Stop the Pressure – Emergency Department Addenbrooke's Hospital

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Introduction

Concerns over the documentation and prevention of pressure ulcers within the Emergency Department (ED) (Fig 1) triggered a review of practice starting in 2009. The overall aim was to change practice to provide improved patient safety, quality of care and to prevent patient harm.

The audit raised several areas of note:

- Trolley mattresses constructed from hard foam with no pressure redistribution properties and which also did not raise or lower, increasing the risk of shearing when patients mounted or dismounted (Fig 2)
- Documentation of pressure area care needs were minimal
- Patients spending long periods of time on trolleys - many of whom are unable to change their position independently. This is due to an increase in patient numbers from 200/250 per day in 2009 to 300/400 per day in 2016.

In addition, as the hospital is a centre of excellence with several specialities, a high proportion of patients admitted via the ED are 'at risk' of developing pressure damage. This includes patients who are immobile, have chronic illnesses, neurological or vascular problems or experienced major trauma.

In conjunction, there was a national concern with the increasing number of pressure ulcers as documented in the Francis report (2009), NHS Patient Safety Thermometer and the European Pressure Ulcer Advisory Panel (EPUAP) publications and supported by the Stop the Pressure campaign (NHS Midlands and East).

Method

Equipment was audited in the presence of budget holding senior management to engage them with the process of change, with the following findings for the trolleys:

- Some covers did not fit correctly or had allowed ingress of bodily fluids
- All failed "the fist test"

To address the audit findings, new trolleys, footstools, the Repose® Companion and new assessment tools plus training were introduced to the department.

Trolleys

The trolleys (Fig 3) have a higher specification pressure redistribution foam, 10cm in thickness. They are also hydraulic which enables easier transfer on and off, helping to reduce damage from shear.

Figure 1. Emergency Department (ED)

Figure 2. Original Trolley

Figure 4. Repose Companion

Figure 3. New Trolley

Figure 5. Footstool

Repose Companion

This system comprises a Repose Mattress Overlay plus a multi-stretch, moisture vapour permeable cover which has a slide sheet base material and integral straps to facilitate patient transfer (Fig 4). It was chosen due to its ability to provide additional pressure redistribution properties achieved by 'immersion' of the patient into the equipment, and reducefriction and shear forces associated with lateral transfers. This is particularly useful for patients who may need to be transferred several times for tests.

Benefits of the Repose Companion:

- Fits existing trolleys
- Protects from hard surfaces and safety rails
- Was found to cushion the Achilles area in tall patients
- X-ray and CT compatible
- Doubles as a transfer sheet
- Easy to clean

Footstool

To reduce the risk of shear and friction damage further whilst getting on and off the bed, a foot stool was also sourced. This provided the additional benefit of helping to prevent the risk of falls as it enabled
patients to step up and down safely using a hand rail for support (Fig 5).

Training

An assessment booklet that included a body map and wound documentation were introduced initially, then later reviewed when the Trust switched to electronic hospital records. New equipment training was also implemented via a train the trainer programme. These changes were communicated at Link Nurse Study Days, who were then able to report the changes in the ED to their wards and how it would link to care across the Trust.

Results

The project raised awareness in the ED of the importance of pressure damage prevention and resulted in an improved uptake of assessing patients at risk of pressure damage. The body mapping tool and documentation are now routinely completed and incident forms sent to Tissue Viability if patients are identified with pressure damage on arrival. This has contributed to a reduction in pressure ulcers being misattributed as hospital acquired.

Patient feedback was positive. High risk frequent visitors to the ED now request the Repose Companion and are grateful for not having to sit on a hard trolley. These are also requested by Ambulance personnel for those at risk on arrival and have suggested the use to other Trusts.

Conclusion

The change in practice has achieved the aims of improved patient safety and quality of care as part of the ongoing campaign at Addenbrooke's Hospital to reduce patient harm through pressure ulcer prevention from door to door.

Reference

EPUAP, NPUAP and Pan Pacific Pressure Injury Alliance (2009). Prevention and treatment of pressure ulcers – Quick reference guide. 1st publication.

Francis, R (2010) Independent Inquiry into Care provided by the Mid Staffordshire NHS Foundation Trust January 2005 – March 2009 Vol 1. Chaired by Robert Francis QC. Published 24th Feb 2010. London. The Stationary Office.