

# Use of a high specification foam mattress in a care home setting

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## Introduction and Aims

Long-term care requirements, often coupled with multiple comorbidities, can result in an increased risk of pressure ulcer development for many care home residents. Although specific agreement on the exact costs associated with pressure ulcer treatment / healing are lacking, there is broad consensus that additional costs will be incurred to treat pressure ulcers and that costs escalate with the severity of these typically avoidable wounds.

With this in mind and with a clear focus on reducing pressure ulcer incidence, trimming budgets and rising healthcare costs, pressure ulcer prevention is a key priority in both primary and secondary healthcare settings.

Following a comprehensive pressure ulcer risk assessment, the use of a high specification foam support surface, in combination with a patient specific repositioning schedule is often sufficient to meet the pressure area care requirements for many patients.

This aligns with the National Institute for Health and Care Excellence Clinical Guideline 179 'Pressure Ulcers: prevention and management', which recommends:

Using a high-specification foam mattress for adults who are:

- admitted to secondary care
- assessed as being at high risk of developing a pressure ulcer in primary and community care settings <sup>1</sup>

Whilst NICE have stipulated that a 'high-specification foam mattress' is to be used there is still no clear consensus on, or definition of, what this is in terms of materials, design or performance characteristics. Therefore it leaves this aspect of the CG179 guideline open to interpretation by both manufacturers and healthcare providers.

Prior to adopting a new high specification foam mattress into clinical use it is important to ensure it meets the clinical requirements of patients with regard to pressure ulcer prevention. The aim of this work was to evaluate a new high-specification foam mattress, establishing both user acceptance from the nursing staff and clinical progress of the residents using this new product. In addition, resident's views on the mattress were also captured.

## Method

Two POLYFLOAT™ Dormira high specification foam mattresses from Talley were placed into two care homes with a total of 170 beds. These homes were part of a national care home group which consists of 54 separate care homes.

**Polyfloat™**  
DORMIRA



FIGURE 1.  
POLYFLOAT  
Dormira mattress

The mattresses were provided to care home residents who were identified by the regional manager as being up to medium risk of pressure ulceration but free from existing pressure related tissue injuries.

The POLYFLOAT Dormira mattress (see Figure 1) provides reactive (static) therapy. It features castellated foam to enhance patient immersion and envelopment into the support surface (see Figure 2a), along with a dedicated head, torso and heel zone (see Figure 2b) for optimal support and pressure redistribution. The foam castellations are wider on each side of the mattress (see Figure 2c), enhancing safety, stability and assisting patient transfers.

Resident demographics recorded included age, sex, pressure ulcer risk level, patient mobility and skin/tissue status. User acceptance and residents' views on the new product were determined by structured questionnaires.



FIGURE 2a.  
Castellations

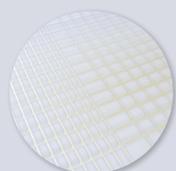


FIGURE 2b.  
Zoned mattress



FIGURE 2c.  
Assisted patient transfer

## Results

Seven residents completed the evaluation on the POLYFLOAT Dormira mattress, 3 females and 4 males. Residents mean age was 83 years (range 64 – 97 years). Pressure ulcer risk assessment was determined using the Braden risk assessment tool. All residents were assessed as being at low risk (scores ranged from 17- 21). Mean length of stay on the POLYFLOAT Dormira mattress was 10 days (range 7 days to 12 days).

All residents remained pressure ulcer free during the evaluation.

A total of 12 staff completed product evaluation feedback forms. Staff reported that the mattress was effective at redistributing pressure and maintaining skin integrity and that residents were safe and stable whilst getting on and off the mattress. See Table 1 for further information.

Residents also reported that the mattress was comfortable and they experienced good quality sleep during their stay on the mattress.

FEEDBACK	PERCENTAGE OF STAFF
The mattress was "effective / very effective" at redistributing pressure and maintaining skin integrity	100%
The mattress was "comfortable / very comfortable" for residents	100%
Resident safety & stability was rated as 'good / very good' when getting on/off the mattress	83%
The ability of the mattress to conform to the resident's position whilst profiled was rated as "good / very good"	75%
The mattress was 'easy / very easy' to clean	100%
Overall view of the product was 'excellent / exceptional'	92%

TABLE 1.  
Staff Views on the TALLEY POLYFLOAT Dormira Foam Mattress Support Surface

## Discussion/Conclusion

Those residents presenting at low risk of pressure ulcer development often have a greater degree of independence and mobility. For these residents, a good quality, high-specification foam mattress is often sufficient to meet their pressure area care needs.

In this evaluation the POLYFLOAT Dormira mattress met the clinical needs of both the residents and the healthcare provider and in addition to assisting the clinical team in preventing pressure ulcers, the product was well liked by staff and reported as comfortable and safe to use by residents.

Wherever possible it is essential for patients to remain free from pressure related skin/tissue damage irrespective of whether they are being cared for in primary or secondary care. A good quality, high specification foam support surface is a valuable tool in assisting with the prevention of pressure ulceration and in the absence of any clear definition from NICE on product specification or performance characteristics for such a support surface, it is imperative that products are tested in the clinical setting to ensure they are fit for purpose.

Based on this evaluation the POLYFLOAT Dormira performs in line with the expectation of a 'high-specification' foam mattress.

## References

1. National Institute for Health and Care Excellence (2014) Pressure ulcers: prevention and management. NICE guideline (CG179).

Poster produced by Talley in association with Avery Healthcare.



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