

Wound care products

Key therapeutic topic

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Key points

- A large number of wound dressings are available with a wide range of physical performance characteristics and costs, presenting a challenge for healthcare professionals who are managing wounds.
- Prescribers' ability to choose wound dressings on the basis of clinical evidence is hindered by the relative lack of robust clinical- or cost-effectiveness evidence.
- **Options for local implementation:**
 - Review and, if appropriate, optimise prescribing of wound dressings to ensure that the least costly dressings that meet the required clinical performance characteristics are routinely chosen.
 - Prescribe the minimum quantity of dressings sufficient to meet people's needs.
 - Do not routinely choose antimicrobial (for example, silver, iodine or honey) dressings ahead of non-medicated dressings.

Evidence context

A large number of wound dressings are available with a wide range of physical performance characteristics (such as size, adhesion, conformability and fluid-handling properties) and costs, presenting a challenge for healthcare professionals who are managing wounds.

Although representing only 1 route by which dressings are procured within the NHS, the

prescription costs of advanced wound dressings and antimicrobial dressings in primary care in England were almost £92 million in the year to July 2018 (based on [British National Formulary \[BNF\] volume 69](#) sections at presentation level; personal communication: NHS Business Services Authority 2018). There is considerable variation in the cost of dressings both between categories of dressings and within each category. For example, silver dressings accounted for almost 9% of items supplied on prescription, but in view of their relatively high cost were associated with nearly 18% (£16 million) of the total cost of advanced wound dressings (see [figures 1 and 2](#)).

NICE has issued guidance on [preventing and managing pressure ulcers](#) and [preventing and managing diabetic foot problems](#), and the Scottish Intercollegiate Guidelines Network ([accredited by NICE](#)) has issued guidance on the [management of chronic venous leg ulcers](#). Although these guidelines give important recommendations about wound care, they do not make recommendations on specific products.

NICE has published numerous pieces of medical technologies guidance and medtech innovation briefings on wound care products – see the [injuries, accidents and wounds](#) page on the NICE website.

NHS England and NHS Improvement have commissioned the Academic Health Science Networks (AHSN) to develop and deliver a [National Wound Care Strategy Programme](#) for England.

Prescribers' ability to choose wound dressings on the basis of clinical evidence is hindered by the relative lack of robust clinical- or cost-effectiveness evidence, as highlighted in numerous systematic reviews (see the Cochrane reviews on [wounds](#)) and NICE's evidence summary on [advanced wound dressings and antimicrobial dressings for managing common chronic wounds](#) (including diabetic foot ulcers, pressure ulcers, venous leg ulcers and infected wounds). For the purposes of the evidence summary, advanced dressings are those that provide the optimal environment for wound healing by simple physical or chemical means, typically by controlling moisture levels (for example, alginate, film, foam, hydrocolloid and hydrogel dressings).

The evidence summary concluded that there is little high-quality evidence from randomised controlled trials (RCTs), or systematic reviews of controlled clinical trials to support the use of advanced or antimicrobial dressings for chronic wounds. From the studies included in the evidence summary, there is some limited evidence that some advanced dressings are more clinically effective than simple conventional dressings for treating some wounds. For example, systematic reviews and meta-analyses found:

- hydrogel dressings were more effective than basic wound contact dressings for complete

- healing of diabetic foot ulcers (low-quality evidence), as were foam dressings (very low-quality evidence)
- hydrocolloid and polyurethane film dressings were more effective than gauze dressings in terms of the proportion of pressure ulcers completely healed (low-quality evidence).

However, many of the conventional dressings used as comparators are no longer routinely recommended for chronic wounds (for example, gauze dressings) and there is generally insufficient evidence to distinguish between different types of advanced dressings.

As well as being few in number, many of the RCTs have significant limitations and the evidence is generally of low quality. Overall, estimates of the effects of dressings are uncertain and not optimal in terms of informing clinical practice. Further good-quality research is needed to improve confidence in the evidence and would probably change the implications for practice. Safety, efficacy and cost-effectiveness are important factors to consider when choosing dressings. However, a decision on which dressing is most appropriate for a specific chronic wound also requires careful clinical assessment of the person's wound, their clinical condition, any comorbidities and their personal circumstances and preferences.

For local wound infections, the [antimicrobial dressings](#) section of the BNF advises that a topical antimicrobial dressing can be used to reduce the level of bacteria at the wound surface but that it will not eliminate a spreading infection. Antimicrobial dressings containing iodine or silver should be used only when clinical signs or symptoms of infection are present.

When a specific dressing cannot be adequately justified on clinical grounds, it would seem appropriate for NHS healthcare professionals to routinely choose the **least costly dressing** of the type that meets the required characteristics appropriate for the type of wound and its stage of healing (for example, size, adhesion, conformability and fluid-handling properties). The frequency of dressing change needs to be carefully considered and should be appropriate for the wound and dressing type. Patients should be assessed regularly. Prescribing the minimum quantity of dressings necessary to meet a person's needs can avoid wastage and stockpiling.

In view of the many dressings available, the absence of good-quality evidence for national guidelines to base specific recommendations on, and recognising financial constraints, local formularies provide a means of rationalising the choice of dressings. NICE's guideline on [developing and updating local formularies](#) provides good practice recommendations for the systems and processes needed to ensure NHS organisations develop and update local formularies effectively and in accordance with statutory requirements. In line with these good practice recommendations, a Wounds UK best practice statement offers advice on [developing a wound dressings formulary](#)

(free login required for health professionals), regular update and audit, and provision of an ongoing educational programme to ensure that use of formulary wound dressings is optimised.

See NICE's evidence summary on [chronic wounds](#) for more information on the best available evidence for advanced wound dressings and antimicrobial dressings and recommendations from national guidance for managing common chronic wounds.

Prescribing data, metrics or supporting resources

At this point, the following prescribing data have been identified to support this topic.

A breakdown of the volumes of advanced wound dressings and antimicrobial dressings prescribed in primary care in England and their associated costs for the year to July 2018 is shown in figures 1 and 2. The figures were created using data provided by the NHS Business Services Authority, which was based on BNF 69 sections at presentation level. Note that primary care prescribing represents only 1 route by which dressings are procured within the NHS.

Figure 1 Annual prescribing volumes of advanced wound dressings in primary care in England (August 2017 to July 2018)

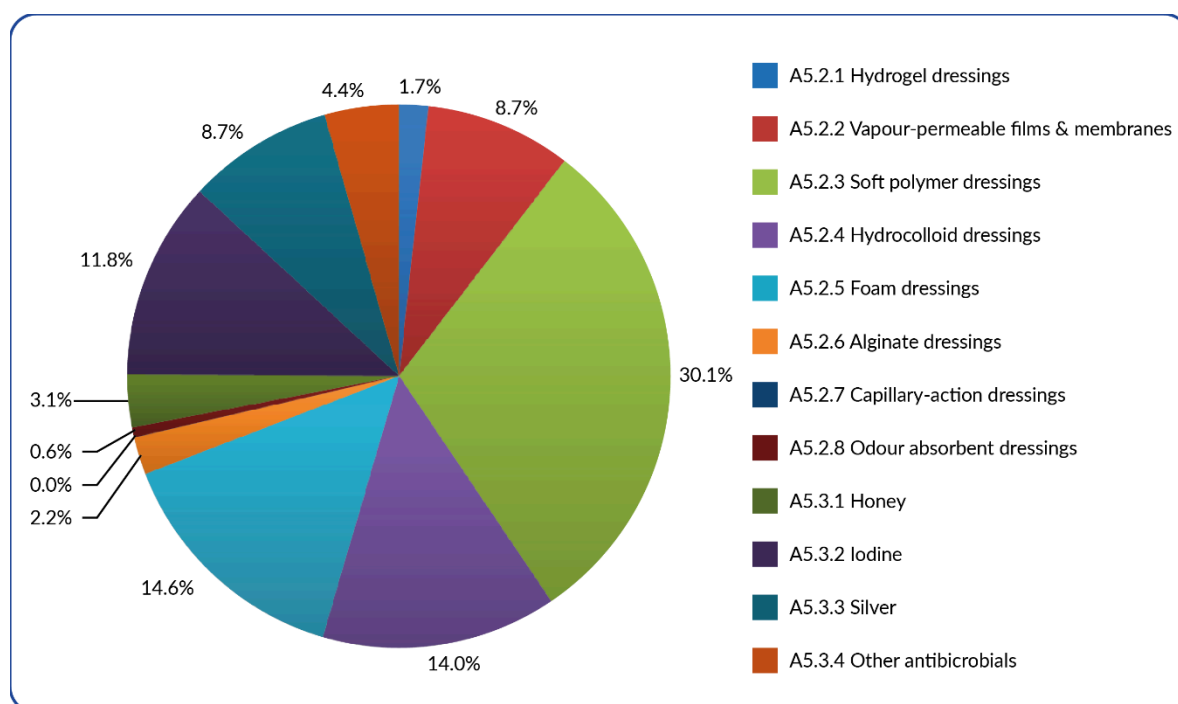
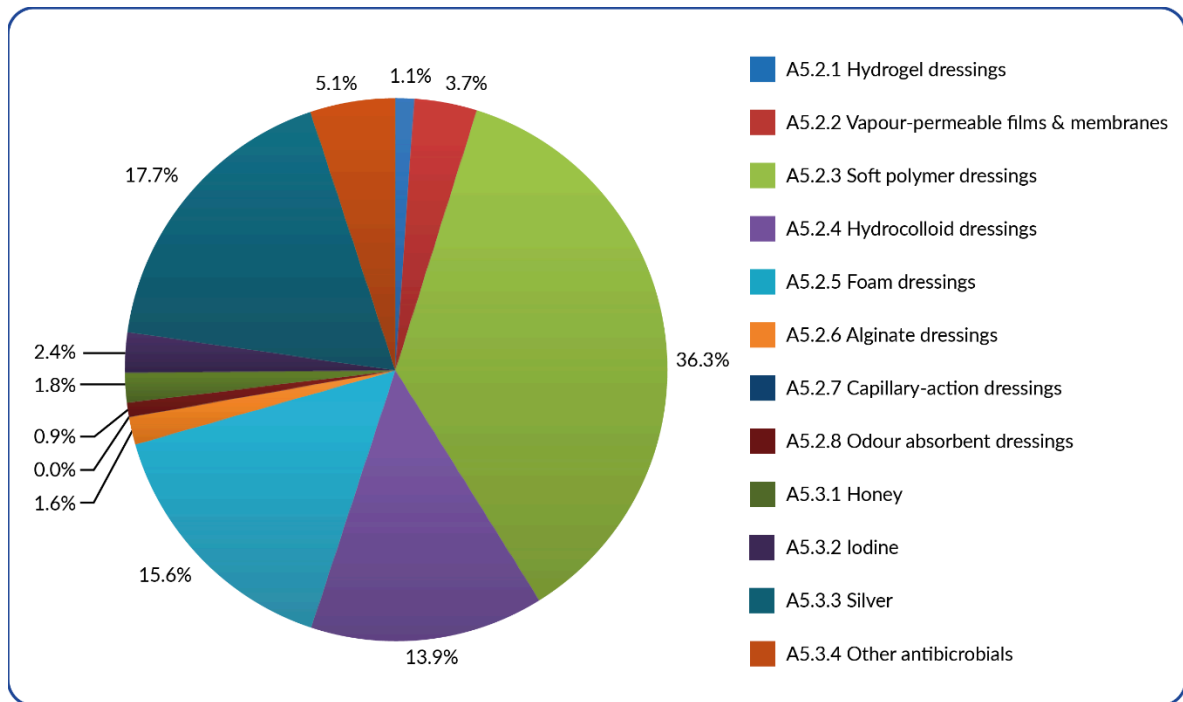


Figure 2 Annual prescribing costs of advanced wound dressings in primary care in England (August 2017 to July 2018)



Update information

September 2019: This topic was retained for the 2019 rapid update of medicines optimisation: key therapeutic topics. Minor editorial changes have been completed. Links have been added to the NICE wound management topic page and the National Wound Care Strategy Programme for England.

About this key therapeutic topic

This document summarises the evidence base on this key therapeutic topic that has been identified to support medicines optimisation. **It is not formal NICE guidance.**

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