

Prescribing and Clinical Effectiveness Bulletin

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WOUND MANAGEMENT SPECIAL: FORMULARY OF WOUND MANAGEMENT PRODUCTS (2012)

Key Points

- The *Lincolnshire Formulary of Wound Management Products* has recently been subject to a full review incorporating the results of product evaluations undertaken both locally and from across the East Midlands Tissue Viability Network.
- This *Bulletin* details all products that have been added to the *Formulary* as part of this latest revision; a list of all products removed from the previous version is also provided (see pages 3 to 4).
- Antimicrobial dressings are only indicated when infection is present or strongly suspected (i.e. where there are clinical signs of infection) (see pages 5 to 7).
- Information is also provided on the significant saving opportunities that are available when formulary approved products are used as an alternative to high-cost non-formulary approved dressings and bandages (see below).

Cost saving opportunities from increased use of formulary products

NON - FORMULARY PRODUCT	COST PER DRESSING	FORMULARY EQUIVALENT	COST PER DRESSING	SAVING OPPORTUNITY PER DRESSING
<i>Tubifast</i>		<i>Clinifast</i>		
7.5cm x 1 m (blue)	£1.28	7.5cm x 1 m (blue)	£0.77	£0.51
7.5cm x 3m (blue)	£3.61	7.5cm x 3m (blue)	£2.13	£1.48
7.5 cm x 5m (blue)	£6.30	7.5 cm x 5m (blue)	£3.74	£2.56
10.5 cm x 1cm (yellow)	£2.05	10.5 cm x 1cm (yellow)	£1.20	£0.85
10.5cm x 3m (yellow)	£5.88	10.5cm x 3m (yellow)	£3.49	£2.39
10.5 cm x 5m (yellow)	£10.10	10.5 cm x 5m (yellow)	£6.04	£4.06
<i>Aquaform 15g</i>	£2.00	<i>Activeal Hydrogel 15g</i>	£1.41	£0.59
<i>Intrasite Gel</i>	£2.32	<i>Activeal Hydrogel 15g</i>	£1.41	£0.91
<i>C View 6 x 7 cm</i>	£0.38	<i>Hydrofilm 6 x 7 cm</i>	£0.22	£0.16
<i>C View 10 x 12 cm</i>	£1.02	<i>Hydrofilm 10 x 12.5 cm</i>	£0.40	£0.62
<i>C View 15 x 20 cm</i>	£2.36	<i>Hydrofilm 15 x 20 cm</i>	£0.93	£1.43
<i>Scanpor 2.5 x 10m</i>	£0.90	<i>Clinipore 2.5 x 10m</i>	£0.73	£0.17
<i>K Band (4m)</i>		<i>Easifix K (4m)</i>		
5cm	£0.19	5cm	£0.10	£0.09
7cm	£0.25	7.5cm	£0.15	£0.10
10cm	£0.27	10cm	£0.17	£0.10
15cm	£0.47	15cm	£0.31	£0.16
Crepe bandage –	£0.95	<i>Easifix K - 5cm</i>	£0.10	£0.85

5cm				
Crepe bandage – 7.5cm	£1.34	<i>Easifix K - 7.5cm</i>	£0.15	£1.19
Crepe bandage – 10cm	£1.75	<i>Easifix K – 10cm</i>	£0.17	£1.58
Crepe bandage – 15cm	£2.53	<i>Easifix K – 15cm</i>	£0.31	£2.22
<i>Aquacel Ag</i>		<i>Silvercel</i>		
5 x 5 cm	£1.90	5 x 5 cm	£1.62	£0.28
10 x 10 cm	£4.52	11 x 11 cm	£3.89	£0.63
15 x 15 cm	£8.50	10 x 20 cm	£7.25	£1.25
<i>Carboflex</i>		<i>Clinisorb</i>		
10 x 10 cm	£3.06	10 x 10 cm	£1.81	£1.25
8 x 15 cm	£3.68	10 x 20 cm	£2.41	£1.27
15 x 20 cm	£6.97	15 x 25 cm	£3.88	£3.09

PROFORE	COST PER BANDAGE	K BANDAGING	COST PER BANDAGE	SAVING OPPORTUNITY PER BANDAGE
Layer one - #1	£0.73	Layer one - <i>K Soft</i> #1	£0.43	£0.30
Layer two - #2	£1.37	Layer two – <i>K Lite</i> #2	£0.97	£0.40
Layer three - #3	£4.09	Layer three – <i>K Plus</i> #3	£2.17	£1.92
Layer four - #4	£3.38	Layer four – <i>Ko Flex</i> #4	£2.89	£0.49

Introduction

The *Lincolnshire Formulary of Wound Management Products* has recently been subject to a full review led by the Tissue Viability Nurse Specialist from Lincolnshire Community Health Services (LCHS) NHS Trust. This has been based on clinical evaluations on individual products coordinated by the East Midlands Tissue Viability Network as part of the regional formulary project. The products chosen for inclusion within the local formulary are all products that have been positively evaluated by teams across the East Midlands, including work undertaken by teams in Lincolnshire.

It is the purpose of this special *PACE Bulletin* to outline the changes to the *Formulary of Wound Management Products* that have been made following this review; detail is given on the products that have been added and those that have been moved.

Regional Formulary

Over the last two years the East Midlands Tissue Viability Network have been working towards the development of a regional formulary. This work was completed at the beginning of the year and produced a comprehensive, but wide list of products that evaluated positively in clinical practice. In Lincolnshire this comprehensive regional work has been used to inform local formulary decisions enabling recommendations for first and second line products within each category.

Category headings have been standardised to provide continuity with the categories within the regional formulary.

The Lincolnshire Formulary of Wound Management Products

The *Lincolnshire Formulary of Wound Management Products* aims to provide a clinically effective range of products that are appropriate for the management of the

vast majority of wounds and have been selected on the basis of clinical need, suitability, best available evidence and cost effectiveness.

As well as taking account of regional recommendations, the updated version of the wound management formulary has been coordinated between Lincolnshire primary and secondary care in an attempt to improve continuity across the interface. Local patterns of usage, determined from EPACT data and wider consultation with clinical practitioners on the ground, have also helped to inform the review.

What has been added to the Formulary of Wound Management Products following review?

All of the products new to the *Lincolnshire Formulary of Wound Management Products 2012* are tabulated below:

CATEGORY	PRODUCT	INDICATION
Alginate /Hydrofiber	<i>ActivHeal Aquafiber</i>	Soft, highly absorbent dressing. For use on moderate to heavily exuding wounds.
	<i>Suprasorb A</i>	Absorbent calcium alginate dressing. Can remain in place for up to 5 – 7 days. Moderate to heavily exuding wounds
Silver dressings – wound contact layer	<i>Acticoat Flex 3</i>	Antimicrobial dressing containing nanocrystalline silver. Can be left in place for up to 3 days. This is a 2 nd line choice.
Silver Absorbent	<i>Silvercel Non Adherent</i>	Antimicrobial, silver alginate dressing. For moderate to heavily exuding wounds.
Odour Absorbent Dressings	<i>Clinisorb</i>	Sterile activated charcoal dressing. Apply as a secondary dressing. For management of malodorous wounds.
Hydrogels / Hydrogel sheet	<i>Activheal</i>	Fluid donating hydrogel. For use on necrotic and sloughy wounds with nil to low exudate. Requires a secondary dressing
	<i>Hydrosorb</i>	Hydrogel sheet. Donates moisture to promote granulation and debride necrosis.
Films	<i>Hydrofilm</i>	Vapour permeable transparent film dressing. Suitable for superficial wound types producing little or no exudate.
Low Adherent dressings	<i>Telfa</i>	Non adherent absorbent cotton pad. Suitable for lightly exuding wounds.
Super Absorbents *	<i>Kerramax</i>	Super absorbent dressing.
Foams - standard	<i>Tielle Plus</i>	For heavily exuding wounds
Foams - specialist	<i>Allevyn Gentle</i>	Absorbent foam, suitable for use on fragile skin.
	<i>Allevyn Gentle Border</i>	Adhesive bordered absorbent foam intended for use on fragile skin.
Retention bandages *	<i>Easifix K</i>	Light retention bandage for fixation of wound dressings – first line.
	<i>Actiwrap</i>	A cohesive retention bandage – for second line use only.
Tapes *	<i>Hypafix</i>	Permeable synthetic adhesive tape.
Tracheo dressings *	<i>Trachi – dress</i>	For use with tracheotomy.
	<i>Permafoam</i>	

* new category

What has been removed from the *Formulary of Wound Management Products* following review?

CATEGORY	PRODUCT
Alginates	<i>Sorbsan</i>
	<i>Sorbsan ribbon</i>
Silver dressings	<i>Acticoat</i>
	<i>Silvercel</i>
Odour absorbent dressings	<i>Actisorb Silver 220</i>
Hydrogels	<i>Aquaform</i>
	<i>Actiform Cool</i>
Film membranes	<i>C-View</i>
Low / Non Adherent dressings	<i>N-A Ultra</i>
Absorbent pad	<i>Zetuvit (non sterile)</i>
Foam dressings	<i>Allevyn (non adhesive)</i>
	<i>Tielle Xtra</i>
	<i>Allevyn Plus Adhesive</i>
Low / Non Adherent foams	<i>Transorbent</i>
	<i>Mepilex</i>
Conforming bandages	<i>Knit – Band</i>
Compression Hosiery	<i>Coban 2 (kit)</i>

New Specialist Formulary within the *Formulary of Wound Management Products*

The products on the new Specialist Formulary are only for prescribing by, or on the recommendation of, the Tissue Viability Nurse Specialists. These products are considered specialist items and are not appropriate for first or even second line use.

Products on this area of the formulary are only for use if all formulary options have been exhausted. At this point practitioners may need to seek the advice of the Tissue Viability Nurse Specialists for recommendation of an alternative.

A tabulated summary of cost saving opportunities from the increased use of formulary products appears at the front of this *Bulletin*.

Mepilex, *Mepilex* bordered and *Mepitel* are all high cost, non-formulary items but continue to be used in large volumes. There are a wide selection of standard foams within the *wound management formulary* or even within the specialist section that provide appropriate and more cost-effective alternatives to the *Mepilex* range. Formulary alternatives to *Mepitel* (a non-adhesive, silicone mesh dressing) include *Atraumann* first line and *Urgotul* second line.

Multi Layer Compression Hosiery

The wound management formulary provides the option of two types of multi layer compression hosiery. The difference between the two products is minimal except that *Profore* is guaranteed 'latex free' and the K bandage system provides a 'long' bandage in each layer. There are cost differences between the products that favour the K bandage range:

PROFORE	COST PER BANDAGE	K BANDAGING	COST PER BANDAGE	SAVING OPPORTUNITY PER BANDAGE
Layer one - #1	£0.73	Layer one - <i>K Soft#1</i>	£0.43	£0.30
Layer two - #2	£1.37	Layer two – <i>K Lite #2</i>	£0.97	£0.40
Layer three - #3	£4.09	Layer three – <i>K Plus #3</i>	£2.17	£1.92
Layer four - #4	£3.38	Layer four – <i>Ko Flex #4</i>	£2.89	£0.49

Antimicrobial containing dressings

Increasing bacterial resistance to antibiotics is a serious problem that has been attributed, at least in part, to over or inappropriate use. This is a problem that is not just associated with parenteral or oral agents; resistance to anti-microbial dressings has now begun to emerge and was reported by Leaper as far back as 2004. Within this context, it is imperative that anti-microbial agents in all formulations are conserved where possible and only used where strictly appropriate.

Historically, antimicrobial containing dressings have been applied to wounds in an attempt to reduce the bacterial load. Modern dressings increasingly incorporate an active antimicrobial component. Inevitably, increasing use of these products has contributed to escalating costs in wound care both nationally and locally. There is concern that expensive antimicrobial products are being used inappropriately.

When should antimicrobial dressings not be used?

- where there are no clinical signs of infection;
- where the infection has long since subsided
- for unnecessary prophylaxis.

When are antimicrobial dressings indicated?

- Antimicrobial dressings should be regarded more as a treatment than a dressing and **are only indicated when infection is present or strongly suspected (i.e. where there are clinical signs of infection).**

Clinical signs of infection include:

- erythema (redness < 2cms around wound margin)
- heat,
- pain,
- swelling,
- spreading cellulitis (> 2cms around wound margin) odour, friable-bleeding granulation,
- increased exudate,
- sudden wound break-down,
- discoloured granulation tissue,
- epithelial bridging or pocketing at base of wound.

- When antimicrobial dressings are in use, treatment should be reassessed frequently and discontinued when clinical signs of infection have subsided.
- Only order a maximum of two weeks' supply of antimicrobial dressings at any one time and re-assess the wound before reordering further supplies

Antimicrobial dressings: formulary choices

1. Inadine

Inadine is a sterile knitted viscous dressing impregnated with 10% povidone iodine. It is indicated for the treatment of a wide range of protozoa and fungal organisms and for the treatment of superficial skin loss injuries. The dressing needs to be changed when colour changes from brown to white. Iodine is quickly de-activated by pus or high exudate. Free iodine levels associated with use of the dressing are low, but there is still potential for sensitivity reactions to povidone-iodine or iodine.

2. Iodoflex paste

Iodoflex paste contains iodine 0.9% as cadexomer iodine in a paste with gauze backing. Iodoflex is indicated for the topical treatment of moderate to highly exuding chronic wounds. The dressing should be changed two to three times weekly or when the colour is lost. The maximum single application is 50g; weekly application must not exceed 150g; and treatment should not continue for longer than three months in any single course of treatment. The dressing may 'draw' for the first hour after application. The slow release from cadexomer iodine optimises activity and reduces toxicity. Caution should be exercised in patients with thyroid disorders, those receiving lithium, women who are pregnancy or breast feeding and in children.

3. Flamazine cream

Flamazine is a hydrophilic cream containing silver sulfadiazine 1%. It is indicated for the prophylaxis and treatment of burns and as an adjunct to short-term treatment of infection in leg ulcers and pressure sores. Silver sulfadiazine is a topical broad spectrum antibacterial which inhibits the growth of nearly all pathogenic bacteria and fungi in vitro including methicillin-resistant *Staphylococcus aureus* (MRSA); it provides prolonged antibacterial activity due to a gradual release of silver ions. Sensitivity reactions are rare. Argyria (dark staining) has been reported with excessive use; 'tattooing' can occur when exposed to sunlight and, as a result, *Flamazine* is not recommended for use on the face. The cream should not to be applied to surrounding skin as there is a potential for maceration; cleansing should be thorough to prevent build up and a pseudo-eschar. *Flamazine* should be used with caution where renal or hepatic function is impaired and is not recommended for neonates and infants.

4. Silver dressings

The following silver dressings have been approved for use within the *Formulary*: *Atraumann Ag*, *Acticoat Flex 3* and *Silvercel Non Adherent*. Dressings which incorporate silver were developed for the treatment of difficult to heal wounds, chronic ulcers and extensive burns as silver ions exert a broad spectrum antimicrobial effect in the presence of wound exudate. When in silver dressings come into contact with wound exudate, there is an exchange of silver ions from the dressing with sodium ions in the wound exudate. The volume of wound exudate is an important factor when considering or selecting a silver containing dressing. *Acticoat Flex 3* has a three day wear time and may cause transient discolouration. If silver dressings are used, supply should be limited to one to two weeks and only continued if appropriate after a clinical review. They should be stopped once the infection is controlled or if they show no benefit.

5. Honey containing products

The following honey containing products have been approved for use within the *Formulary: Medihoney* Antibacterial gel, medical honey and gel and *Medihoney* tulle. Fluid and bacteria are drawn from the wound by osmotic pressure exerted by the concentrated sugar solution of the honey. The antibacterial activity is due mainly to hydrogen peroxide liberated by an enzyme, although some honey dressings may also contain antibacterial substances originating from flowers. These products are effective at debriding wounds, have anti-inflammatory properties and act as a stimulant for growth of new blood capillaries, fibroblasts and epithelial cells. Honey dressings also reduce or eliminate odour. Some patients may experience 'drawing' pain for the first hour of treatment: if pain continues the dressing should be removed and the area cleaned with saline. These dressings should not be used on those allergic to bee venom. Honey dressings are non-irritant and create a low pH within the wound (an acidic environment deters microbes).

Specialist Advice

Specialist advice on all aspects of wound management can be obtained from the LCHS Tissue Viability Nurse Specialists. Contact details are as follows:

- North West Business Unit - **Colette Longstaffe**, Ravendale Health Centre, Laughten Way, Lincoln. LN2 2BT. Tel Number 01522 340900.
- North East Business Unit - **Kerry Belshaw**, Louth Locality Office, Louth Hospital, High Holme Road, Louth, LN11 0EU. Tel Number 01507 608342
- South West Business Unit - **Alison Tyrer**, Grantham Community Base, Tollemache Road South, Spittalgate Level, Grantham, NG31 7UH. Tel Number 01476 590416.
- South East Business Unit - **Angela Wilson**, Johnson Community Hospital, Spalding Road, Pinchbeck, PE11 3DT. Tel Number 01775 652254

Further Information

The full text Lincolnshire *Formulary of Wound Management Products* (2012) is available from the PACEF section of the NHS Lincolnshire website www.lincolnshire.nhs.uk

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