



Clinical Evaluation

Pressure redistribution surfaces for patients who choose to smoke in bed: a multi-disciplinary approach to provision

Author:

Kathryn Morgan

Matron for Infection Prevention & Safety (Tissue Viability)

BACKGROUND

- Increasing number of referrals made to the Lancashire & South Cumbria NHS Foundation Trust (LSCFT tissue viability team for patients with, or at risk of, pressure damage, who choose to smoke in bed.
- Smoking cessation advice is offered as part of making every contact count¹, however, some patients choose to continue to smoke.
- Due to significant fire risk, dynamic, alternating cell mattresses are not appropriate for use as the fire from cigarettes can potentially breach the outer cover and ignite the pumped air source.
- A fatal incident within the Trust in 2013 and subsequent MHRA alert highlighted the danger of this.
- Prior to this trial, a static air overlay was used on top of a foam mattress.

A COLLABORATIVE APPROACH

A working group was established with the LSCFT Fire Safety Manager, the Business Development Manager (BDM) from a local equipment manufacturer and the community equipment contract manager.

METHOD

- Market research to identify existing products that may be suitable for this patient group was conducted.
- The BDM discussed with manufacturing colleagues and a product was identified that could be adapted to provide additional fire retardant benefits.
- The mattress contains static air cells, offering pressure redistribution properties, whilst a cover was manufactured to a higher specification of fire retardancy, tested to crib 7 ignition source
- Trial undertaken with 6 community patients over a 8 week period.

RESULTS

- 6 participants in trial 3 male, 3 female all living in their own homes.
- Time spent in bed per day Figure 1.
- Average age of participants 74.5 years.
- 5 out of the 6 patients had pre-existing pressure ulceration Figure 2.
- 50% scored high on Waterlow risk assessment with the other 50% scoring very high risk.
- No new pressure ulcers were reported for these patients during the trial period
- 5 out of the 6 patients were smokers Figure 3.

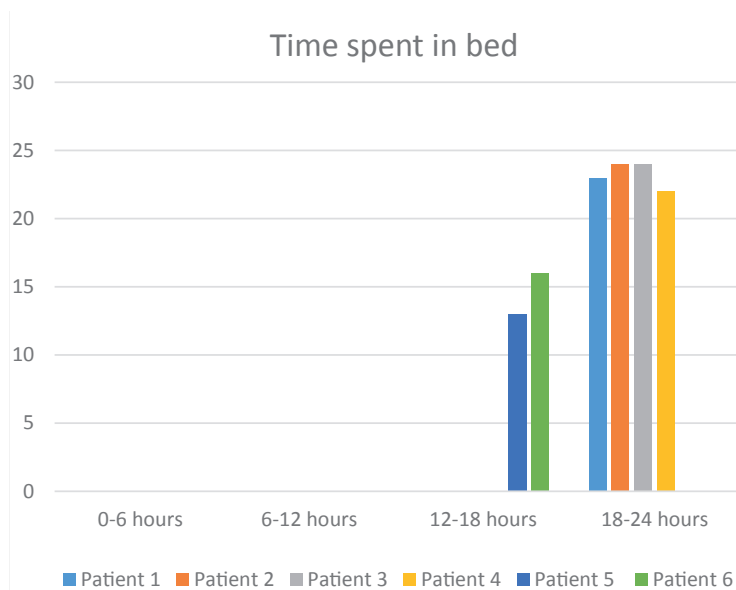


Figure 1

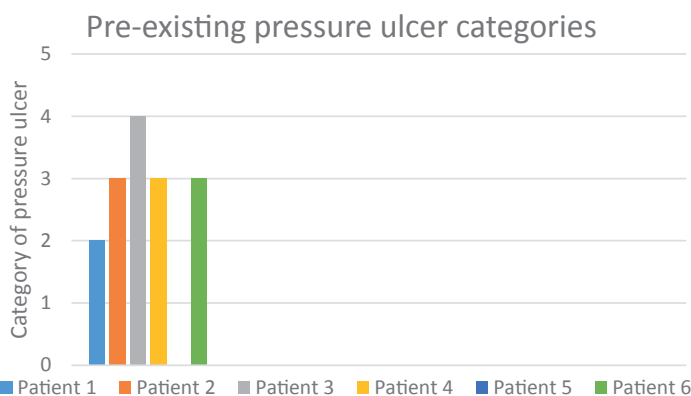


Figure 2

Smoking status of patients

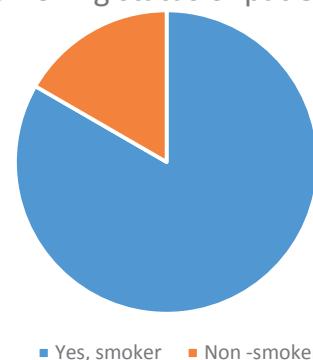


Figure 3

CONCLUSIONS

- The mattresses were well received by the patients taking part in the trial as an all in one solution.
- All patients rated the mattress comfortable/very comfortable
- Staff felt assured that they had a dedicated product for patients that choose to smoke in bed.

RECOMMENDATIONS

- Positive feedback from patients and staff.
- Reassuring that patients who choose to smoke in bed are kept as safe as possible.
- Use in combination with fire prevention strategies such as fire retardant bedding, home fire safety checks and patient specific information.

REFERENCES

1. Public Health England (PHE), 2016). Making Every Contact Count (MECC): Consensus statement. London. PHE.