



Cedar

Healthcare Technology Research Centre

Review report of MTG17:

The Debrisoft monofilament debridement pad for use in acute or chronic wounds

Cost update: December 2018

Produced by: Cedar

Authors: Susan O'Connell, Cedar Researcher
Kathleen Withers, Cedar Researcher
Grace Carolan-Rees, Cedar Director

Date: 10th December 2018

Version: 1.0

1. Background

Medical technology guidance for Debrisoft was published in March 2014.

All medical technology guidance is reviewed 3 years after publication.

As part of their review process, NICE have requested an update on the cost analysis of the original assessment, at this stage focusing on the cost model only.

2. The technology

The Debrisoft monofilament debridement pad (L&R Medical UK Ltd) is a sterile, single-use pad for nurses and other healthcare professionals use on adults and children to remove devitalised tissue, debris, and hyperkeratotic skin around acute or chronic wounds. It is available in a 10cm × 10cm pad, a 10cm x 10cm pad with pocket, a 13cm x 20cm pad with pocket and 2cm x 5cm lolly (pad with plastic handle). It is made of monofilament polyester fibres with a reverse side of polyacrylate. The monofilament fibres are cut with angled tips designed to penetrate irregularly shaped areas and remove devitalised skin and wound debris ([MTG17](#)).

3. Original objective of guidance

To assess the clinical and cost effectiveness of the Debrisoft pad in patients needing debridement of an acute or chronic wound by a healthcare professional (most likely to be a nurse) in a community-based setting.

4. Current guidance recommendations

- 1.1 The case for adopting the Debrisoft monofilament debridement pad as part of the management of acute or chronic wounds in the community is supported by the evidence. The available evidence is limited, but the likely benefits of using the Debrisoft pad on appropriate wounds are that they will be fully debrided more quickly, with fewer nurse visits needed, compared with other debridement methods. In addition, the Debrisoft pad is convenient and easy to use, and is well tolerated by patients.

Debridement is an important component of standard woundcare management as described in Pressure ulcers (NICE clinical guideline 29) and Diabetic foot problems (NICE clinical guideline 119).

- 1.2 The Debrisoft pad is indicated for adults and children with acute or chronic wounds. The available evidence is mainly in adults with chronic wounds needing debridement in the community. The data show that the device is particularly effective for chronic sloughy wounds and hyperkeratotic skin around acute or chronic wounds.
- 1.3 The Debrisoft pad is estimated to be cost saving for complete debridement compared with other debridement methods. When compared with hydrogel, gauze and bagged larvae, cost savings per patient (per complete debridement) are estimated to be £99, £152 and £484 respectively in a community clinic and £222, £347 and £469 respectively in the home.

5. New evidence

5.1. Changes in technology

The monofilament fibre technology used on the pad has not changed, however three improved versions of the pad have been launched

- Debrisoft Lolly was launched in March 2016
- Debrisoft Pad 10cm x 10cm improved version with a pocket was launched in June 2018
- A larger Debrisoft Pad 13cm x 20cms with a pocket was launched in October 2018

The three versions use the same technology and mode of action. Debrisoft Lolly is more suitable for smaller wounds, hard to reach areas, cavity wounds and skin folds. The larger Debrisoft Pad 13cm x 20cms is

designed for larger areas of skin and larger wounds and as with the 10cm x 10cms version, incorporates a pocket.

5.2. New studies

The EAC has not carried out a review of the literature for this update, however, the manufacturer has submitted information on a number of studies which have been published since the publication of the original guidance. This information has been submitted to NICE by the company.

5.3. Ongoing trials

No trials of Debrisoft compared with saline & gauze, hydrogel or larvae for wound debridement were identified.

One trial identified in the original guidance has been halted due to difficulties with recruitment.

5.4. Changes in costs in the model

The EAC updated the costs of the technology (Debrisoft) using information provided by the company. The cost of Debrisoft 10cm x 10cm pad has increased from £6.19 to £6.55.

Costs for all the comparators were updated where possible and any additional relevant products identified using the British National Formulary (BNF) were added to the model.

Nurse costs were inflated using the 2015/2016 Pay and Price Series.

Two additional Debrisoft products are now available; a larger 13cm x 20cm pad priced at £16.38 and a smaller 'lolly' which is a 2cm x 5cm pad with a plastic handle priced at £5.88 (company submission). The EAC therefore ran a version of the model which replaced the costs of Debrisoft with these alternative prices. The EAC assumed the comparators would be the same but that the size of the comparator dressings would be similar to that of the new Debrisoft pads and therefore updated the costs accordingly to make appropriate comparisons.

The EAC assumed that nurse time for home and clinic visits would be the same for all three wound sizes.

One clinical expert stated that a similar product is now available in the NHS (Braun Medical Prontasan debridement pad). The same clinical expert also highlights a second debridement pad from Medi UK that uses a different mode of action. The EAC has not included either of these technologies in the model at this time as neither are listed on BNF online.

Information highlighted in yellow should be treated as commercial in confidence

Table 1: Updated Costs for a 10cm x 10cm dressing (Updated from original EAC Basecase)

Sheet Title	Cell	Original EAC Value 2013	Cedar Updated Value 2018	Comment
Nurse Costs				
Unit Costs	F6	£46.66	£47.27	Cost per hour £70 (inc travel) updated using 2015/2016 Pay&Price Series (PAY) to £70.91. Appointment time 40 mins
	F7	£21.26	£21.55	Cost per hour £58 updated using 2015/2016 Pay&Price Series (PAY) to £58.76. Appointment time 22 mins
	J6	£17.50	£17.73	Cost per hour £70 (inc travel) updated using 2015/2016 Pay&Price Series (PAY). Appointment time 15 mins
	J7	£14.50	£14.69	Cost per hour £58 updated using 2015/2016 Pay&Price Series (PAY). Appointment time 15 mins
SA	J3	£70	£70.91	Updated nurse cost per hour
	K3	£58	£58.76	Updated nurse cost per hour
Adhesive Film				
Unit Costs	F18	£0.20	£0.20	All costs updated using BNF online (F54:F68). 2 additional products identified (Mepitel and Vellofilm). No listing for ActivHeal Film or Bioclusive. The minimum cost for adhesive film was used in the model.
Saline and Gauze				
Unit Costs	F10	£0.39	£0.42	Updated using 2015/2016 Pay&Price Series (PRICES)
Hydrogel				
Unit Costs	F11	£1.02	£1.41	Minimum cost of hydrogel based on updated costs for all hydrogel (cells F27:F44) taken from BNF online. All costs for each of the hydrogel products were updated (cells F27:F44) using BNF online
Larvae				
Unit Costs	F12	£295	XXXX	XXXX
	F13	£175	XXXX	XXXX
Debrisoft				

Unit Costs	F15	£6.19	£6.55	Updated cost for Debrisoft 10cmx10cm pad with/without pocket BNF online/Company submission
------------	-----	-------	-------	--

Table 2: Debrisoft 13cmx20cm pad with pocket

Sheet Title	Cell	Updated Cedar Value 2018 (10cmx10cm)	Cedar Value 2018(13cmx20cm)	Comment
Adhesive Film				
Unit Costs	F18	£0.20	£0.40	Minimum cost for film dressing (BNF online)
	F54: F68			All costs updated using BNF online. 2 additional products identified (Mepitel and Vellofilm). No listing for ActivHeal Film or Bioclusive.
Absorbent Pads				
Unit Costs	F19	£0.17	£0.25	Minimum cost for absorbent pad (BNF online)
	F48: F51			Updated costs for absorbent pads (BNF online)
Saline and Gauze				
Unit Costs	F10	£0.42	£0.42	Updated using 2015/2016 Pay&Price Series (PRICES)
Hydrogel				
Unit Costs	F11	£1.41	£1.41	Minimum cost for hydrogel (BNF online). This is based on the costs for both hydrogel sheets and amorphous hydrogel (15g). All costs for individual hydrogel types/brands (cells F27:F44) updated using BNF online. The model uses the minimum cost (i.e. the cost of the cheapest product)
Larvae				
Unit Costs	F12	£295	XXXX	XXXX
	F13	£175	XXXX	XXXX
Larvae	D22	1	0	Switch to loose larvae
	D23	0	1	Switch to loose larvae
	E22	£295	£0.00	No bagged larvae cost
	E23	£0.00		
Debrisoft				
Unit Costs	F15	£6.19	£16.38	Updated cost for Debrisoft 13cmx20cm pad with pocket (company submission)

Table 3: Debrisoft 2cmx5cm lolly with plastic handle

Sheet Title	Cell	Updated Cedar Value 2018 (10cmx10cm)	Cedar Value 2018 (2cmx5cm lolly)	Comment
Adhesive Film				
Unit Costs	F18	£0.20	£0.11	Minimum cost for film dressing (BNF online). All costs updated using BNF online (cells F54:F68). 2 additional products identified (Mepitel and Vellofilm). No listing for ActivHeal Film or Bioclusive.
Saline and Gauze				
Unit Costs	F10	£0.42	£0.42	Updated using 2015/2016 Pay&Price Series (PRICES)
Hydrogel				
Unit Costs	F11	£1.41	£1.41	Minimum cost for hydrogel (BNF online). This is based on the costs for both hydrogel sheets and amorphous hydrogel (15g). All costs for hydrogel products updated using BNF online (cells F27:F24)
Larvae				
Unit Costs	F12	£379	XXXX	XXXX
Larvae	D22	0	1	Switch to bagged larvae in the calculations
	D23	1	0	Switch to bagged larvae in the calculations
	E22	£379		To update larvae costs in the calculations
	E23	£0.00		To update larvae costs in the calculations
Debrisoft				
Unit Costs	F15	£5.88		Updated cost for Debrisoft 2cmx5cm lolly with plastic handle

5.5. Notes on model inputs

The EAC which carried out this update (Cedar) was not the EAC which carried out the work on the original Assessment Report (Birmingham Brunel EAC). As such Cedar does not have access to some background knowledge and information regarding decisions made on the chosen inputs in the original model. Where there is a lack of clarity regarding the source or choice of the original inputs, rather than provide inappropriate alternatives, inputs have been inflated using Hospital & Community Health Services Pay & Prices Index.

Costs for hydrogel were updated for 15g as used in the original model and these costs were used for all comparisons. It is likely that more hydrogel would be needed for larger wound sizes therefore the costs of treatment with hydrogel may be under estimated when compared to Debrisoft 13cm x 20cm.

When updating the costs for individual comparators, the EAC used the same section of the BNF as the original guidance and where any product was no longer listed it was removed from the model. Similarly, if any additional product was listed in the BNF, the product and cost was added to the model.

When identifying comparators for each of the two new Debrisoft products, if no exact size match was available the closest larger size match to the Debrisoft pad under consideration was used. This was considered appropriate as the EAC consider that comparators that were smaller in size would not be used on comparable wound sizes as they would not achieve complete wound coverage.

Cost for larvae were provided as a product list from Biomonde. The information used to cost larvae for a 10cm x 10cm wound was provided by Biomonde staff. The EAC requested information from Biomonde relating to the requirements for a 13cm x 20cm and 2cm x 5cm wound area specifically to compare with the new Debrisoft pads, however this information was not provided, therefore the EAC has used a best estimate for the costs of larvae.

5.6. Results from updated changes

Results of the updated cost analysis suggest that the costs of all comparators including Debrisoft pads, have increased marginally since the publication of the guidance. Table 4 shows how the cost of treatment using Debrisoft has increased when using 10cm x 10cm pads as well as the cost of treatment using each of the two new Debrisoft products.

Debrisoft remains cost saving compared with saline & gauze (£292), hydrogel (£213) and larvae (£277) for 10cm x 10cm wound area in the home setting. Larger Debrisoft pads (13cmx20cm) are cost saving in the home setting compared with saline & gauze (£263), hydrogel (£185) and larvae (£311) and the smaller Debrisoft lolly (2cmx5cm) is also cost saving compared with all three comparators in the home setting: saline & gauze (£294), hydrogel (£215) and larvae (£401).

In the clinic setting, use of Debrisoft is cost saving for all three Debrisoft pads when compared with saline & gauze (£154; £125 and £126 for 10cmx10cm, 13cmx20cm and 2cmx5cm respectively), hydrogel (£99; £79 and £101 for 10cmx10cm, 13cmx20cm and 2cmx5cm respectively) and larvae (£373, £343 and £345 for 10cmx10cm, 13cmx20cm and 2cmx5cm respectively).

When updating the costs for hydrogel, one product was only available in 25g. Using the cost for 25g of hydrogel (£3.08) in the model to reflect the possibility that larger wound areas would require more hydrogel indicates that Debrisoft remains cost saving compared with the other comparators (table 6).

Table 4: Updated Debrisoft Costs

Debrisoft Pad	Home	Clinic
Original Guidance	£333	£139
10cmx10cm	£338	£141
13cmx20cm	£368	£171
2cmx5cm lolly	£336	£139

Table 5: Changes to incremental costs following costing update

	Saline & Gauze		Hydrogel		Larvae	
	Home	Clinic	Home	Clinic	Home	Clinic
Original EAC Basecase (2013)	-£288	-£152	-£211	-£99	-£280	-£375
Cedar 2018 Update (10cmx10cm)	-£292	-£154	-£213	-£99	-£277	-£373

Table 6: Debrisoft 13cm x 20cm incremental cost savings

	Saline & Gauze		Hydrogel		Larvae	
	Home	Clinic	Home	Clinic	Home	Clinic
15g Hydrogel (£1.41)	-£263	-£125	-£185	-£71	-£311	-£343
25g Hydrogel (£3.08)	-£259	-£121	-£197	-£83	-£308	-£340

Table 7: Debrisoft 2cm x 5cm lolly incremental cost savings

Saline & Gauze		Hydrogel		Larvae	
Home	Clinic	Home	Clinic	Home	Clinic

-£294	-£156	-£215	-£101	-£401	-£375
-------	-------	-------	-------	-------	-------

6. Conclusion

Two clinical experts suggest there has been no significant change to the care pathway and that Debrisoft is still used in the NHS. One clinical expert suggest that there are two new comparable products available however these do not seem to be listed on BNF online or on NHS Supply Chain.

Two new Debrisoft pads are available thus increasing the range and size of wounds that the pads can be used for.

Updated costs suggest that Debrisoft pads are still cost saving compared with saline & gauze, hydrogel or larvae for wound debridement for all three sizes of Debrisoft pad.

Caution should be exercised when reviewing the cost savings for the two new Debrisoft products as it is possible that a more thorough review of the relevant comparators and costs is required to ensure accuracy.

7. References

The Debrisoft monofilament debridement pad for use in acute or chronic wounds NICE MTG17 (2014)

Medicines Complete (BNF) <https://www.medicinescomplete.com/#/> [last accessed 10 December 2018]

Department of Health Pay & Price Series 2015/16
[http://www.info.doh.gov.uk/doh/finman.nsf/af3d43e36a4c8f8500256722005b77f8/360a47827991d10a80258036002d8d9f/\\$FILE/2015.16%20Pay%20&%20Price%20series.xlsx](http://www.info.doh.gov.uk/doh/finman.nsf/af3d43e36a4c8f8500256722005b77f8/360a47827991d10a80258036002d8d9f/$FILE/2015.16%20Pay%20&%20Price%20series.xlsx) [last accessed 10 December 2018]