

debates and issues

Home care takes on the challenge of falls at home: innovative practice

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Falls are prominent among the external causes of unintentional injury. Every year, about a third of adults in England over age 65 who live at home have at least one fall, and half of these have frequent falls. Falls are an urgent public health concern because of their medical and economic consequences, and with a rising older population, they are costly for health and care systems. This article describes an innovative initiative in the South-West of England in which a private home care provider and a local ambulance service collaborated to develop new training, protocols and suitable equipment in order to better manage falls.

Key words falls • reducing inappropriate admissions to hospital • protocol
to assess injury post-fall

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Introduction

Reducing falls is a global priority and falls are prominent among the external causes of unintentional injury. Falls are commonly defined as inadvertently coming to rest on the ground, floor or other lower level, excluding intentional change in position to rest on furniture, walls or other objects (WHO, 2017). This article describes a recent initiative in the South West of England in which a private home care provider and a local ambulance service collaborated to develop new training, protocols and suitable equipment, with impressive results that could be widely replicated.

As in many other countries, the National Health Service (NHS) in the UK is under intense pressure, especially during the winter months, with emergency department admissions up, dangerously high bed occupancy rates, cancer waiting times growing and 4.3 million people waiting for treatment (BMA, 2019). Every year, about one in three adults in England over age 65 who lives at home have at least one fall, and about half of these have frequent falls. Falls among older people are an urgent public health concern because of their medical and economic consequences, and with a rising older population, they are costly for health and care systems (Ek et al, 2019).

Most falls do not result in serious injury and only about 10 per cent require medical care (WHO, 2017). However, hip fractures in the UK account for 1.8 million hospital bed days and £1.9 billion in hospital costs every year. The consequences of falls for older people are increased risk of hospitalisation, dependency, institutionalisation, lower quality of life and increased morbidity (Peeters et al, 2009).

Emergency calls are frequently made to ambulance services for older people who have fallen. Ambulance crews often only help the person up from the floor and leave patients at the scene as there is frequently no need for ongoing care (Snooks et al, 2017). There are several common scenarios for falls of an older person: (1) family members, often elderly spouses, may be present but unable to assess for injury or help the person to get up from the floor; (2) there may be a care worker present who is unable to help the person up from the floor due to protocols on moving and handling or health and safety; and (3) the person may live alone and may or may not have access to an emergency call and response service.

In a randomised control trial, Snooks et al. (2017) tested an intervention for paramedics in which the intervention element was a clinical protocol with referral pathway and training and support, versus ‘usual care’. Researchers found there to be a modest cost (£17.30 per call) without risk of harm and some reduction in further emergency calls, compared to usual care. However, this may still be an inappropriate use of a valuable and increasingly stretched resource.

At the time of Snooks et al’s (2017) work, the Home Instead Senior Care service in Exeter and East Devon, based in Budleigh Salterton (UK), was becoming increasingly aware of the growing number of falls among its older clients living at home, 65 per cent of whom had a diagnosis of either dementia or cognitive impairment. A fall would be registered, perhaps through the Home Instead Senior Care emergency helpline, or when a care worker arrived for a scheduled call and found the client on the floor. Protocol and practice for such workers was that when at the scene of a client fall, they should make an immediate assessment of the client for injury and then call the emergency services. They were often working alone, so the applicable health and safety policy and protocol did not allow them to physically assist the person to a standing or sitting position.

During 2016, the South West Ambulance Service Trust (SWAST) found that it was under increasing pressure to find ways of reducing the rising costs and demands on their services from falls-related call-outs. At that time, most home care providers lacked the clinical skills or training to make detailed assessments of falls-related injuries or to determine if the fall had resulted in an injury or not. Standard procedure for most home care workers was to call 999 if they found that a client had fallen.

Collaborative working

In December 2016, the clinical development officer of SWAST and the director of Home Instead Senior Care in the Exeter and East Devon region met to discuss problems and concerns in the region regarding falls-related calls and to explore the ways in which their organisations could work in partnership to reduce the number of ambulance call-outs and resulting hospitalisations. Home Instead Senior Care was keen to find ways of reducing inappropriate hospitalisations from falls but lacked the training, processes and equipment to implement the required changes in their operating procedures. SWAST agreed to share its ‘Traffic Light System’ and post-falls

assessment guidance with Home Instead Senior Care, which could be adapted for home care workers to use. It also agreed to collaborate with Home Instead Senior Care to deliver a training programme for home care workers in 2017. Consequently, the Traffic Light System to enable home care workers to assess a fall and determine if it had resulted in a possible injury was developed (see Figure 1).

Training in how to apply the new Traffic Light System was implemented in early 2017 with all home care workers trained in the new falls assessment processes and given written instructions on how to assess and categorise a fall using the red, amber and green colour guidance. This enabled care workers to take actions appropriate to

Figure 1: The Traffic Light System

Green – Non-Injury Conscious and responds as usual. No apparent injury No head injury No complaints of pain or discomfort (verbally or non-verbally) Mobility unaffected (Able to move limbs on command or spontaneously) No sign of bruising and/or wounds	What to do Do not move the client. Check airways, breathing and circulation. Ask if they have any new pain. Assess client head to toe for any possible fracture whilst watching facial expression for any signs of pain. If no concerns try to assist client to sitting position using correct moving and handling techniques - Do not lift client. If unable to do this single headedly call office for help. Observe the client for a minimum of 24 hours for pain or any changes in condition. Document incident in the client journal and complete an incident form. Call the office to update them on the situation before leaving the clients home.
Amber – Minor Injury Conscious and responds as usual. Some bruising. Slight skin wounds. Slight discomfort. Mobility unaffected (Able to move limbs as usual or on command or spontaneously) No head injury. No sign of limb deformity, shortening or rotation.	What to do Do not move the client. Check airways, breathing and circulation. Ask if they have any new pain. Assess client head to toe for any possible fracture whilst watching facial expression for any signs of pain. Call the office for advice. If authorised by office staff, assist to a sitting position using correct moving and handling techniques - Do not lift client. If unable to do this single headedly call office for help. Observe the client for a minimum of 24 hours for pain or any changes in condition. Office staff to contact GP or NHS 111 for advice and follow-up. Document incident in the client journal and complete an incident form. Call the office to update them on the situation before leaving the clients home.
Red – Major injury Loss of consciousness or reduced consciousness. Signs of head injury. Airway and or breathing problems. Haemorrhage and or bleeding. Suspected injury to a client taking anticoagulants. Chest pain. Limb deformity. Pain and or discomfort. Swelling. Extensive bruising. Unable to move limb/joint on command. Dizziness or vomiting Any fall from height above 2 metres. Any other concerns by yourself.	What to do DO NOT move client. CALL for an ambulance. Administer FIRST AID if required OR as instructed by the operator on the phone. CALL the office to inform them of the situation. OFFICE STAFF will INFORM client's relatives. Document incident in client's journal. Complete incident form.

the type of fall and to determine whether an ambulance should be called or if it was safe to assist the client up from the floor.

Implementation of the Traffic Light System markedly reduced the number of phone calls from care workers reporting every fall as an emergency, thereby relieving the pressure of calls on the ambulance service. Implementation of the Traffic Light System also increased attention on data collection and analysis in recording falls and their outcomes to support continuous quality improvement. (Previously, although data and events were recorded, these were not analysed to seek cause and effect or identify trends.)

Assessing for injury/non-injury – then what?

The next issue to overcome was how to safely assist a non-injured client up from the floor when attended by a care worker or other lone worker. Although the Traffic Light System assessment was a useful tool, care workers still needed to call for the assistance of a second worker, and in some instances an ambulance, for non-injury-related falls in order to get the person from the floor to a sitting or standing position. In October 2017, the registered manager of Home Instead Senior Care attended a SWAST event where a demonstration of different lifting devices to assist people up from the floor was provided. The value of such devices in assisting care workers to help non-injured clients up from the floor in a timely and dignified manner was immediately apparent.

There were potential benefits for individual clients: local waiting times for an ambulance for non-injury falls could be over four to five hours, during which time frail older people could experience other health problems not caused by the fall itself, including pressure sores and hypothermia. Similarly, if the care workers could reduce the number of calls to the ambulance service, they could focus their attention on other calls.

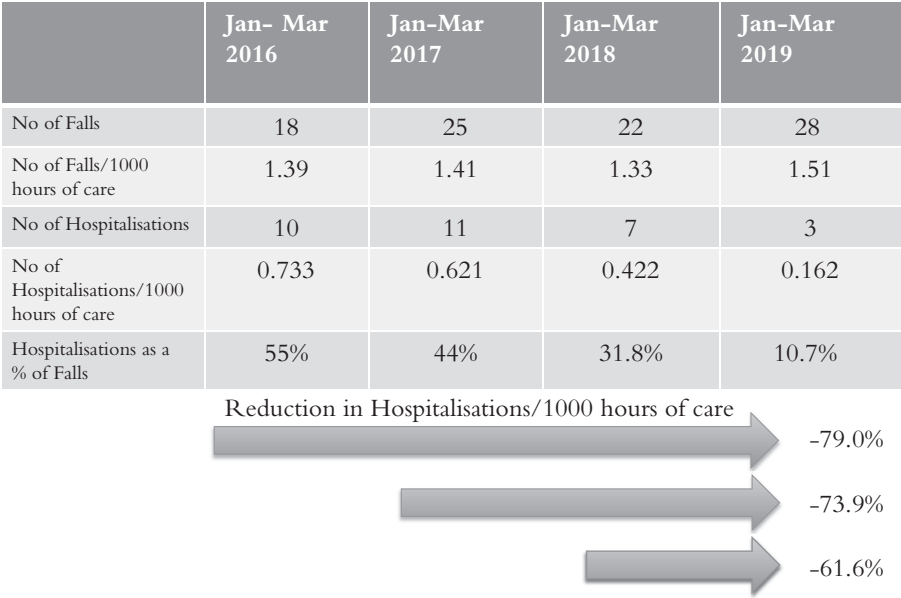
A demonstration of one product, the Raizer ChairTM, was held at Home Instead Senior Care's offices in January 2018 and the device was subsequently purchased. A protocol for and training in its use quickly followed. The chair is kept centrally in the head office; initially, 12 staff were trained by the ambulance service to use it and were listed on an on-call rota so that when called by another care worker or client, they could take the device with them, join the care worker in making the Traffic Light System assessment for potential injury and operate the device as required. These 12 staff then disseminated the training to over 125 care staff in the field to assess the clients on the floor for injury. As part of the falls protocol the Home Instead Senior Care team also notifies the person's general practitioner (GP) and/or community nurse of the incident, using a bespoke form to arrange a visit if there are any concerns and to record if the fall resulted in hospitalisation. This provides valuable data for the GP, who can include the fall in the risk aspects of the person's record. The ambulance service has reviewed and endorsed the Home Instead Senior Care training and procedures used in the Traffic Light System and use of the chair. Helping GPs to update falls risk assessments for their patients has greatly improved the working relationship with local health care professionals and helps in developing trusting professional relationships between teams.

Initial findings

Data on the number of client falls and hospitalisations of clients who had fallen were collected from 2016 to 2019 during the winter months (January–March) (see Figure 2), when pressure on the NHS for beds and calls to the ambulance service are greatest. In the winter of 2016, prior to the interventions and training already described, 55 per cent of falls resulted in hospitalisation. However, in January 2017, following the introduction of the Traffic Light System protocol and training, only 44 per cent of falls led to hospitalisations, and in 2018, following the introduction of the Raizer Chair™ and a full year’s familiarity in using the Traffic Light System assessment protocol, the hospitalisation rate dropped further to 31.8 per cent. After each use of the protocol and the chair, the team have a debriefing and discuss the use of the process and reflect upon outcomes to further enhance effective falls management.

By 2019, with growing confidence in the assessment process and the ability to respond to any fall within 30–40 minutes, the hospitalisation rate dropped even further to 10.7 per cent, despite the actual number of falls in the same three winter months increasing from 18 to 28 across the three-year period (largely due to higher numbers of clients). Analysis of the number of hospitalisations per hours of care delivered shows that with progressive intervention, training and experience, Home Instead Senior Care has achieved an impressive improvement over three years from 0.773 hospitalisations per 1,000 hours of care to 0.162 per 1,000, which is a 79 per cent reduction from the pre-intervention scenario. The work has also led to closer

Figure 2: Impact of falls-related hospitalisations in the winter period



working relationships between the Home Instead Senior Care team and other local health care professionals.

National NHS estimates show that the cost of a hospitalisation from a fall averages £5,000, with an estimated total annual cost of all falls to the NHS of some £2.3 billion. In the first eight months of 2019, Home Instead Senior Care in Exeter and East Devon was called out 72 times when the protocol indicated that the use of the Raizer ChairTM was required; its most recent hospitalisation rate has been maintained at under 11 per cent, representing huge cost savings to the taxpayer and improved outcomes for the patient.

The way forward

The Traffic Light System for assessment of injury after a fall, combined with the Raizer ChairTM, has undoubtedly been successful in helping keep frail older people out of hospital and in reducing ambulance call-outs. The collection and analysis of data resulting from falls, hospitalisation, accidents and incidents is helping to make Home Instead Senior Care in Exeter and East Devon a safer and more responsive care provider. Indeed, during a routine inspection in December 2018, the Care Quality Commission (CQC¹) found Home Instead Senior Care to be ‘outstanding’ as a provider in all five areas of inspection, making it the first home care provider in the South West region of England to achieve the top ‘5 Star’ rating. The inspection report particularly noted the company’s innovative use of technology and its total quality management system in helping keep its clients safe and in being responsive.

Box 1: Key facts about falls

- Every year, one in three people over the age of 65 suffer a fall that causes serious injury or even death.
 - Falls represent the most frequent and serious type of accident for people aged 65 and over.
 - Every minute, six people over the age of 65 suffer a fall.
 - Annually, ambulance services respond to 700,000 calls from older people who have fallen, which accounts for 10 per cent of total calls.
 - Annually, there are over 250,000 emergency hospital admissions related to falls among patients aged 65 and over, with around 68 per cent of these patients aged 80 and over.
 - Falls are estimated to cost the NHS (2017) £2.3 billion per year.
 - Hip fractures in the UK account for 1.8 million hospital bed days and £1.9 billion in hospital costs every year.
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Note

¹ The CQC is the independent regulator of all health and social care services in England (see: www.cqc.org.uk/).

Conflict of interest

The authors declare that there is no conflict of interest.

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