

# An Evaluation of the Dual Star Alternating Mattress Replacement System

## AUTHORS

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## BACKGROUND

The Queen Elizabeth Hospital (QEH) is part of University Hospitals Birmingham and is an acute major trauma centre with approximately 1300 beds. The Tissue Viability Service hold the budget and manage the purchase of equipment.

The pressure relieving equipment is Trust owned and usage is monitored via the Equipment Store. Due to issues with the current supplier a market review was carried out.

The Dual Star\* (IQ Medical) was selected via this process to undergo a product evaluation in 3 clinical areas within the QEH. The Dual Star is an alternating mattress replacement system suitable for patients up to 200kg, deemed to be at risk of developing pressure ulcers or for treatment of up to a category 4.



## MANAGEMENT APPROACH

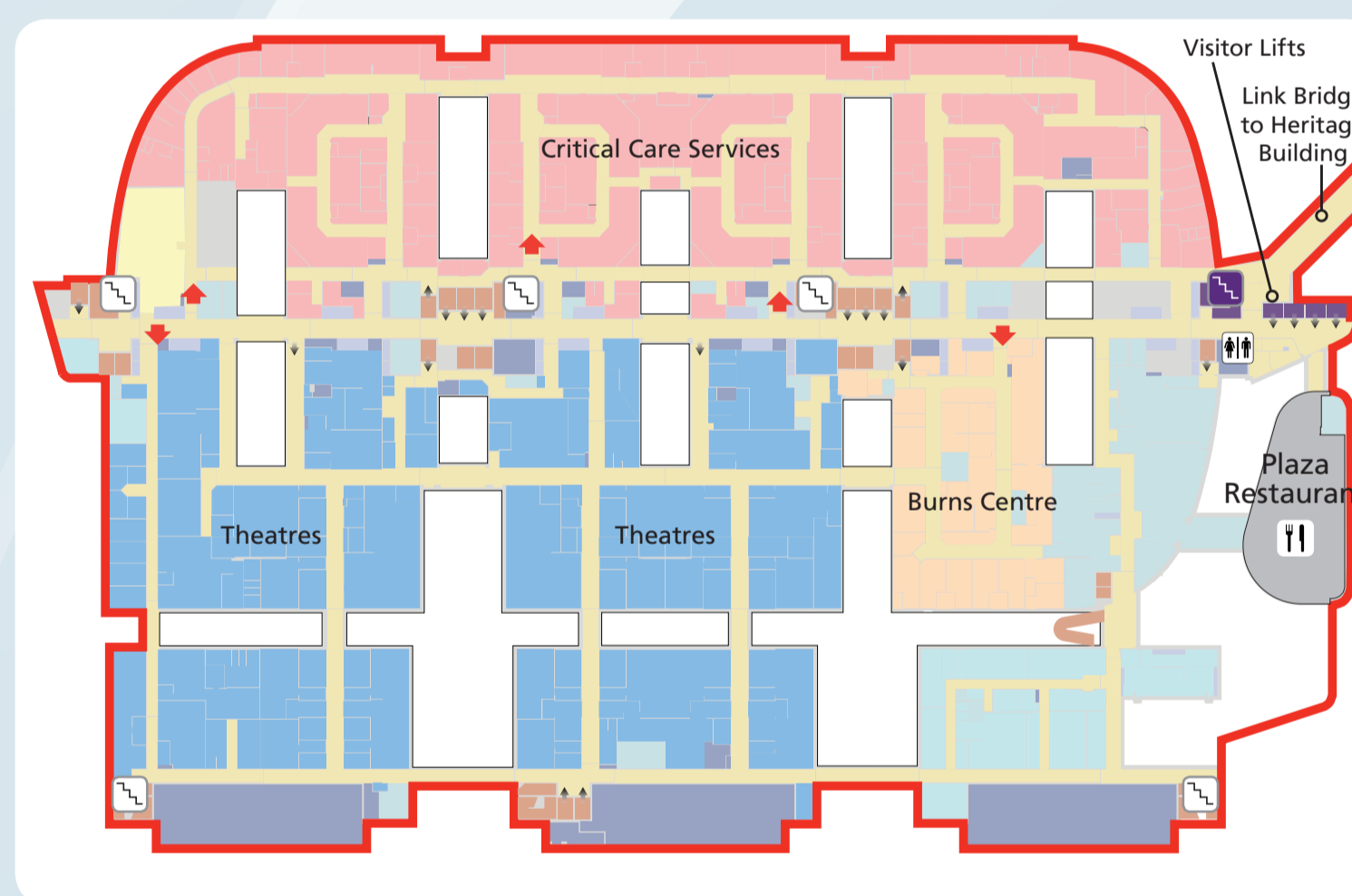
- An evaluation tool was devised containing 8 considerations which were agreed to be important when using pressure relieving mattresses.
- These were recorded on an evaluation form and scored from 1 – 5 (negative to positive perception)

## Factors evaluated

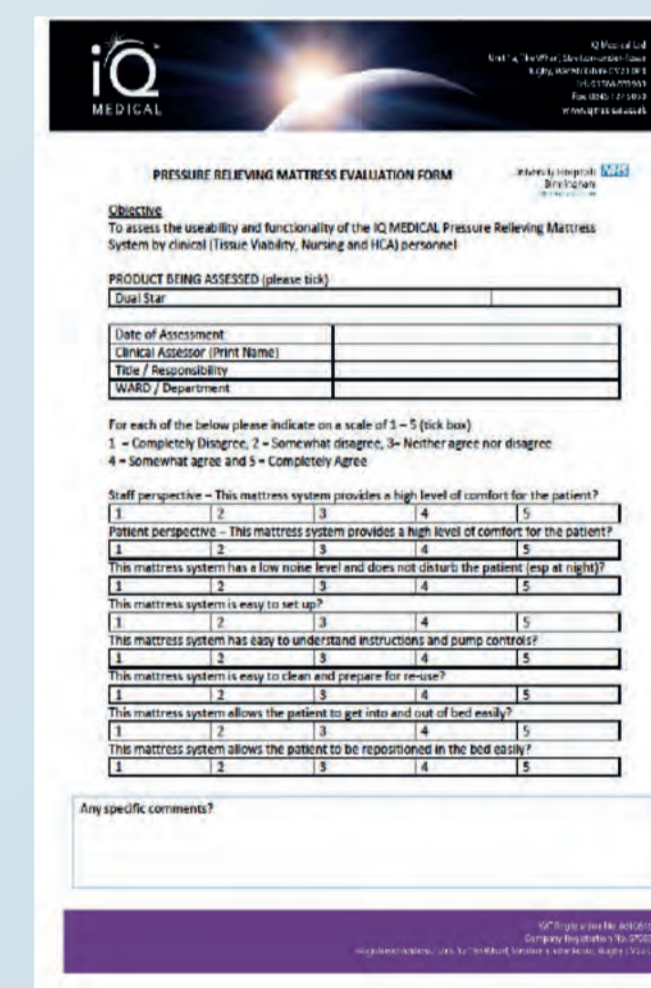
- Perceived patient comfort (by staff)
- Patient's own perception of comfort
- Pump noise (esp at night)
- Ease of patient use / access
- Ease of cleaning mattress
- Ease of control panel / operation
- Ease of setting up
- Ease of patient reposition in bed



10  
STAR® Dynamic  
PAC systems



3  
Clinical Areas  
2 Elderly Care, 1 ITU

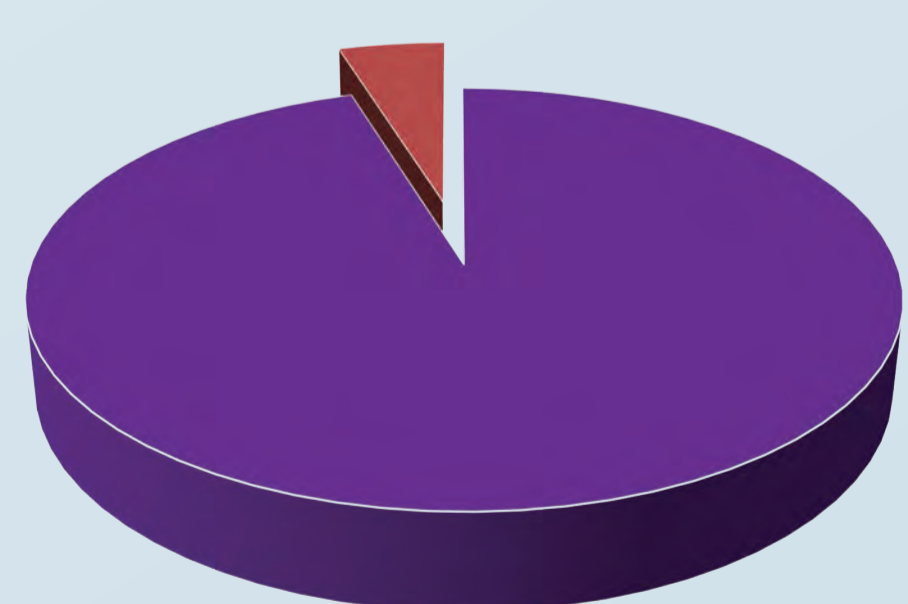


44  
Completed evaluation  
forms

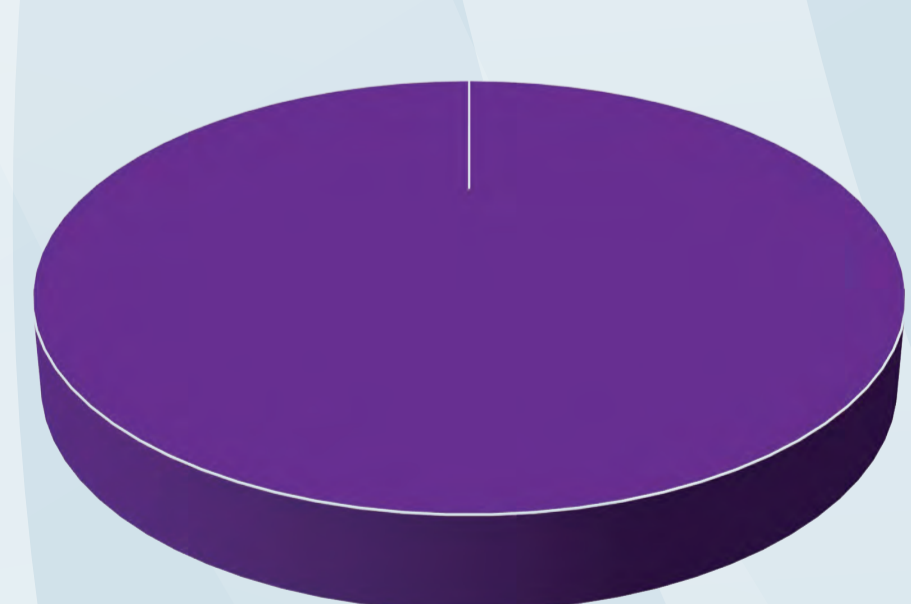


7  
Weeks duration

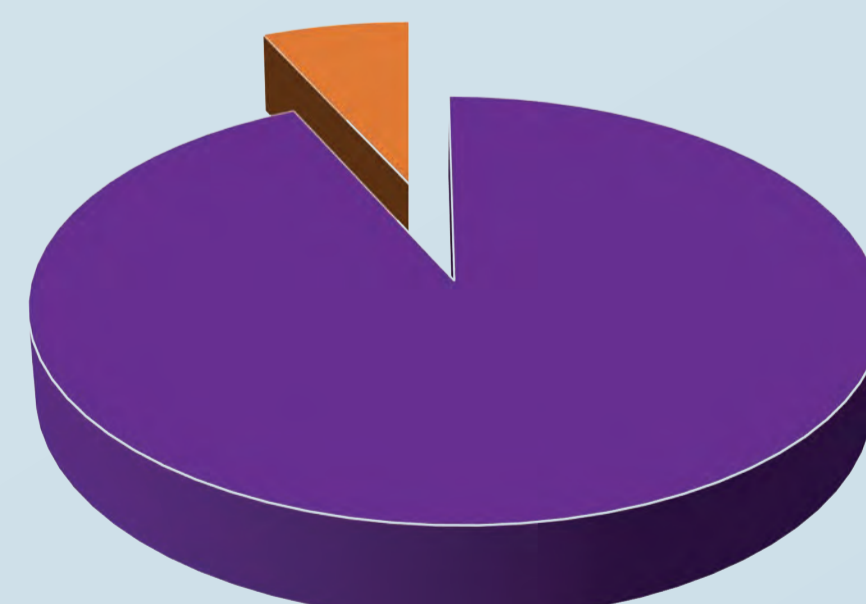
## OUTCOMES SUMMARY



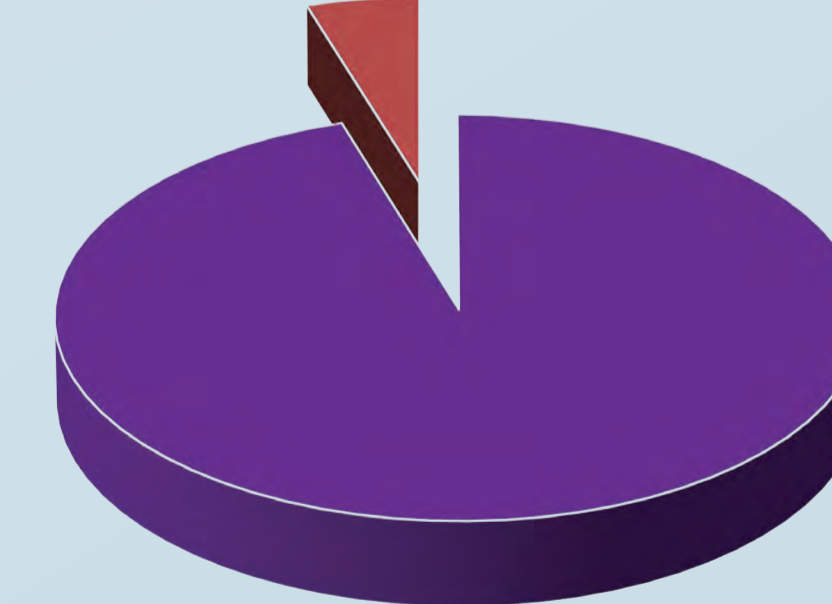
STAFF – PERCEIVED COMFORT 98%  
PATIENT - HIGH COMFORT 84%



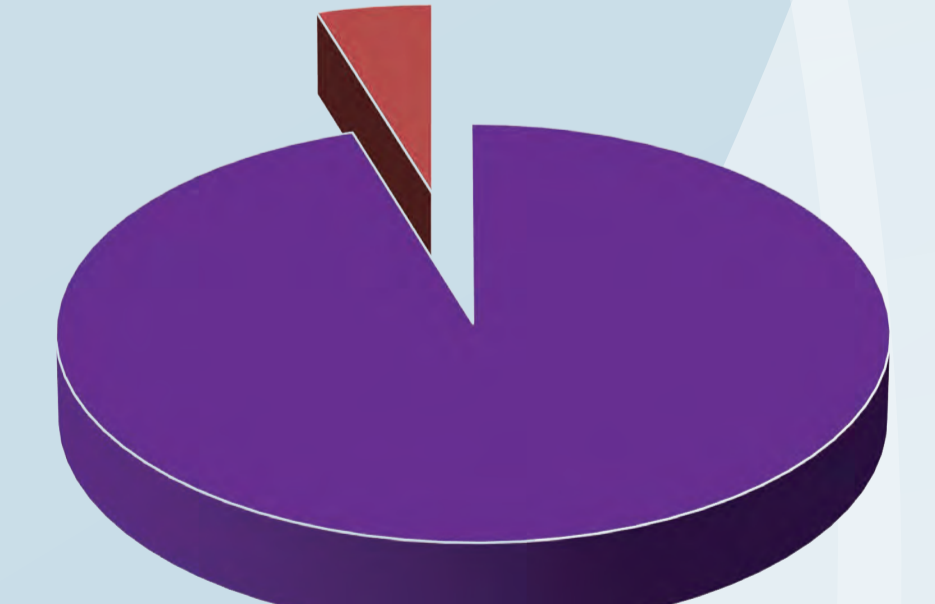
LOW NOISE 100%  
EASY SET UP 100%  
EASY CONTROLS 100%



EASY PATIENT ACCESS/USE 93%



EASY REPOSITIONING 98%



EASY OF CLEANING 98%

## CONCLUSION

The objective and thorough evaluation supported our decision that the Dual Star\* should be selected as the replacement dynamic air mattress of choice at the QEH.

\*Now renamed Star® Dynamic PAC (2nd generation with additional improvements)

The authors would like to thank IQ Medical for the training and ongoing support provided