

The ELK and Camel have been used for more than 15 years in a range of settings, such as care homes, housing associations, hospitals, telecare response teams, emergency services and in the community.

The Mangar lifting cushions reduce the risk of injury to healthcare professionals including care assistants, nurses, occupational therapists, physiotherapists and paramedics.

The controlled, safe and dignified lift provided by the lifting cushion means change the end of this sentence to: it can be used anywhere someone might fall and is particularly useful in the following environments:

- **Ambulance** and first response services

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- **Elderly** Care

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- **EMI** nursing and care homes

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- **Rehabilitation** facilities

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- **Dementia** Care

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- **Bariatric** Care

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- **In the home**

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# Key Benefits of Lifting Cushions

## The benefits of using the Camel and ELK:

- **Reduce** the risk of musculoskeletal (MSK) disorders
- **Protect** staff
- **Reduce** costs
- **Maintain** patient dignity

We understand that hazardous manual lifting techniques, associated with moving and handling, can not only be distressing and undignified for the person who has fallen, but can also increase the risk of injury to workers.

The Mangar ELK and Camel lifting cushions are practical, efficient manual handling products that are used across the world. Inflated by an Airflo 24 Compressor, a fallen person can be lifted in minutes.

Their innovative design and portability means the lifting cushions can be used anywhere, inside or out.

### Easy to use

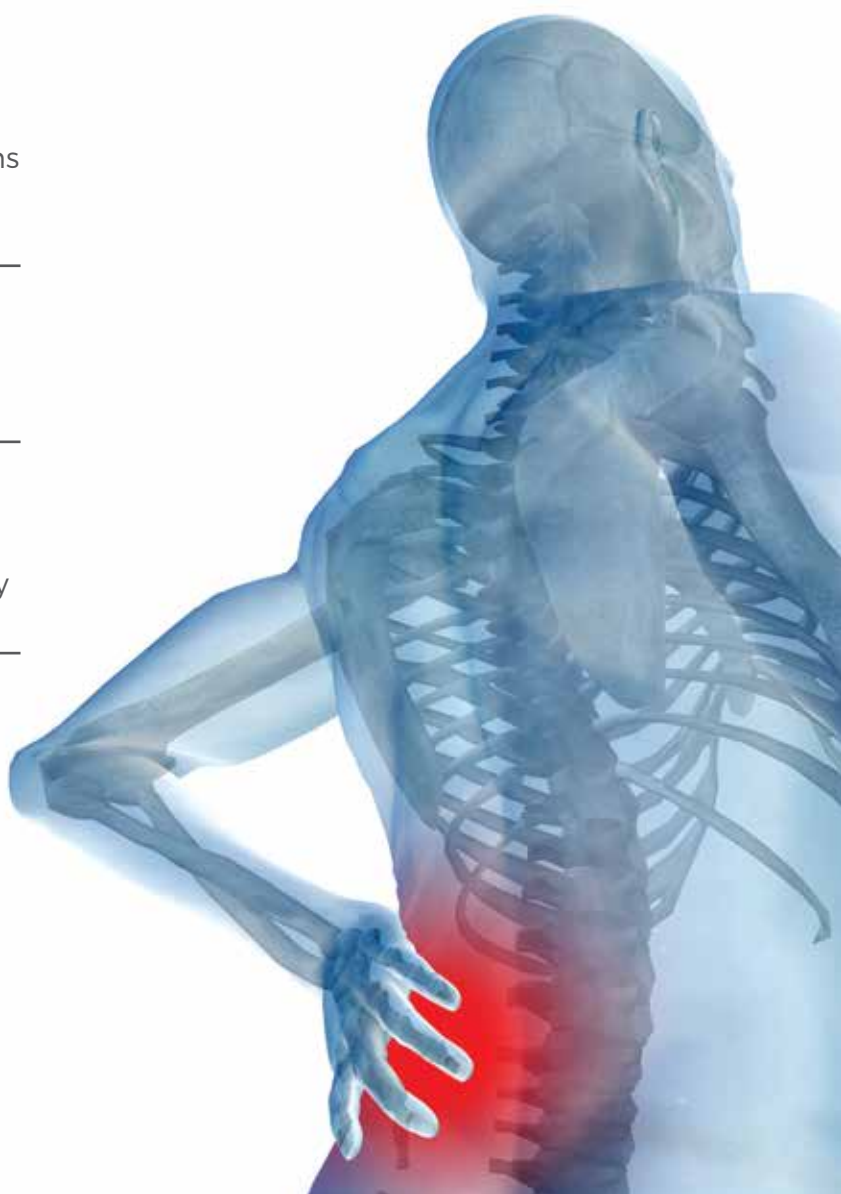
No additional accessories are required to complete a lift - one size fits all. Very little staff training is required.

### Easy to clean

Lifting cushions are made with a durable Riverseal® material with an anti-microbial coating. They are cleaned using a proprietary nonabrasive mild liquid cleaner.

### Easy to transport

Lifting cushions are battery powered, lightweight and portable.

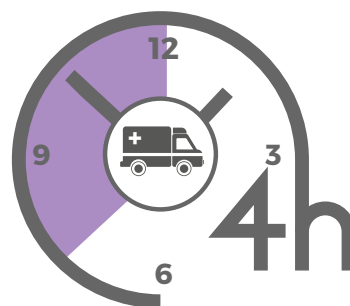


# Care Homes and Senior Living Environments

The ELK and Camel have been used for more than 10 years in a range of senior living settings, such as care homes, assisted living facilities, domiciliary care and by telecare response teams. Manual handling is a regular part of the day for those working in the care sector and the repetitive nature of lifting means that UK nurses, care workers and nursing assistants combined account for 11% of total reported injuries (HSE).

West Midlands Ambulance Service has created a checklist for care homes, called ISTUMBLE, which gives guidance on what to check for before performing a lift. It is agreed that leaving a resident aged over 65 on the floor for more than an hour (Long Lie), is associated with high mortality rates.

“20% of patients admitted to hospital as a result of a fall have been on the ground an hour or more. 50% of these will die within six months”. (Vellas et al)



Long Lie associated with  
**HIGH MORTALITY RATES**

## Putting resident care first

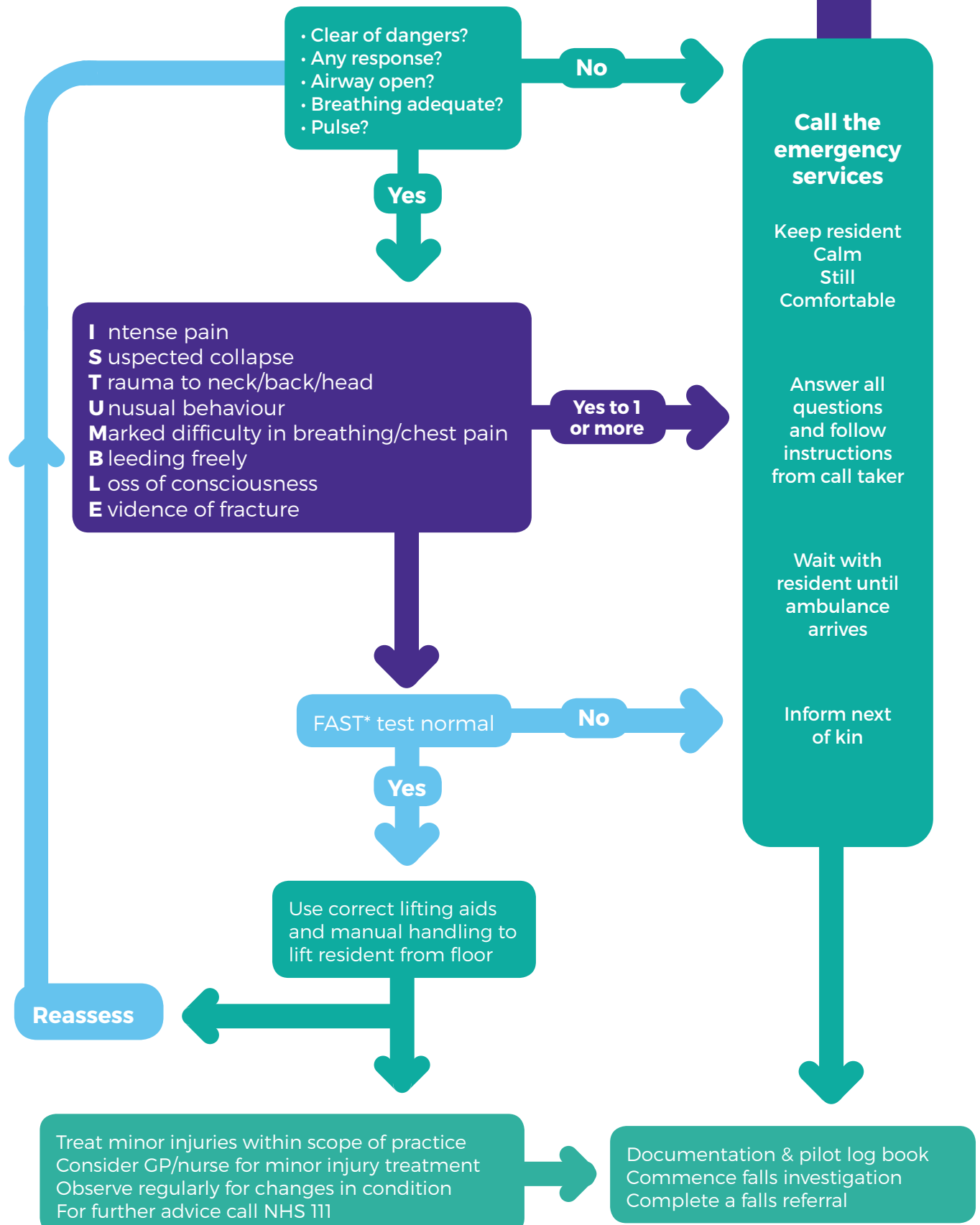
Every day more than 1,000 residents living in a UK care home will fall. More than 45% are uninjured and do not need transferring on to hospital. (Cardiff University 2010). Often, an ambulance will be called to check on the resident and get them back on their feet but unfortunately, there can be a long wait until a paramedic arrives.

Using the Camel and ELK provides a controlled, dignified lift for anyone who has fallen. Once a resident is confident they will be quickly and safely lifted if they fall, wellbeing is improved and a fear of falling is less likely to develop.

# When should you call an ambulance?

The Ambulance Service in the UK issue guidelines on when to call the emergency services.

This one, called ISTUMBLE, is used by West Midlands Ambulance Service NHS Trust.



# Emergency Services

Every ambulance in England and Wales carry an ELK or Camel lifting cushion. The equipment was originally introduced into the NHS ambulance service to reduce the impact of musculoskeletal disorders through lifting on paramedics and ambulance technicians. A case study from South West Ambulance saw a £300K reduction in sickness costs in the first year after the introduction of ELKs into the fleet.

The Camel and ELK are powered by Airflo compressors. The compressors can be charged while stowed on ambulances in specially designed stowage units or using in-vehicle chargers, ensuring they are always ready to use.

## Not just a lifting cushion

Increasingly, ambulance crews are finding lots of different ways to use the inflatable cushions including:

- to push a patient away from the wall into a more manageable position.
- as a bariatric seat for patients who can only walk a few steps.
- to assist when lifting someone on a stretcher.
- lifting someone who is stuck in the bath.
- A lifting cushion was used at road traffic collision to help lower boarded patients from the roof of a car, down to a correct working height to transfer the patient to a stretcher.

Using lifting cushions not only reduces the risk of staff developing musculoskeletal injury but also the costs associated with absenteeism, including overtime payments, recruitment through loss of staff and compensation claims.



# Consequences of injury

Performing a safe lift is vital for both the wellbeing of the fallen person and the healthcare professional. Injuries among healthcare professionals can be costly not only to employers and employees but also can negatively impact the quality of care that a patient may receive.

## Consequences for the employer

When an employee is affected by a musculoskeletal injury the impact on the employer can be significant as skilled, experienced staff take time off to recover.

**The financial implications, such as compensation claims and human resource costs, include:**

- **Recruitment** - advertising, interviewing and background checks
- **Enhanced** fees for agency personnel
- **Overtime** payments
- **Training** of new staff
- **Reduced** productivity as new staff learn the job

## Consequences for the employee

Evidence suggests repeated manual lifting is a leading cause of musculoskeletal disorders in healthcare workers.

**Consequences for employees are:**

- **Ongoing pain** suffered through a musculoskeletal disorder
- **The loss** of their ability to perform duties
- **Time off required** to recover and recuperate, often resulting in reduced earnings
- **No longer able to work** in a healthcare or moving and handling environment and require new training
- **May need** to take early retirement

## Consequences for the patient

In the UK, 50% of adults over 80 will experience at least one fall a year (HSE) and the impact can be considerable causing injury, psychological difficulties and social isolation. Lifting fallen people safely and with dignity is essential to managing future fears. If a patient is dropped, or hurt, during a manual handling procedure, further complications and potential hospitalisation are likely.

Research by the American Journal of Epidemiology shows the fear of falling in the elderly will subsequently reduce their quality of life. Fear of falling among older people occurs in approximately 30% of those who have never fallen and 60% for those who have fallen previously.

The patient becomes more dependent on others and less mobile, and begins to cut their daily activities. As the fear of falling increases and activity diminishes, muscle strength weakens causing more and more falls. Falls are often considered a contributing reason for admission to a nursing home.

# ELK

## Lifting Cushion

The Mangar ELK is a lifting cushion designed to lift the frailest individual to a plus size or bariatric patient from the floor in a safe and dignified manner.



### Technical Specifications

Maximum user weight	450 kg / 980 lbs
Maximum height	22" / 56 cm
Minimum height	Flat
Seat depth	20" / 50 cm
Width	22.5" / 57 cm
Cushion weight	3.6 kg / 8 lbs
Compressor weight	4 kg / 9 lbs

### Stowage Board

The new Stowage Board is designed to hold the Airflo 24 securely in an emergency services vehicle, keeping it on charge when it is not in use.



- **Reduces the risk** of musculoskeletal injuries and the associated costs
- **Provides a safe**, dignified lift
- **Ideal for** confined spaces, such as bathrooms or hallways
- **Can be used** inside or out, including when travelling or on day trips
- **Does not need** a LOLER certificate
- **Lifts** up to 450 kg (70 stone)
- **Easy to use**, with minimal staff training required
- **Battery powered** and portable
- **Designed to lift** a person from the floor with the help of only one carer
- **Easy** to store
- **Easy** to clean



# Camel

## Lifting Cushion

With an inbuilt backrest, the Mangar Camel is a lifting cushion that offers a fully supportive lift for a person up to 700 lbs with minimal moving and handling requirements.



### Technical Specifications

Maximum user weight	320 kg / 700 lbs
Maximum height	21.5" / 55 cm
Minimum height	Flat
Seat depth	19" / 48 cm
Width	28" / 71 cm
Cushion weight	6 kg / 14 lbs
Compressor weight	4 kg / 9 lbs

### Wipes

Mangar multi-purpose disinfectant wipes are alcohol and chlorine free and are compatible for use on all Mangar products.



- **Reduces the risk** of musculoskeletal injuries and the associated costs
- **Provides a safe**, dignified lift
- **Lifts** up to 320 kg (50 stone)
- **Suitable for** plus size or bariatric patients
- **Can be used inside or out**, in public areas and care home gardens
- **Does not need** a LOLER certificate
- **Easy to use**, with minimal staff training required
- **Battery powered** and portable
- **Designed to lift** a person from the floor with the help of only one carer
- **Packs away** into a compact bag

# Using the ELK Lifting Cushion

## Assess

The lifting cushions can be used once you have established the fallen person is uninjured but needs help to return to their feet.

## Position

From the recovery position, the ELK is folded under itself and positioned parallel with the person's belt line. The person is then rolled onto their back and the ELK is unfolded so that it is lying flat underneath them.

If the person is able to sit, the ELK is folded under itself and the patient asked to lean to one side while the cushion is positioned under them. They then lean in the other direction and the ELK is unfolded, ready for inflating.

Once the ELK is in place, the person is encouraged to sit up and can be assisted using recognised moving and handling techniques if required. The person needs to sit centrally on the ELK, as close to the back as possible. Once the person is in the seated position, and with arms folded, the carer gives support from behind for the duration of the lift.

## Inflate

Simple to set up, lifting cushions inflate at the touch of a button, using an Airflo 24 compressor. The four coloured and numbered airlines are simply connected to each section of the lifting cushion.

The handset is operated by pressing and holding numbered buttons in sequence. The Airflo will stop automatically once each section is fully inflated.

Three sections will usually be sufficient to enable transfer but a taller person may need all four.

## Transfer

The person can be helped to a stand or side transferred to a chair once the lift is completed. The ELK can also be used with stabilising bars when lifting a stretcher.

**When using lifting cushions always follow your organisation's manual handling guidelines.**



# Using the Camel Lifting Cushion

## Assess

The lifting cushions can be used once you have established the fallen person is uninjured but needs help to return to their feet.

## Position

In many cases, the patient is able to shuffle backwards onto the Camel independently. If this is not possible, from the recovery position, the carer places the Camel directly behind the person with the Camel badge in line with their head. The carer should then position a slidesheet lengthways under the person to enable them to be easily manoeuvred onto the Camel. The slidesheet is then removed.

## Inflate

Simple to set up, lifting cushions inflate at the touch of a button, using an Airflo 24 compressor. The four coloured and numbered airlines are simply connected to each section of the lifting cushion.

The handset is operated by pressing and holding numbered buttons in sequence. The Airflo will stop automatically once each section is fully inflated.

First, press 1 on the hand control to partially inflate the backrest until the fallen person is comfortable.

Then press 2 and 3 to inflate the Camel. This is usually sufficient but a taller person may need all four sections inflated.

Finally, press 1 again to fully inflate the backrest and bring the person to an upright position.

## Transfer

The person can be helped to a stand or side transferred to a chair once the lift is completed.

**When using lifting cushions always follow your organisation's manual handling guidelines.**



# What our customers say

## **Richmond Village Retirement Homes**

"What I particularly like about the Camel is that we can just grab it and run."

## **Perry Tree Centre, Birmingham**

"The Camel is the most dementia friendly lifting equipment available."

## **ARV Independent Living Centre Villages, Australia**

"I can't recommend this piece of equipment highly enough."

## **Heritage Property Management, USA**

"Workers compensation payouts dropped by 80%."

## **Carecall, Stockport**

"Well trained, friendly staff using the right equipment enables Carecall to deliver a first class service day in day out."



# Contact us today

For a FREE demonstration call **0800 2800 485**.

For a **FREE DVD** email [sales@mangarhealth.com](mailto:sales@mangarhealth.com)

For more information visit  
[www.mangarhealth.com](http://www.mangarhealth.com)

