

**Working with CCGS, the
Ambulance Service and Care
Homes to reduce the cost of Falls**

The Case Studies

North Manchester CCG

Aneurin Bevan Health Board

Wandsworth CCG



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Inappropriate callouts cost the NHS £50 million annually

The Care Act (2014) advocates the need to safeguard people from harm with a focus on achieving better outcomes for anyone with care needs. There is evidence to suggest that many older people are unnecessarily admitted to hospital, which not only has cost implications for the NHS, but also has an impact on the ambulance services called to transfer them to hospital. As all NHS services juggle priorities in a desperate bid to help the patients they serve, the situation continues to deteriorate.

Of the over 7 million ambulance calls outs across the UK every year, 10% are to fallen people and around 150,000 of these are to care home residents. Residents are generally reluctant to be admitted to hospital as admission often results in distress, confusion and anxiety, particularly for anyone living with dementia.

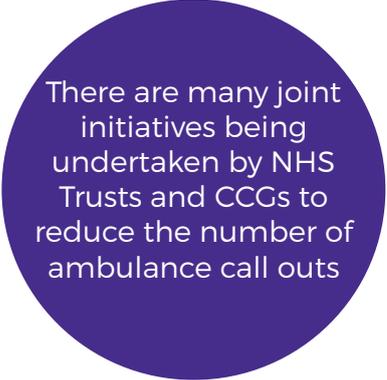
Interestingly, 45% of residents that fall are uninjured and do not need hospital attention. For the sake of the resident and our stretched NHS resources, it is vitally important residents are supported to achieve better outcomes if uninjured following a fall, without resorting to calling an ambulance or a hospital admission.

There are many joint initiatives being undertaken by NHS Trusts and CCGs to reduce the number of ambulance call outs to care homes to enable residents to have better outcomes and to safeguard them from unnecessary hospital admissions.

The following case studies follow product trials in:

- North Manchester CCG
- Aneurin Bevan Health Board
- Wandsworth CCG

The case studies examine how CCGs and Health Boards have identified ways in which they could achieve better outcomes for residents who may have had a fall in their care homes. This was achieved by introducing more dignified and appropriate falls equipment, supporting care home staff in moving uninjured residents and so reducing the need to call an ambulance for assistance. The reduction in ambulance calls has implications for NHS Ambulance Trusts and Clinical Commissioning Groups, in that millions of pounds could be saved every year if the CCGs could support care homes to have the Mangar falls equipment to aid in the moving and handling of residents following a fall.



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Background - Today, 1,000 people living in a care home will fall

Research shows that every day 1,000 residents living in care homes in the UK will fall, and more than 45% are uninjured and do not require transportation onto hospital. (Cardiff University, 2006). The NHS Ambulance Trusts are charged with reaching high priority calls within 8 minutes and are often put in the unfortunate position of needing to classify uninjured residents who have had a fall in care homes as low priority. This means residents are regularly left on the floor for up to 4 hours or more. In July this year, NHS England wrote to all CCGs to ask for their support with 12 priority areas to assist with building resilience to winter pressures. One of those priorities was the Ambulance Response Programme, which highlights the issue of long wait times for non-urgent patients.

In North Manchester there has been instances of a 4-6 hour wait before an ambulance has been able to attend an uninjured resident. Leaving a resident on the floor for more than an hour can have implications both physically, socially, physiologically and psychologically. Some of the complications cited associated with lying on a hard surface for long periods of time are hyperthermia, pressure sores, kidney failure or renal failure. (ROSPA 2017). In addition to this, being left on the floor in a communal area has implications on the resident's dignity, and often can be very distressing for both the resident involved and the other residents around them.

Promoting dignity and safeguarding residents from harm should be a priority for all CCGs and Local Authorities. Better outcomes and health benefits are ensured when moving a resident who has had a fall within an hour. CCGs and Local authorities are constantly identifying ways in which ambulance calls out to care homes can be reduced.

They will regularly review this as part of their compliance quality and monitoring processes and falls and ambulance calls out are often some of the key areas explored.

Avoiding Hospital Stays and the Associated Costs

The Nuffield Trust's Think Tank reports avoidable stays in hospital costs the NHS £330m a year, with an average of £135,000 a day. At least 45% of ambulance call outs to care homes are to uninjured residents, equating to 450 people a day. With an overnight stay in hospital costing an average of £400, that's a potential £180,000 of avoidable cost...every day.

Paramedics do not know the medical history of the resident they are moving and may decide to transfer onto hospital if health checks are not in line with the expected standard measures. Care home staff are in a much better position to assess their residents' health and make decisions regarding hospitalisation based on the individual's normal level of health. However, this will depend on the care staff's knowledge and skills in achieving this. In response to assisting care homes staff to ensure that they only call an ambulance when necessary, the West Midlands Ambulance Service introduced the Post Fall Assessment pathway and ISTUMBLE guidelines. This pathway and guidelines enable care home staff to make an assessment, which will enable them to determine if the resident has been injured or has suffered more serious illness or disorders that have led to the fall.



Project Objectives

The CCGs and Health Board that trialled the equipment had 3 common objectives:

- **To focus** on enabling residents to have a better outcome, whilst at the same time reducing the cost implications and the number of callouts to the ambulance service by care homes to move uninjured residents.
- **To empower care home staff** to move residents safely following the Post Fall Assessment Pathway and ISTUMBLE (page 12) guidelines advocated by the West Midlands Ambulance Service to ensure that only uninjured residents are moved.
- **To promote moving and handling aids** that enable care home staff to achieve an outcome, which promotes a more dignified approach to moving residents following a fall.



The North Manchester Care Home Project

The first trial started in August 2016 and was managed by Sophie Wallington, an Advanced Physiotherapist Practitioner from an acute hospital provider in North Manchester.

After an initial meeting with Mangar Health, a group of occupational therapists and physiotherapists assessed the Camel and ELK inflatable lifting cushions against the criteria required to provide suitable falls equipment in care homes.

They found the ELK suitable for their care home population for a number of reasons, including:

- **It can be used in confined spaces** where a full body hoists are not always accessible
- **It can be used** inside and outdoor
- **The ELK is fully portable** and isn't constrained by needing to be near an electric socket.

North Manchester selected the Mangar ELK as their moving and handling cushion of choice within a care home setting.

The next step was to trial the ELK moving and handling cushion in selected care homes in the North Manchester area. The care homes selected were chosen because of their high propensity to call an ambulance when a resident falls, whether they are injured or not.

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North West Ambulance Trust provided data which identified the top 10 care homes in the area who had called an ambulance to move uninjured residents from the floor. These residents needed no medical intervention or hospitalisation.

Each of the 10 care homes were given a Mangar ELK to trial from in August 2016.

The success of the trial was dependent on care home staff feeling comfortable about moving fallen residents and performing an assessment to determine whether or not an injury had occurred. All participating care homes were given training on how to implement the Post Fall Assessment pathway, ISTUMBLE which are guidelines advocated by the West Midlands Ambulance Service and used widely by paramedics in the UK before performing a lift.

Further product training was then completed on the ELK lifting cushion and the trial began.

Feedback

Very quickly, feedback was positive:

“This equipment is an absolute godsend. We’ve used it 20 times at least, preventing 999 on every occasion. Residents are happier, families are much happier and the staff find it easy and safe to use.”

Daniel Kelly, Manager at Chestnut House Care Home

“We really like it, staff like it and the ambulance was not called out to support us on any occasion. Really good piece of equipment and we are pleased we are able to use it. Simple to use and feels really safe to use with our residents.”

Hannah Jackson, Manager at Lightbowne Hall Care Home

“We are using the ELK between 2-3 times per week. Staff love it, it’s very easy to use and more dignified for residents, especially in communal areas. The unit has never failed, no problems.”

Jacqueline Van Zandt, Manager at Wellington Lodge

Financial Outcomes

During the trial period, based on published falls data, the **expected ambulance costs** for picking up uninjured residents in the 10 trial North Manchester care homes would be:

The combined resident numbers in the care homes trialled	427
Average falls per year*	213
Uninjured fallers (213 x 45%)	95
Ambulance cost to pick up uninjured fallers (£300 x 95) per annum	£28,700

The following are the **actual cost** savings during the trial period

Recorded use of ELK instead of calling an ambulance over 5 months	123
Pro rota to 12 months	(123/5x12)
	295
Ambulance cost would have been (£300 x 295)	£88,560

Cost Savings

Ambulance call out costs avoided	£88,560
ELK cost (£1K x 10 care homes)	£10,000
NHS Saving over a year	£78,560

*Based on 50% of over 80s falling at least once a year (often higher in care homes) – (Ref HSE)

Next Steps

The trial continues with a further 11 care homes taking part in the project across Manchester and with the first year's full data to be released later this year.

The Care Home and CCG project continues with more trials to be identified and planned regionally and nationally to ensure that more robust data relating to the outcome of uninjured residents following a fall are obtained, as well as the cost implications associated with the reduction of unnecessary ambulance call out.

Participating Care Homes

With special thanks to Acacia Lodge, Alexian Brothers Care Home, Blackely Premier Care, Chestnut House, Eachstep, Israel Sieff, Lightbowne Hall, Oakbank, View Park and Wellington Lodge for participating in the study.

Aneurin Bevan Health Board and Welsh Ambulance Trust

This trial was assessed by Angela Powell Acting Senior Nurse Quality & Patient Safety at Aneurin Bevan Health Board. The trial's aims and objectives were:

- **To reduce the number of calls** for Falls to Ambulance Service that are non life threatening
- **Reduce the number** of avoidable hospital admissions
- **To improve** patient care
- **To improve** the management of falls in care homes
- **To manage falls safely** by care home staff
- **Measure the effectiveness** of the Protocol and use of lifting aid

Methodology

12 care and nursing homes took part in the trial, covering all Local Authority areas in the Aneurin Bevan Health Board region. Key staff were identified to pilot the project within the care homes and follow the fall protocol agreed.

All staff were trained how to use the lifting aids and introduced to the ISTUMBLE algorithm to ensure residents were assessed carefully for injury.

Homes were asked to submit retrospective data of falls in the previous year and to collect data once lifting equipment was installed.



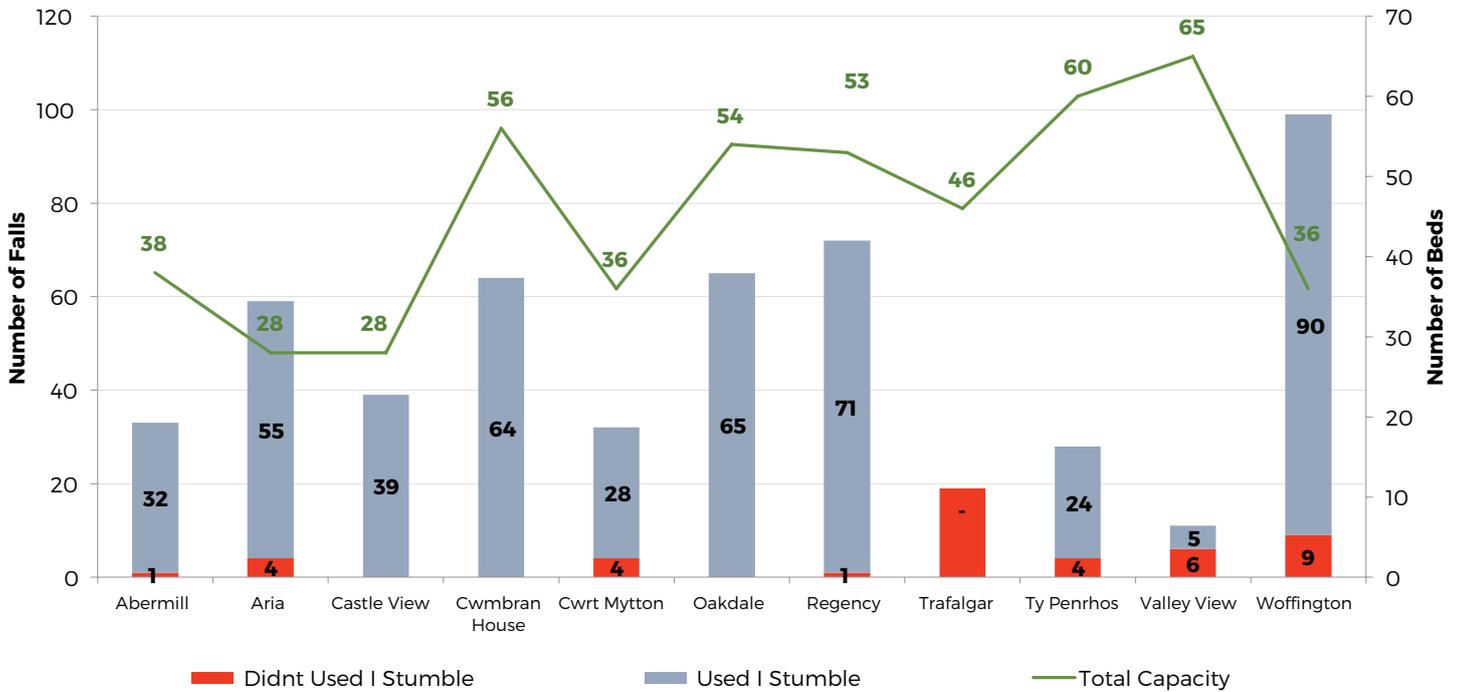
Retrospective Findings

The data collected prior to the lifting equipment being introduced was as follows:

- Total 1,165 falls in 2015/16 recorded by participating Care Homes
- 322 were 999 calls:
 - 20% - 63 resulted in hospital admissions
 - 38% - 122 resulted in A&E admissions
 - 42% - 137 were treated on site by ambulance crews

Using the fall protocol

The data shown below is for the first 6 months of the pilot. Only one home has experienced difficulties in submitting data. Care home staff have used the protocol for 91% of all falls recorded. 3 of the homes have used the protocol for 100% of all falls recorded



Calling 999

During the first six months of the trial period, there were 521 falls recorded by care homes. 401 of those were safely managed by care home staff using ISTUMBLE and lifting equipment. The 120 that required a 999 call being made resulted in:

- 39% (47) residents were treated on site
- 35% (42) residents were conveyed to A&E

Outcomes

Based on a reduction of 353 999 calls

- 526 Ambulance hours saved
- Improved Patient Care.
- Better patient outcomes

Financial outcomes

353 calls at £300 ambulance cost over 6 months

£105,900

Likely cost over 12 months

£211,800

Investment cost of 12 ELKs

12,000

Cost Saving to NHS over 12 months

£199,800

Supporting Information

Wales Ambulance Service recently trialled a similar project in Bridgend, South Wales. Anecdotally, initial findings suggest a 55% reduction in ambulance calls outs to uninjured residents in the trial care homes. Further research will be completed later this year.

Wandsworth CCG

Wandsworth CCG has recently started a trial with 20 care homes in their region. The decision-making factors were based on the need to reduce the cost of hospital admission, as much as inappropriate ambulance call outs.

Introducing the ISTUMBLE falls protocol together with the Mangar ELK lifting cushions was based on the following analysis.

Cost Analysis

Wandsworth CCG and London Ambulance Service provide support to 20 care homes and 1,000 beds. Over a 12-month period in 2016/17, call outs to residents cost:

- 150 conveyances (attendance without a need to transfer to hospital) @ £211 = £31,650
- 139 transfers from care home to hospital A&E @ £268 = £37,252
 - 45% of these are uninjured and do not need to be transferred = £16,763

Total cost to the ambulance service **£48,413**

In addition, avoidable* A&E admissions at £100 per resident, and overnight stays @ £300 per resident, equate to:

62 avoidable A&E admissions @ £100 £6,200

31 (based on 50% of avoidable admissions) avoidable overnight stays @ £300** £9,300

Total cost to the hospital **£15,500**

Total annual cost to the NHS **£63,913**

Investment Cost in ELKS 2017/18 **£18,000**

Saving **£45,913**

Avoidable costs

*Cardiff University data suggests 45% of residents transferred to hospital are uninjured and do not require hospital care. Paramedics do not know the medical history of the resident they are moving, and may decide to transfer onto hospital if health checks are not in line with the expected standard measures. Care home staff are in a much better position to assess their residents' health and make decisions regarding hospitalisation based on the individual's normal level of health. However, this will depend on the care staff's knowledge and skills in achieving this.

**Age Concern state an overnight hospital cost is £303, however the Nuffield Trust suggest this should be £400.

The ELK and Camel moving and handling equipment

The benefits of using the Camel and ELK:

- **Reduce** the risk of musculoskeletal (MSK) disorders, protecting staff from injury
- **Reduce** costs associated with staff injury
- **Maintain** patient dignity

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 and efficient manual handling products that are used across the world.

Inflated using 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.

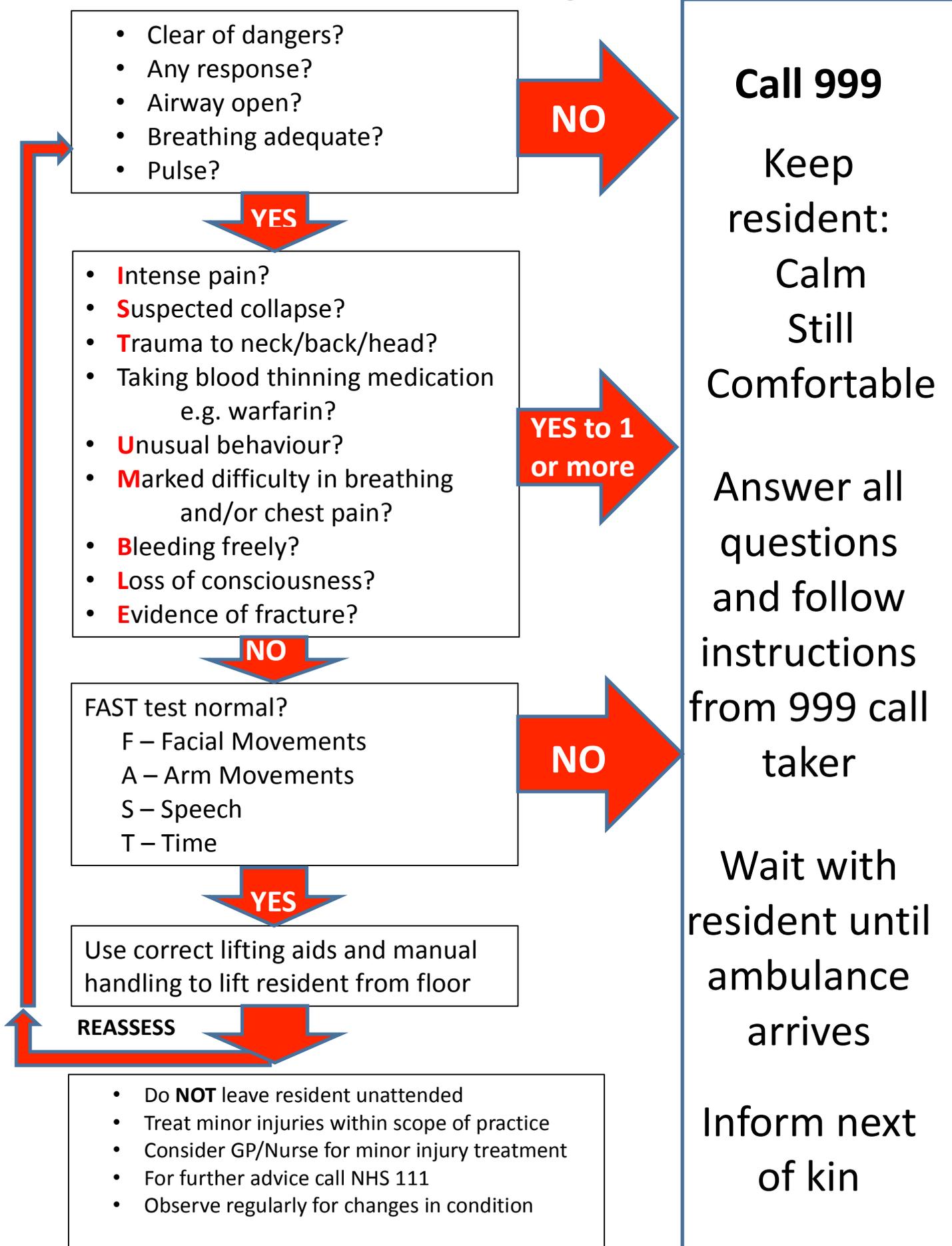
Easy to clean

Lifting cushions are made with a durable Riverseal® material with an anti-microbial coating.

Easy to transport

Lifting cushions are battery powered, lightweight and portable.





ISTUMBLE

Intense Pain

- New pain since fall, including:
- Headache, chest pain and abdominal pain
- Consider both pain from injury caused by fall or medical causes

Suspected Collapse

- Ask resident if, before their fall, they:
 - Tripped
 - Collapsed
 - Felt Dizzy
 - Felt Nauseous

Trauma to Neck/Back/Head

- New pain in neck/back/head following fall
- New lump or dent in head with/without bleeding
- Any new numbness/paralysis in any limbs

Unusual Behaviour

- New confusion
- Acting differently to normal self e.g. agitated, drowsy, quiet
- Difficulty speaking e.g. slurred speech, words mixed up, marked stuttering

Marked Difficulty in Breathing/Chest Pain

- Severe shortness of breath, not improved when anxiety is reduced
- Unable to complete sentences
- Blue/pale lips, blue fingertips, becoming lethargic or confused

Bleeding Freely

- Free flowing, pumping or squirting blood from wound
- Apply constant direct pressure to injury with clean dressing (elevate if possible)
- Try to estimate blood loss (per mugful)

Loss of Consciousness

- Knocked out
- Drifting in and out of consciousness
- Limited memory of events before, during or after fall
- Unable to retain or recall information/repeating themselves

Evidence of Fracture

- Obvious deformity e.g. shortened/rotated, bone visible, severe swelling
- Reduced range of movement in affected area
- Unusual movement around affected area

In all **999** cases remember to keep resident: CALM, STILL & COMFORTABLE
If any bleeding is present, apply constant direct pressure with a clean dressing

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