Enhancing Skin Integrity: A Quality Improvement Initiative for Managing Moisture-Associated Skin Damage in Critical Care

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Introduction

Moisture associated skin damage (MASD) in the form of Incontinence-associated dermatitis (IAD) is a common issue in critical care units (CCU), with acute illness and associated treatments often leading to faecal incontinence with diarrhoea. This can result in significant discomfort, superficial open wounds, increased risk of infection, and complicates overall patient care.

Over the past 2 years, CCU within this hospital followed a skin integrity guide, promoting SSKIN assessments, barrier creams & faecal management systems as appropriate. Across the Trust, MASD is routinely reported, however, limited guidance was in place to prevent deterioration once excoriation was noticed. The NHS recommends that moisture lesions be reported in addition to pressure ulcers (PU), to identify the clinical problem and quality improvement action that may be required. To improve quality of care around MASD, the Skin Integrity Specialist Nurse and Critical Care Ward Manager conducted research into possible solutions, and were introduced to Flamigel®.

Flamigel® is a hydroactive colloid gel with arginine for the treatment of superficial open wounds. Flamigel® cushions the wound providing a barrier against external contamination. It contains hydrocolloid and hydrogel properties the wound to heal fast, reducing the likelihood of scarring.

To review the clinical effectiveness of the current pathway and proposed change, an evaluation of both approaches was required.

Method

A pathway with a focus on prevention and management of MASD within the CCU was introduced (fig 1). A 14 week evaluation across both the intensive care unit

Prevention and Management of Moisture Associated Skin Damage (MASD) North Tees and Hartlepool lealthy Skin Consider using Flaminal and Atrauman on open area • Increase the frequency of repositioning if appropriate Only use continence pads on those that NEED them Refer to TVN if required

and high dependency unit was started concurrently with the main focus to assess clinical efficacy of Flamigel® for the treatment of excoriation, and prevention of deterioration. For the purpose of the study, clinicians were advised to introduce Flamigel® when excoriation was identified and continue to monitor and report any deterioration of MASD. Evaluation forms collected staff, patient and relative feedback.

Result

To compare clinical outcomes, PU and moisture lesion reporting data was retrospectively gathered for 24 weeks prior to the evaluation start, followed by 14 weeks throughout the evaluation. With 19 beds across the CCU, retrospective data showed an average of 0.62 reported moisture lesions per week and 0.88 pressure ulcers. During the 14 week evaluation, a total of 249 patients were admitted into the critical care units. Flamigel® was commenced on 15 patients with various levels of excoriation. Reporting data alongside evaluation forms

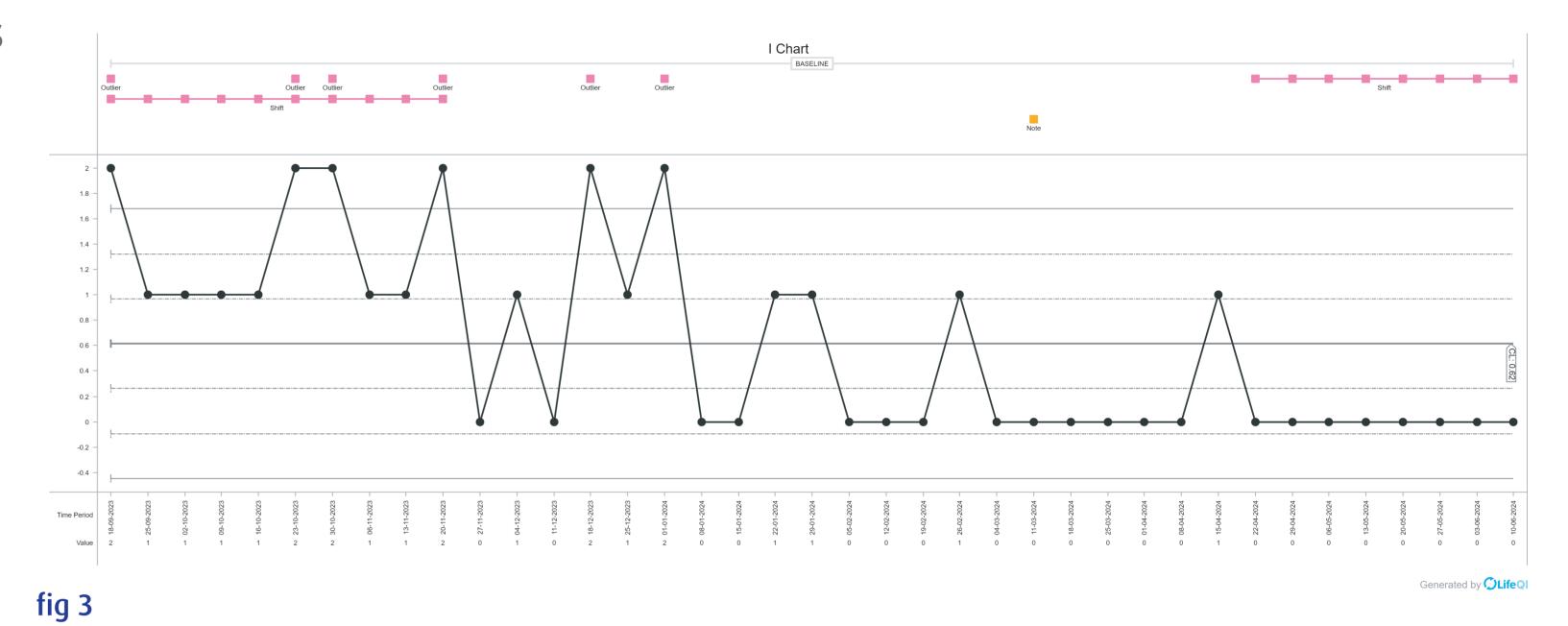
Reported Moisture Lesions:

Moisture lesions reduced by 53% to an average of 0.29 per week (fig 2). During against external contamination. It contains hydrocolloid and hydrogel properties week 9, when the first moisture lesion was recorded, no Flamigel® was available that help to create optimal healing conditions to accelerate cell renewal, allowing on the ward. During week 12 where there were 3 reports, a care assistant strike was in place leading to significantly reduced staffing numbers.



Reported Pressure Ulcers:

When reviewing the incidence of reported pressure ulceration, although not the primary focus of the evaluation, staff noticed that during the evaluation period, pressure ulceration reduced by 84% to only one incidence (average of 0.14 per week) (fig 3).



Staff Evaluation forms:

- 100% of staff felt that Flamigel® was:
- Easy to apply- Provided adequate skin protection
- Soothing for the patient
- Met their expectations
- 100% felt the department should continue to use Flamigel®, with 91% believing that use of Flamigel®, would lead to fewer incidents of deteriorating moisture damage.

Discussion

Reducing the incidence of MASD in critical care units is essential to improve patient outcomes and prevent further complications. A well-defined care pathway ensures healthcare providers follow the same protocols, resulting in consistent and reliable care. Within this department, over a 14 week period, the implementation of a new care pathway incorporating Flamigel® into routine practice, showed that it is possible to treat and prevent the deterioration of IAD.

The link between PU and MASD is widely accepted, more so when diarrhoea is a contributing factor. Within the evaluation period, a noticeable reduction in reported pressure ulceration was identified. With the close documented link, the department feel that Flamigel® also had an impact on the incidence of pressure ulceration, but this will be investigated further soon.

Conclusion

This quality improvement initiative aimed to reduce the incidence of MASD within the CCU through implementation of a structured pathway and introduction of Flamigel®. Through recorded outcomes and staff feedback, this has now been launched across the CCU, soon to be implemented Trust-wide.

