DEVELOPING A STRONG PROCESS FOR EVALUATING HYBRID SUPPORT SURFACES

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Introduction
All patients are potentially at risk of developing a pressure ulcer (PU)\(^1\), however with appropriate risk assessment and preventative care the majority of PU are preventable \(^2\). Due to a high incidence of patients being both admitted with and developing PUs a review of practice was carried out which identified a more proactive approach to equipment provision.

The equipment review revealed that although the trust owned both replacement and overlay mattresses there were inadequate surfaces available and additional units were rented.

This process:
• Was not financially sustainable longer term.
• Caused a delay in the patient being placed on the appropriate surface.
• Created a storage issue for static mattresses when mattress replacements were used and meant that decontamination costs were high.

Methods
• A scoping exercise identified that ‘hybrid mattresses’ would meet the gap in the portfolio.
• 3 mattresses were identified for the evaluation and a business case based on the previous 6 months rentals was written and approved.
• Two ‘high risk’ wards were identified for the trial – Elderly Care and Vascular which was over 2 weeks.
• All 3 mattresses were trialled concurrently e.g. direct comparison (and not 2 weeks per product over 6 weeks).
• All staff received training from each company and a standard evaluation form was completed by all patients and staff groups.

Results
Clinical evaluations were collated, analysed and ranked and two companies were taken forward to the commercial process.

Discussion
The prevention of hospital acquired PU remains a challenge. The evaluation process clearly indicates that it is possible to reduce the time taken to put a patient on the correct surface and this improves their experience and outcomes.

The most desirable healthcare interventions are those that increase the quality of care and lower costs. This project clearly demonstrates a reduction in cost of rentals, static mattress replacement program and decontamination costs.

Clinical Relevance
The clinical relevance of this work is the demonstration that the use of the hybrid mattress improves patient experience and outcomes whilst helping to prevent hospital acquired pressure ulcers.

Patients on the Right Support Surface up to 7 Hours Faster\(^3\)

Prior to the implementation of Intelligent Pressure Care Management the study showed that it could take up to over 7 hours to transfer patients onto a Dynamic mattress following a clinical requirement being identified.

\begin{tabular}{|c|c|c|c|}
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 & Ward Request Mattress & Ward Receives Mattress & Mattress waits on Ward & Nurse(s) start patient swap over & Patient returned to bed \\
\hline
\multicolumn{5}{|c|}{Nurse(s) start patient swap over & Patient returned to bed} \\
\hline
77 minutes & 94 minutes (office hours) & 951 minutes (after 16:30) & 194 minutes & 69 minutes \\
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\end{tabular}

Overall, usually (80% of the time) it takes 434 minutes (a little over 7 hours to get a dynamic mattress)

References:
1. NICE (2014) Pressure ulcers: prevention and management of pressure ulcers
3. Jones, L (2014) ‘Do you really know how soon your patient is on an alternating mattress in a hospital setting?’