



Topic Exploration Report ¹

Topic explorations are designed to provide a high-level briefing on new topics submitted for consideration by Health Technology Wales. The main objectives of this report are to:

- Determine the quantity of evidence available for a technology of interest.
- Identify any gaps in the evidence.
- Inform decisions on topics that warrant fuller assessment by Health Technology Wales (HTW).

Topic exploration report number	TER493
Topic	Wearable wound care for hidradenitis suppurativa
Summary of findings	<p>Hidradenitis suppurativa (HS) is a chronic skin condition that affects approximately 1-4% of the UK population. It is associated with significant pain, as the blocked hair follicles affected by HS result in abscesses and scarring which require daily dressing. For many people with HS self-managing their wound dressing may result in localised skin irritation, increased time, and restricted movement. Wearable wound care for HS may be effective in assisting people to self-manage their wound dressing effectively.</p> <p>Two primary studies were identified. Results show that wearable wound care may improve quality of life in people with HS when compared to standard self-care. Two case studies suggest that wearable wound care may result in cost saving for the NHS compared to standard practice. There is a need for more high-quality evidence that assesses the clinical and cost effectiveness of wearable wound care for hidradenitis suppurativa.</p>

¹ [Cyfieithu dogfennau HTW wedi'u cyhoeddi o'r Saesneg i'r Gymraeg](#)
Translation of published technical HTW documents from English into Welsh

Introduction and aims

Hidradenitis suppurativa (HS) is a chronic skin condition where areas of skin containing apocrine sweat glands become inflamed, resulting in abscesses and scarring in the affected area. HS may occur in or around the groin, buttocks, armpits, abdomen folds or breast areas and affects approximately 1-4% of the UK population. As areas affected by HS continuously drain, frequent dressing changes and considerable wound care is required on the part of the patient. This need for intensive wound care, coupled with the locations in which HS present make it difficult for patients to self-manage HS. Non-adhesive wearable wound care may be an effective option for the management of HS and may eliminate the adverse effects commonly associated with self-adhesive dressings, or those secured with adhesive medical tape. HidraWear, a class I medical device, was identified by the topic proposer as a specific example of this technology.

Health Technology Wales researchers searched for evidence on the clinical and cost effectiveness of wearable wound care for hidradenitis suppurativa (HS).

Evidence overview

Guidance

We were unable to identify any relevant UK or international guidance for this technology.

Secondary Evidence

We were unable to identify any secondary evidence for this technology.

Individual studies

A single arm, unblinded pilot trial by Moloney, et al (2022) assessed different methods of wound care for ease of use and impact on wound management in 15 female participants with HS. Participants were provided with two HidraWear garments and trial dressings to use at home over the 21-day study period. Participants were then asked to respond to a questionnaire comparing their experience with the HidraWear garments and dressings to their usual routine. Quality of life was also studied based on participants' responses to the dermatology life quality index (DLQI) questionnaire administered during the study in 7-day intervals. The study identified statistically significant ($p < 0.001$) improvements in dressing-related pain, comfort and ease of use of the dressings, and other domains relating to confidence. DLQI scores decreased from a mean score of 19.3 on day 0 to a mean score of 4.5 on day 21 ($p < 0.001$) which is suggestive of an increased quality of life. The study did not assess the severity of HS wounds or the effects of the HidraWear dressing on wound healing.

Two UK case reports were detailed in an article by Handley (2023). Each case report detailed dressing usage for patients before and after being provided with HidraWear garments and dressings with associated costs. Case study one detailed a 60-year-old male patient whose wound dressing regimen cost £1,972.64 every four weeks, with quality of life assessed using DLQI. The patient was provided with HidraWear garments and dressings, and the case study claims nursing time and subsequent visits decreased, with the monthly cost of HidraWear dressings equalling £397 every four weeks. The patients DLQI score also decreased from 17 to 0, which is indicative of increased quality of life. In case study two, a male patient (age not reported) was following a wound dressing routine costing £285.60 per month. Following assessment, the patient was provided with HidraWear garments and dressings, and monthly cost decreased to £187.60.

Evidence overview

Ongoing trials

We were unable to identify any relevant ongoing trials for this technology.

Areas of uncertainty

Further clarification is required in the following areas:

- Further evidence from larger studies is needed for the effect of wearable wound care on wound stage and healing time outcomes
- Further assessment of the economics of the technology is needed
- Information on how this intervention would embed in the current NHS structure and practice is needed

Literature search results

Health technology assessments and guidance
No evidence found.
Evidence reviews and economic evaluations
No evidence found.
Individual studies
No evidence found.
Ongoing research
No evidence found.
Evidence supplied by topic proposer
Handley. C. (2023). Hidradenitis suppurativa: diagnosis and treatment. <i>Wound Care</i> . . 37(3). Moloney S, Fitzgerald D, Roshan D, et al. (2022). Impact of hidradenitis suppurativa-specific wound dressing system on patient quality of life and dressing-related pain: pilot study. <i>J Wound Care</i> . 31(11): 898-906. doi: 10.12968/jowc.2022.31.11.898 Moloney S, McGrath BM, Roshan D, et al. (2022). The Personal Impact of Daily Wound Care for Hidradenitis Suppurativa. <i>Dermatology</i> . 238(4): 762-71. doi: 10.1159/000520262

Date of search	January 2023
Concepts used	Hidradenitis suppurativa, acne inversa, wound care, hidrawear, dressing, wearable wound care

Proposed research question and evidence selection criteria (if selected)

Proposed Research question	What is the clinical and cost effectiveness of wearable wound care for hidradenitis suppurativa?
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	Inclusion criteria	Exclusion criteria
Population	Adults with hidradenitis suppurative / acne inversa	
Intervention	Wearable wound care, comprised of a garment and non-adhesive dressing	
Comparison/ Comparators	Standard dressings, either adhesive or non-adhesive	
Outcome measures	Wound healing and HS stage, quality of life, economic outcomes especially where they relate to cost and use of resources.	

Proposed speciality	
Proposed specialities	Injuries, accidents and wounds; patient experience; dermatology