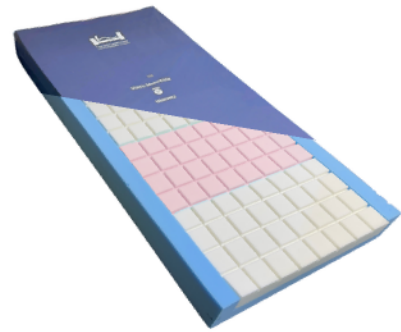




# Visco MultiZone Evaluation Case Series

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## Background

The Harvest Healthcare Visco MultiZone mattress is an enhanced static mattress comprising varying density visco-elastic memory foam "Zones" across key areas of the mattress. The zones allow for higher levels of pressure relief around the sacral and feet areas whilst providing firmer support to the head, back and behind the knee, ensuring superior pressure redistribution across the entire body. The Visco MultiZone mattress is complete with a vapour-permeable, four-way stretch, water-resistant cover, which is machine washable up to 95 °C. Suitable for very high-risk residents weighing up to 27 Stone (177 kg) and with pressure ulcers up to a category 2.

## Method

A five-resident evaluation of the Visco MultiZone was commenced across four nursing units within the HC-One care homes. Prior to the evaluation, all five residents were on alternative castellated, very high-risk memory foam mattresses. Residents had an initial clinical assessment, mid-point assessment at five weeks and the final assessment at ten weeks when the trial was completed.

Data collected included age, sex, past medical history, skin condition, continence status, weight, BMI and mobility. Using the Waterlow tool, the risk of pressure ulcer development was determined to ensure the suitability of the Visco MultiZone and a dependency score was assigned to each resident, with 1 being low and 4 very high.

## Initial Assessment

### Resident 1

A 92-year-old female with a history of Type II Diabetes, Hypertension, Atrial Fibrillation, Heart Failure and Vascular Dementia. There was the presence of introguinous dermatitis under the right breast, but otherwise, the skin was healthy and intact, with no history of pressure damage. She was taking a normal diet and fluids, weight 51.2kg, BMI 22.1 and a Waterlow score of 22. She was fully mobile and repositioned herself independently but tended to sit for long periods of time. She was continent with a dependency score of 3.

### Resident 2

A 96-year-old female with a history of Hypertension, Chronic Kidney Disease, Osteoarthritis, and considered frail with previous falls and a fractured neck of femur. There were skin tears to both the right and left legs, but the skin was otherwise healthy and intact, with no history of pressure damage. She was taking a normal diet and fluids, weight 47.5kg, BMI 20 and a Waterlow score of 19. The resident was immobile, being transferred with a hoist and repositioned 4 hourly. She was continent but presented with a UTI at the initial assessment and a dependency score of 3. She was using a memory foam pressure-relieving cushion in conjunction with the Visco Multizone.

### Resident 3

A 92-year-old male with a history of Dementia, Epilepsy, Rheumatoid Arthritis and considered frail. His skin presented as dry and was treated with Hydromol, but otherwise intact, with no history of pressure damage. He was taking a normal diet and fluids, weight 59.15kg, BMI 19 and a Waterlow score of 20. He was independently mobile but tended to sit for long periods of time and declined the use of a pressure-relieving cushion. He was continent and had a dependency score of 1.

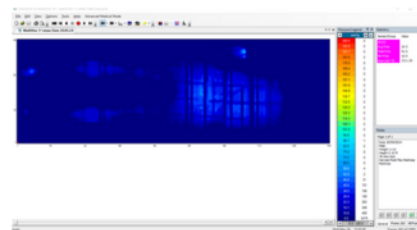


Figure 1

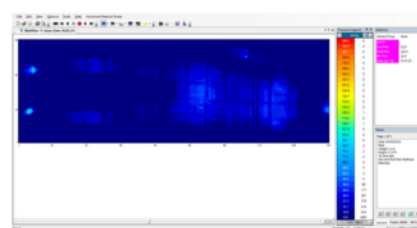


Figure 2

### Resident 4

An 88-year-old male with a history of Spinal Stroke, Vascular Dementia, previous falls and considered frail. Presented with dry skin, which was being managed with derma cream, and bruises were visible on the left hip and right arm due to a recent fall. No history of pressure damage. He was taking a normal diet and fluids, weight 51.25kg, BMI 22 and a Waterlow score of 18. He was mobile but tended to lie in bed most of the day, continent and a dependency score of 4.

### Resident 5

A 65-year-old male with a history of Chronic Obstructive Pulmonary Disorder, Tuberculosis, Bronchiectasis and Type II Diabetes. His skin presented as dry and was treated with Zerobase, but otherwise intact, with no history of pressure damage. He was taking a normal diet and fluids, weight 45.2kg, BMI 19 and a Waterlow score of 18. He was independently mobile and continent and had a dependency score of 2. He was using a memory foam pressure-relieving cushion in conjunction with the Visco MultiZone.

## Mid-Point Assessment (Week 5)

A five-resident evaluation of the Visco MultiZone was commenced across four nursing units within the HC-One care homes. Prior to the evaluation, all five residents were on alternative castellated, very high-risk memory foam mattresses. Residents had an initial clinical assessment, mid-point assessment at five weeks and the final assessment at ten weeks when the trial was completed.

Data collected included age, sex, past medical history, skin condition, continence status, weight, BMI and mobility. Using the Waterlow tool, the risk of pressure ulcer development was determined to ensure the suitability of the Visco MultiZone and a dependency score was assigned to each resident, with 1 being low and 4 very high.

## Final Assessment (Week 10)

The final assessment was performed at week ten. Resident 1 had been admitted to the hospital during the period since the mid-point assessment following a fall, which left red marks on her back; these were still present. Her BMI had reduced to 20.7, and Waterlow increased to 23, but the MultiZone continued to be a suitable support surface. Resident 3 had also sustained injuries to his back following a fall. However, these were healed before the final assessment. There were no other clinical changes to note at the end of the evaluation. Clinicians reported the mattress with the performance of the MultiZone mattress and found it easy to clean and compliant with organisation infection prevention and control policies.

Resident feedback was overall good. Three residents provided favourable comments, such as "It was good, comfortable," "It was comfortable," and "I'm sleeping well." One resident mentioned that she "did not like it," though this was also her opinion regarding the previous mattress. Another resident was unable to comment; however, clinicians observed that she appeared comfortable, with no changes noted in her sleeping pattern.

## Conclusion

Even though it was a small cohort of residents, the trial was considered a success due to the data presented in this case study. Both resident and clinician feedback has been positive, with mattress comfort and resident sleep quality highlighted. The Harvest Healthcare Visco MultiZone has now replaced the alternative castellated, very high-risk memory foam mattresses across the HC-One care homes with guidance information developed by Harvest Healthcare for the organisation.

Harvest Healthcare will continue to collect clinician and resident feedback to ensure the MultiZone continues to perform effectively and to support new product development in the future.

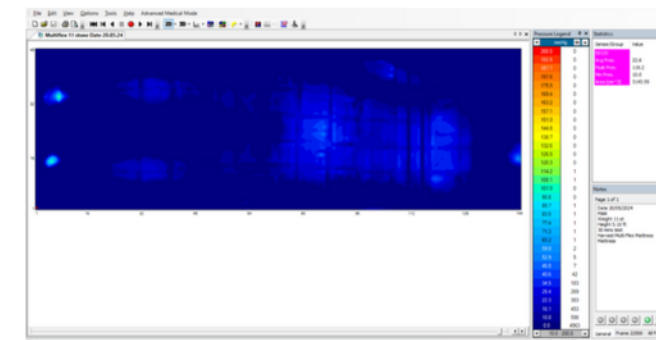


Figure 3

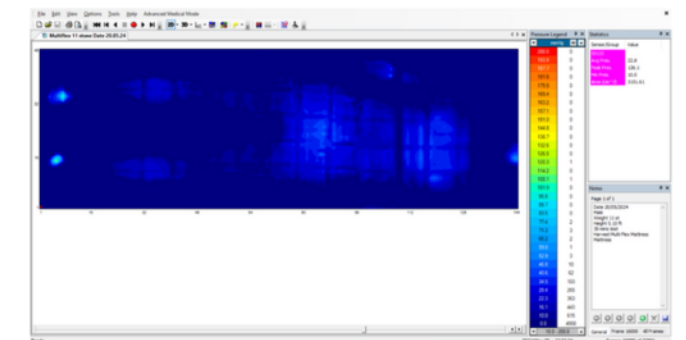


Figure 4