

# CATEGORY: COST-EFFECTIVE AND EFFICIENT WOUND CARE

# MAKING THE CASE

## ALLEVYN™ LIFE

### WOUND MANAGEMENT FOR THE 21<sup>ST</sup> CENTURY

Wounds pose a significant economic cost to the healthcare system, but this is largely hidden and the impact often not recognised. The prevalence and incidence of wounds are set to rise as a result of an increasing and ageing population, along with the prevalence of complex comorbidities<sup>1</sup>. The following main cost drivers determine the level of resources used in wound care:

- **The time it takes to heal a wound** – longer duration means increased nursing time and dressing costs, and increased risk of complications<sup>2</sup>
- **The frequency of changing dressings** – higher frequency of dressing changes means increased material and nursing costs
- **The incidence of complications** – complications (e.g. infection)<sup>2</sup> may lead to hospital admission, surgical intervention, lengthy treatment or increased use of other resources<sup>2</sup>.

The cost drivers outlined above are the first areas to tackle when attempting to make wound care more efficient and effective. Taking a simplified approach to dressing selection, education and training, including thinking about opportunity cost (i.e. what have we given up for a nurse to undertake wound treatment), could help to improve efficiency in wound management and identify possible ways to release resources<sup>2</sup>.

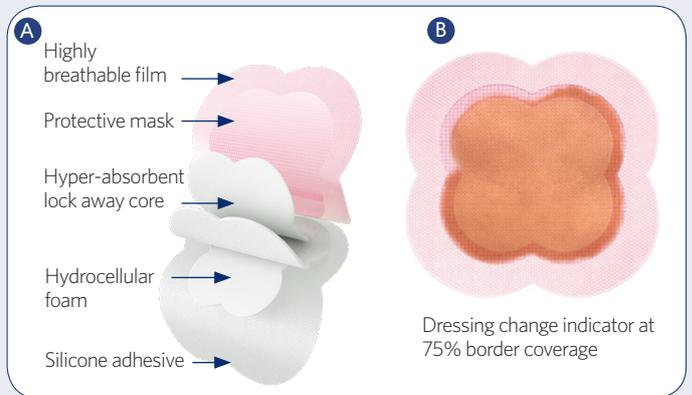
### ADDRESSING THE CHALLENGES: REDUCING CHANGES

An integrated pathway of options that addresses each of these main wound care cost drivers (Figure 1) could improve efficiency. The time healthcare professionals spend on wound management activities, such as changing dressings, is a significant contributor to total resource use, especially in the community. For example, one wound management audit in Denmark found an average of 3.53 changes per week in one care home, with 23% of wounds having dressings changed daily<sup>3</sup>. If a dressing can remain in place for longer, this has the potential to yield great benefits in practice efficiency, as well as improved clinician and patient satisfaction<sup>2</sup>.

### INTRODUCING ALLEVYN LIFE

ALLEVYN LIFE is a multi-layered dressing that was designed following extensive research with both clinicians and patients (Figure 2A), with features including:

- A hyper-absorbent layer that locks fluid away to efficiently manage wound exudate and prevent leakage
- A masking layer that conceals presence of exudate, enhancing acceptability for patients
- A unique change indicator, which shows both clinicians and patients when the dressing requires changing
- An ergonomic quadrilobe shape that fits the contours of the body.



Figures 2A & 2B: ALLEVYN LIFE dressing

Wound dressing changes are usually prompted when the dressing is saturated and begins to leak; its surface becomes soiled by unsightly strikethrough; or it starts to detach from the wound. ALLEVYN LIFE's pioneering design addresses these issues and, in combination with the unique change indicator (Figure 2B), it is able to increase the interval between dressing changes, thus resulting in fewer dressing changes and saving valuable nursing time. Time can instead be allowed for proper re-assessment of a wound, rather than a nurse visiting a patient because their dressing is not working effectively<sup>4</sup>.

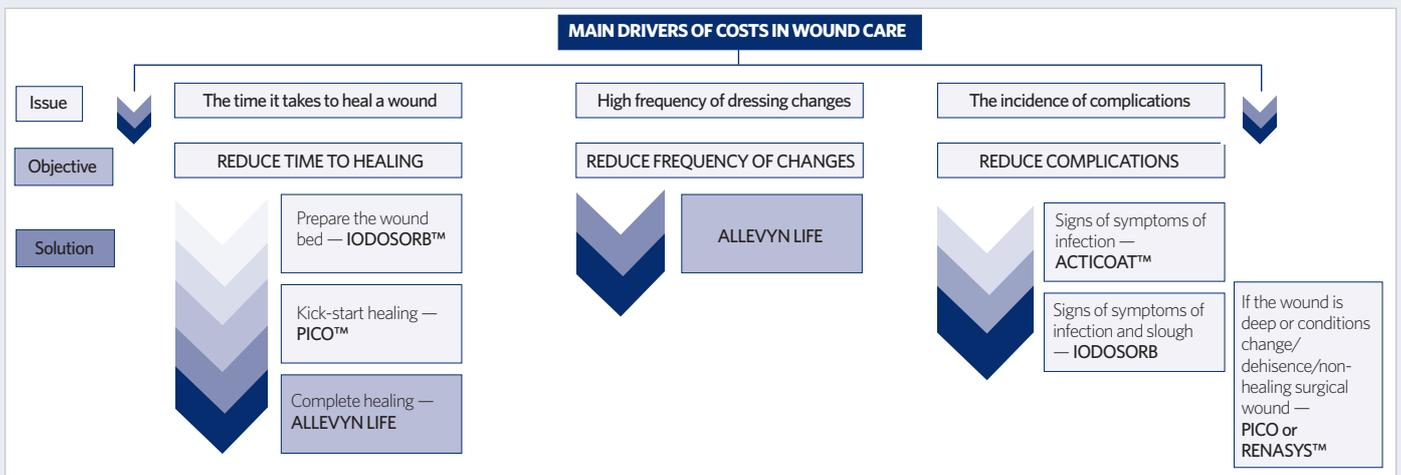


Figure 1: Integrated pathway for efficient wound management

**Explanation of how to use this guide:** This document can be used to make the case for implementing effective prevention and management measures and may be supported by data from your own care setting. As well as economic impact, it is important to know the impact of interventions on patient quality of life and outcomes.

Table 1: In-practice investigations of ALLEVYN LIFE

	Joy et al (2015) <sup>5</sup>	Kronert et al (2016) <sup>6</sup>	Simon D, Bielby A (2014) <sup>7</sup>	Stephen-Haynes et al (2013) <sup>4</sup>
<b>Overview of study</b>	Collaborative project (n=37) seeking to enhance wound care efficiency with ALLEVYN LIFE, looking at frequency of nursing visits, dressing changes and reasons for dressing change.	Audit of resource use in two centres (n=35), reviewing frequency of dressing changes/ types of dressing used before and after adoption of ALLEVYN LIFE.	In-practice case series examining ALLEVYN LIFE to determine suitability for formulary listing, looking at usability, acceptability and clinical performance (n=109).	In-practice review looking at usability, acceptability and performance of ALLEVYN LIFE (n=40), focusing on in-practice impact.
<b>Performance rating</b>	Patients gave feedback on their experience of aspects of care including control of wound leakage at baseline during routine care and following project implementation.  The proportion of 'good' or 'very good' ratings rose from 57.1% to 62.9%. Conversely, the proportion of patients indicating that the control of leakage was 'poor' decreased from 25.7% at baseline, to 14.3%.	Clinicians reported ALLEVYN LIFE to be better than previous products in various areas, including ease of use (96.8%), adhesion (90.3%), wear time (90.3%) and overall performance (96.8%).	Dressing was acceptable to clinicians across a range of characteristics. Importantly, ease of application was rated as good, very good or excellent in 93.3% of cases.  Similarly the criteria for appraising the performance of ALLEVYN LIFE generated extremely positive responses with ratings of excellent, very good, or good being the predominant response rates for ability to conform to wound site (92.3%), exudate management (93.3%) and patient comfort during wear (93.3%).  Some 70% of wounds were said to of decreased in size.  98% of clinicians recommended ALLEVYN LIFE for use in their practice.	Nurses were asked to document their experience of the in-practice performance of ALLEVYN LIFE and rated it as follows: <ul style="list-style-type: none"> <li>• 100% Excellent, very good or good for ease of application</li> <li>• 92.1% Excellent, very good or good for exudate management</li> <li>• 92.5% Excellent, very good or good for ability to conform</li> <li>• 97.3% Excellent, very good or good for indicator for change</li> <li>• 94.9% Excellent, very good or good for masking staining of exudate</li> <li>• 94% would recommend for use</li> </ul>
<b>Wear time/ dressing changes</b>	Dressing change frequency decreased in 97.3% of patients – mean dressing change frequency reduction of 50% (3.6 to 1.8 visits per week).  Mean increase in wear time of 2.3 days (92%) (2.5 to 4.8 days). Mean number of dressings required per change fell by 47.6% (2.1 to 1.1 per change).  Overall reduction in dressings used per patient per week of 79.6% (364 to 73 dressings).	Mean frequency of dressing changes per week reduction of 27% (from 4.59 to 3.34 times per week).  Mean increase in wear time of 0.46 days (27%), from 1.73 to 2.19 days.	The mean difference in dressing change frequency was 43% (from 4.7 to 2.7 times per week).  Mean increase in wear time of 1.7 days (49%) from 3.5 to 5.2 days.	Mean increase in wear time of 1.5 days (79%; from 2.3 to 3.86 days).  Mean reduction of 1.64 dressing changes per week (where wear time data were available for previously used dressing and ALLEVYN LIFE).  The Trust estimates a possible reduction of 769 nursing visits per week or approximately 40,000 per year.
<b>Cost savings</b>	Mean dressing costs per change were similar pre- and post-implementation, but the mean cost per week reduced by 64% (from £28.46 to £10.12).	The average cost of dressings across a week decreased by 22.6% (from €45.81 to €35.46).		

## EVIDENCE FOR ALLEVYN LIFE

To obtain useful data that supports product choice, it is important to engage front-line staff and ensure appraisal includes in-practice use that accurately reflects how the product will be used on a day-to-day basis<sup>7</sup>. Results for four such studies with ALLEVYN LIFE are outlined in Table 1.

## SUMMARY

It is important to implement technologies that are easy to use, that promote rapid healing, improve patient satisfaction, and free up clinical time. During a series of in-practice reviews, ALLEVYN LIFE was given high performance ratings due to a number of positive dressing attributes, including ease of use and impact on wear time, which can yield benefits in practice efficiency, subsequently releasing nursing time. A much less

complex approach to dressing products was achieved with the adoption of ALLEVYN LIFE along with education, training and effective promotion of practice change, with considerable cost benefits resulting from reduced wear time and decreased number of dressing changes.

### References

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