

Using ActivHeal[®] dressings in a London teaching hospital: a cost analysis

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Abstract

Lower-cost 'generic' wound dressings are now available in the dressing categories of foams, films, alginates, gels and hydrocolloids. This offers the possibility of achieving significant financial savings while retaining good clinical standards of wound care. To test the potential for cost saving in a typical London teaching hospital, the ActivHeal[®] range of dressings was substituted for normal 'branded' dressings over a 3-month period, during which dressing cost and clinical effectiveness were assessed. The result was an equivalent yearly cost saving of £55 221 (54%), with retention of performance standards across the dressing range. Two years after the trial, wards in University College London Hospitals NHS Foundation Trust continue to benefit from significant annual cost savings on dressings by using the ActivHeal range of products, while maintaining a high standard of clinical care.

Key words: ActivHeal[®] ■ Clinical effectiveness ■ Cost saving ■ Dressing cost ■ Tissue viability ■ Trial

Cost saving is an issue that continues to be high on everyone's agenda, especially now that the UK is in the middle of a world recession. This, of course, applies to the NHS, and with the total national expenditure on wound care provision running at an estimated £2.3–3.1 billion per year at 2005–2006 costs (Posnett and Franks, 2007), there is still scope for greater efficiency in this clinical area.

One important element of wound management is dressing selection and use. Some authors have noted that the largest savings can be made by addressing staff or time costs associated with the management of chronic wounds (Drew et al, 2007; Posnett and Franks, 2007; 2008). However, with a national annual expenditure on wound dressings of more than £100 million per annum at 2006–2007 costs (Polak et al, 2008), it may also be possible to achieve valuable savings by reducing wound dressing expenditure.

Lower-cost 'generic' wound dressings are now available in the dressing categories of foams, films, alginates, gels and hydrocolloids. These dressings offer cost savings per unit of up to 40% (NHS Supply Chain, 2009), and the manufacturers claim that they are equivalent to more

expensive 'brand name' dressings in terms of their clinical performance (Timmons, 2008).

At University College London Hospitals NHS Foundation Trust (UCLH), the tissue viability team were interested in establishing if a less expensive range of dressings (ActivHeal[®], MedLogic Global Limited, Plymouth, Devon) could produce measurable cost savings while maintaining clinical standards. As well as hoping to save money, the team planned on switching to one main dressings supplier to assist with education and training within the Trust. A 3-month 'in-use' trial was, therefore, implemented to assess the clinical performance of ActivHeal dressings and to measure the amount of money that could be saved if current wound dressings were replaced with the ActivHeal range.

ActivHeal

ActivHeal is a range of advanced wound dressings that was first launched in 2004. The range consists of generic dressings in the advanced wound dressing categories, that are priced significantly lower than the 'brand name' equivalents. ActivHeal has been added to formularies in a wide variety of acute and primary care Trusts within the UK, with the range being listed either instead of, or alongside 'brand name' dressings.

As the ActivHeal range is generically named, it allows a clear positioning of where the dressings should be used, and what basic function each dressing performs (see *Table 1*). This is advantageous over the majority of wound dressings, which often have complex branding. The range consists of ActivHeal Foam Non-Adhesive and Foam Island, ActivHeal Alginate, ActivHeal Aquafiber (see *Figure 1*), ActivHeal Hydrocolloid, ActivHeal Hydrogel, and ActivHeal Film. MedLogic also have a team of clinical support nurses that are able to provide training and education within both community and acute Trusts.

Method

At the beginning of this trial, a user group was established to select the test dressings, set study protocols, monitor study progress and assess study results. The user group included representatives from procurement, pharmacy and relevant clinical areas, including tissue viability, podiatry, dermatology and the leg ulcer clinic. These areas were selected as they had the highest dressing-user figures at the time of the trial.

A number of companies who supply lower-cost dressings were approached and assessed for product suitability. The MedLogic ActivHeal dressing range was chosen from these companies for two reasons. First, their dressing range included

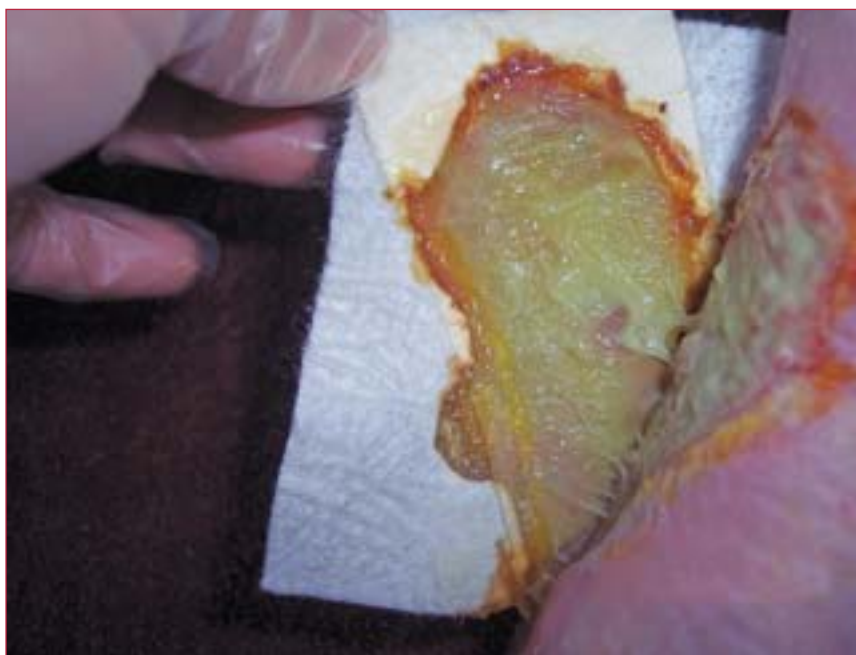
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Accepted for publication: October 2009

Table 1. Basic functions of wound dressings

Dressing	Basic function	Where to use them
Foam	To create an ideal wound healing environment by absorbing and transpiring excess fluid away from the wound	Exuding wounds
Alginate	To gel in contact with wound fluid, conforming to the contours of the wound bed, facilitating wound healing	Exuding wounds/ cavity wounds
Aquafiber	To gel in contact with wound fluid, conforming to the contours of the bed, facilitating wound healing	Exuding wounds/ cavity wounds
Hydrocolloid	To create a moist environment that reduces further exudate production	Exuding wounds/ sloughy wounds
Hydrogel	To create a moist wound bed by donating fluid, and facilitating autolytic debridement	Dry wounds
Film	To provide a waterproof bacterial barrier on areas of tissue which require a moist healing environment	Low exuding wounds/ tissue-requiring wounds

Figure 1. ActivHeal Aquafiber® being removed from a leg ulcer.



each one of the main 'standard advanced' dressing types, i.e. foam, film, alginate, gel and hydrocolloid. Second, the dressings were easy to identify and describe because they are named generically, for example ActivHeal Foam, ActivHeal Alginate. From these ActivHeal dressings, the foam, alginate, gel and hydrocolloid dressings were selected for the trial. The film dressing was not selected because of the tissue viability team's concerns about its potential to lose adherence.

The user group decided to test the ActivHeal dressings on care of the elderly, surgical, orthopaedic and neurology wards. First, the user group calculated the total yearly usage and spend for existing dressings. Then they replaced the current foam, alginate, gel and hydrocolloid dressings on the chosen wards with the ActivHeal range of products.

Nurses could use the new dressings on any appropriate wound as dictated by the Trust formulary and by the teaching sessions that had been provided prior to the evaluation. At each dressing change, the nurse was required to fill out an evaluation form (Figure 2). This enabled nurses to assess the ActivHeal dressing performance as 'better' than, 'equivalent' to, or 'worse' than the previous dressings across a variety of parameters, including ease of application, ease of removal and exudate management. The assessments were based on the nurse's own clinical experience of using the dressings in comparison with the previous dressings that had been used. At the end of one calendar month the completed evaluation forms were collected and each product was given an evaluation result as being either 'worse' than, 'equivalent' to, or 'better' than the previously used dressing. The 'current' dressings that were replaced by the ActivHeal range were: Allevyn® Adhesive and Allevyn® Non-Adhesive foam (Smith and Nephew, Hull); Kaltostat® Alginate (ConvaTec, Deeside); Aquacel® (ConvaTec); Intrasite® Gel (Smith and Nephew); and Granuflex® (ConvaTec).

To help ensure that the ActivHeal dressings were used appropriately, the tissue viability nurse carried out teaching sessions on all of the target wards. These were designed to remind the nurses of which dressing types were appropriate for which wound condition. They were also designed to make sure the nurses were clear about which ActivHeal dressings should be used in place of which branded products. The trial took place between September and December 2006.

Results

The annual spend on foam, alginate, gel and hydrocolloid dressings before the trial for the target wards was £103029. This was made up of foam dressings (£74821), alginate dressings (£13798), gel dressings (£8904), and hydrocolloid dressings (£5506).

The 'current' dressings were completely replaced by the ActivHeal range, and the equivalent 3-month spend on the ActivHeal dressings was £11952. This was made up of ActivHeal Foam Island and Non-adhesive Foam (Figure 3) (£8444); ActivHeal Alginate (£1845); ActivHeal Hydrogel (£965); and ActivHeal Hydrocolloid (£698). This equates to a projected annual spend for ActivHeal dressings of £47808, which would provide an annual cost saving of £55221 (54%).

In terms of dressing performance, there was no obvious difference between the original 'branded' dressings and the replacement ActivHeal range. The ActivHeal dressings were rated as 'equivalent to' or 'better than' original dressings in almost all cases. The nursing staff registered no complaints about the change to the more cost-effective dressing range and 2 years after the trial, the ActivHeal range of dressings is still being successfully used at UCLH.

There were no reports of any adverse events related to the new range of ActivHeal dressings. There were no allergic reactions reported, other than a small number of patients who already had a history of dressing allergies. There were also no reported instances of adhesive issues such as skin stripping.

Figure 2. User evaluation report on ActivHeal dressing range in clinical use.

ActivHeal® dressing used		<input type="checkbox"/> Film	<input type="checkbox"/> Hydrocolloid	<input type="checkbox"/> Alginate Felt	<input type="checkbox"/> Alginate Rope	
		<input type="checkbox"/> Hydrogel	<input type="checkbox"/> Foam Island (adhesive)	<input type="checkbox"/> Foam Non-Adhesive		
ActivHeal® dressing size used		Name of dressing that ActivHeal is being compared with				
Hospital or PCT name		Clinician's name				
Description of wound		Date of assessment		/ /		
Wound healing state		<input type="checkbox"/> Necrotic	<input type="checkbox"/> Sloughy	<input type="checkbox"/> Granulating	<input type="checkbox"/> Epithelializing	<input type="checkbox"/> Cavity
Property of the ActivHeal® dressing assessed (Please select the properties you consider to be important when choosing a dressing)		ActivHeal® dressing was less than equivalent to existing* dressing*	ActivHeal® dressing was equivalent to existing dressing	ActivHeal® dressing was better than existing dressing		
1	Ability to absorb exudate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
1	Ability to retain exudate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
3	Wound healing rate	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
4	Exhibits maceration on removal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
5	Softens necrotic tissue	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
6	Desloughs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
6	Adverse reaction	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
8	Stays in place	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
9	Moist wound environment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
10	Dressing change frequency (see below)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
11	Ease of application	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
12	Ease of removal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
13	Clarity of instructions for use	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
14	Patient comfort	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
How many days did the dressing stay in place for?						
* If you indicated 'less than equivalent to existing dressing' for any property, please provide further details						
Signature of clinician						

Discussion

This trial may be typical of many dressing evaluations that take place throughout the UK, in that it was relatively informal and it took place on a relatively small scale (Trueman and Posnett, 2006). However, in the author's opinion, this trial is all the more relevant because it is typical and reflective of clinical practice, and it provides some useful insight into an average wound-dressing-usage scenario.

Even before the changeover of dressings, foam dressings were by far the most popular option for treating wounds in this hospital, with over 72% of chosen dressings being foam. The estimated annual cost saving in this category alone by introducing the equivalent ActivHeal dressing, was more than £41 000. This is a considerable amount of money to save in one year by changing one product. It is a cost saving that would enable, for example, one extra registered nurse to be employed on a ward, with a considerable amount of money still remaining for other needs.

Education at ward level provided some useful insight into the level of knowledge of nurses looking after patients with wounds on hospital wards. One of the key issues that this trial raised was that nurses can be confused by the trade names of dressings. Trust formulary is typical of hospital formularies, in that it describes wound types and wound tissue states (e.g. granulating, necrotic) and matches them to generic dressing categories (e.g. foam, alginate, hydrocolloid). The problem here is that branded dressings are not known by their generic descriptions. Rather than being called 'hydrocolloid' or 'foam', they are known by their brand names, and this can lead to confusion among ward staff when they try to align these dressings with wound types based on a formulary that is founded on generic categorization. In contrast, the ward staff found the ActivHeal dressings relatively easy to match up with wound types because the dressings were generically named.

Figure 3. ActivHeal® Non-adhesive Foam on a leg ulcer.



Another observation from this in-use trial was that nurses were perfectly happy to implement the new dressing range. Prior to the commencement of this trial, the user group expected that there would be some resistance to the

KEY POINTS

- The total UK national expenditure on wound care provision is running at an estimated £2.3–3.1 billion per year.
- Lower-cost 'generic' wound dressings are now available in the dressing categories of foams, films, alginates, gels and hydrocolloids.
- A London teaching hospital set up a 3-month 'in-use' trial to assess the clinical performance of ActivHeal dressings and to measure the amount of money that could be saved by switching to the range.
- The ActivHeal dressings were rated as 'equivalent to' or 'better than' the original dressings in almost all cases.
- The projected annual saving for the trust by switching to ActivHeal is £55 221, which is 54% of current spend.

new dressings by the nursing staff. It was the user group's general experience that the implementation of change tended to be challenging when a well-know product was replaced with a product that was relatively unknown. (The majority of the nursing staff had not heard of ActivHeal dressings before the trial.)

Yet, in spite of these expectations, there was no discernable protest from the ward nurses about the changeover. In fact the nurses were very satisfied with the clinical performance of the new dressings, and this was reflected in the dressing assessment forms throughout the trial.

Limitations

It is acknowledged that this trial was only run over a limited period of time and therefore the findings may not be as accurate as a trial that was run over a longer period. Additional research into the possible savings to Trusts by using lower-cost 'generic' wound dressings is proposed.

Conclusion

The general level of satisfaction with the new, more cost-effective range of dressings is still being experienced 2 years after the trial was conducted. The ActivHeal dressings used in this trial are still being used in the hospital today, and the nurses and the tissue viability nurse that use them, together with the other participants from the original user group, are completely satisfied with their clinical performance. UCLH also continues to benefit from an annual saving in wound dressing spend of more than £50 000, while providing excellent ongoing clinical care for inpatients with a range of chronic and acute wounds. BJN

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