



Digital Wound Imaging: Reducing Care Costs Through Early Detection

A Report by Joerns Healthcare

INTRODUCTION

Wound care is a critical aspect of long-term care (LTC), and delayed healing can lead to significant consequences for residents and facilities alike. Without a standardized approach for accurately assessing chronic wounds, the costs associated with treatment can become a major financial challenge.

Poor communication, inaccurate wound measurement, and incomplete documentation can all cause delays in healing and resource waste. As government agencies continue to crack down on long-term care facilities, wound care practices must align with federal regulations to reduce the chance of legal disputes.

Digital fluorescent wound assessment represents a promising solution for reducing wound care costs and improving healing rates. It is a solution that helps clinicians make better treatment decisions and lowers the risk of antibiotic overuse by giving them objective diagnostic data at the point of care.



THE CLINICAL AND FINANCIAL PRESSURES OF CHRONIC WOUNDS

Wound healing is a complex, multi-step process essential to a patient's overall well-being. Unfortunately, it can also be one of the most difficult aspects of patient care, particularly in long-term care facilities.

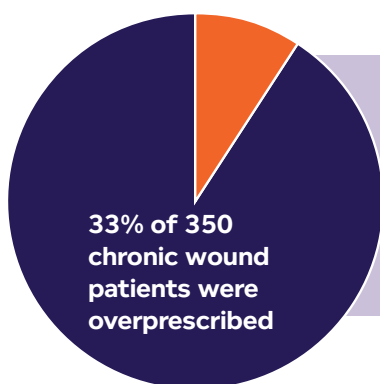
Antimicrobial dressings represent the highest financial burden for wound care. A lack of standardization in wound assessment can triple costs.²



\$3,456



\$1,040



A study of 350 chronic wounds across 20 clinicians revealed that reliance on symptoms alone to diagnose bacterial burden in chronic wounds leads to unnecessary use of antimicrobials.³

Clinicians often rely on clinical signs and symptoms to assess for bacteria at the point of care, inform the prescription of antibiotics, and guide other antimicrobial stewardship efforts. However, strong evidence shows that relying on clinical symptoms alone is an insufficient strategy for detecting problematic bacterial loads and infections.³ This can result in delays in diagnosis and appropriate treatment, making assessment and dressing selection the primary clinical challenges in wound management.

Then there is the regulatory cost. Wound care must meet federal regulations, and surveyors are cracking down on facilities that are not properly addressing wounds.

Lawsuits related to poor wound care are not uncommon, with over 17,000 lawsuits filed annually for pressure injuries.⁴

17,000+
Pressure Injury
Lawsuits Annually

Failure to meet the required wound care standards can result in fines, decreased funding, and probationary periods that often require additional out-of-pocket expenditures. Ensuring proper documentation and wound care is critical to avoid legal repercussions.



DATA GAPS LEADING TO DELAYED WOUND HEALING

When it comes to addressing wounds in long-term care organizations, limited and incomplete data collection can have a stifling effect on progress. Without accurate and comprehensive tracking of recurrence and changes in severity, any interventions that could be implemented to assist in wound healing may come too late — leading to further medical complications or even death.



IMPRECISE WOUND MEASUREMENT

Accurately measuring wounds is critical in determining the healing progress and treatment plan. Incorrect or imprecise measurements can result in healthcare providers being unable to accurately identify the extent of tissue damage and adjust treatment plans accordingly.



INADEQUATE WOUND DOCUMENTATION

Proper documentation is crucial for effective wound management. Poor documentation can result in incomplete information about the wound, hindering informed decision-making and leading to delayed healing.



INACCURATE WOUND DIAGNOSIS

An accurate wound diagnosis is essential for prompt and effective treatment. Improper diagnoses can cause financial distress due to unexpected costs associated with long-term treatments or lawsuits resulting from preventative complications.



UNNECESSARY USE OF ANTIMICROBIALS

Antimicrobial dressings play a crucial role in wound management and healing. But if they are misused, especially on an infected wound, they can slow and complicate the healing process. On the other hand, overuse of these dressings results in inflated care costs.



DIGITAL WOUND ASSESSMENTS: AN CLINICALLY-PROVEN SOLUTION THAT DOESN'T PUT MARGINS AT RISK

In recent years, the use of digital assessment systems has gained traction as a solution to the challenges posed by delayed wound healing.

By providing objective diagnostic information and enabling more informed treatment decisions, digital wound assessments can significantly improve wound care outcomes and enhance the quality of care provided to residents, all while preserving resources.



NON-INVASIVE WOUND MEASUREMENT

Digital wound assessments provide clinicians with an efficient, safe way to measure wounds without requiring invasive methods. This eliminates patient discomfort and allows healthcare professionals to quickly collect valuable data that can inform treatment decisions.



EARLY DETECTION & ASSESSMENT

With the ability to deliver diagnostic information in real-time, fluorescent digital wound assessments make it possible to obtain detailed information at the point of care, including size, location, and bacterial load.



MORE TARGETED TREATMENT

Research indicates that existing cleaning and debridement practices commonly leave behind dangerously high levels of bacteria, hindering the healing process for wounds.⁵



STANDARDIZED DOCUMENTATION

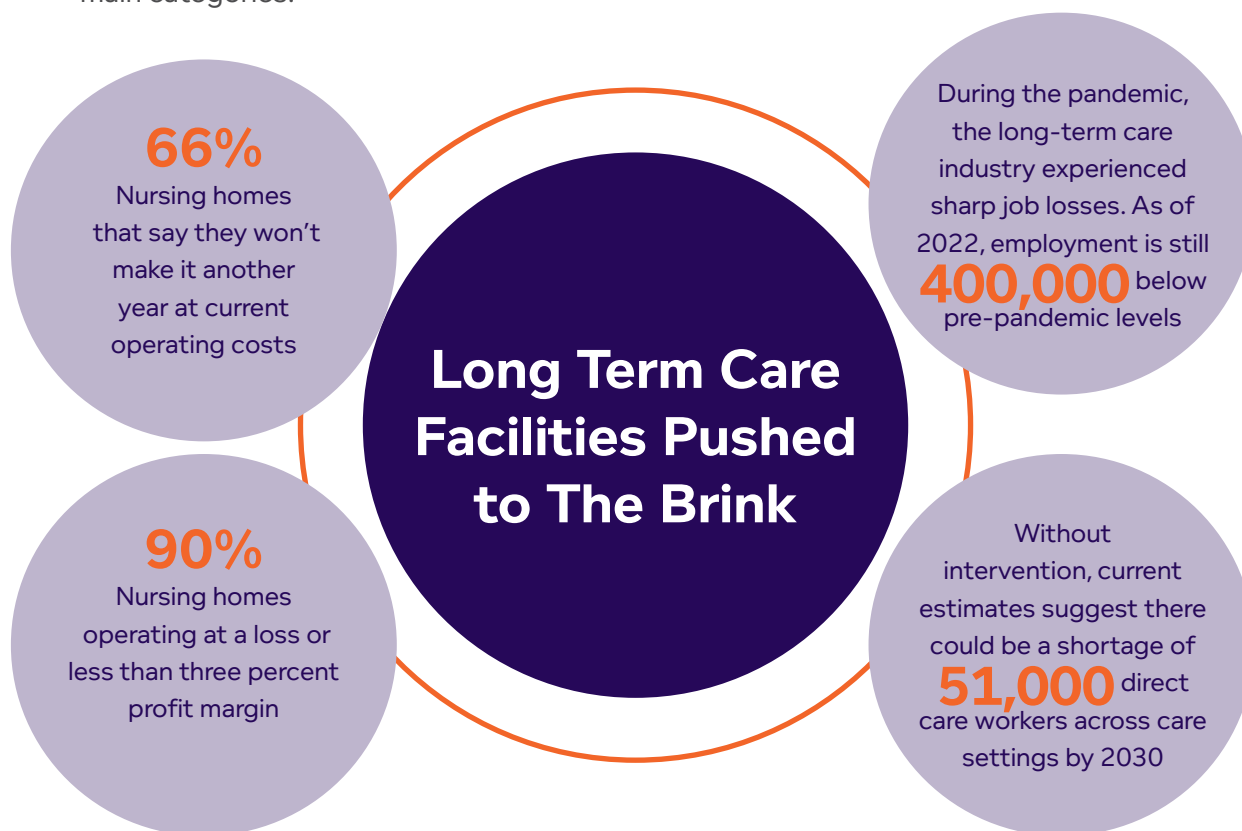
Wound care in long-term care facilities is subject to high regulatory standards, making it crucial to stay compliant with the latest regulations. The proper documentation of wound care and assessment is important to reduce the risk of error, which can result in fines and lawsuits.

If timely, accurate action is essential to reducing the financial burden of chronic wounds, why aren't more LTC organizations investing in this technology?



CHALLENGES IN ADOPTING DIGITAL WOUND ASSESSMENT TECHNOLOGY

The implementation of digital wound assessment technology in long-term care has been met with several challenges. Many of these can be distilled into a few main categories.^{6,7}



Financial instability due to government budget cuts

With the ever-changing landscape of long-term care, many facilities are struggling with budget cuts and financial instability. Implementing digital wound assessment technology can appear to be a daunting financial expense at first glance, but the potential for cost savings offered by faster healing times makes it a worthy investment.

Lack of awareness around digital wound assessment cost-savings

Many long-term care facilities are unaware of the impact that inaccurate wound assessments have on their overall expenditures. Delayed wound healing results in longer stays, increased use of resources, and additional medical expenses. Implementing digital wound solutions can help mitigate these costs.



Reduce Healing Times for Residents



- WOUND CLEANING**
Clinicians can now quickly and accurately identify areas of infection with fluorescent bacteria, making proper wound bed preparation more effective than ever before.
- WOUND SAMPLING**
MolecuLight has been proven to be an effective method for swabbing, showing a 54% improvement over the Levine technique.
- WOUND TREATMENT PLANNING**
By examining the effects of fluorescent bacteria on wound surface area at each visit, clinicians can make data-driven decisions when planning treatment.
- PATIENT ENGAGEMENT**
Creates transparency between residents and clinicians. Residents can now see and understand why certain treatments are being instituted for their wounds.
- ANTIBIOTIC STEWARDSHIP**
Supports more responsible antibiotic decision-making, improving patient outcomes and effectively limiting excessive antibiotic use.
- WOUND DEBRIDEMENT**
More efficient and targeted debridement of wounds.
- WOUND ASSESSMENT**
Visualize fluorescent bacteria and measure wound surface area in real time to gain a deeper understanding of the healing process.
- WOUND DOCUMENTATION**
Highly accurate visual documentation of fluorescent bacteria on a wound surface for objective analysis.



MolecuLight offers a revolutionary approach to wound assessment, empowering clinicians with an easy-to-use tool for digital measurement and documentation. Fluorescence images that indicate bacterial presence can be uploaded to residents' charts, allowing practitioners to track progress over time.

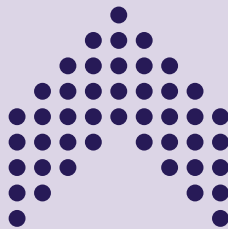
[Request a Free Demo](#)



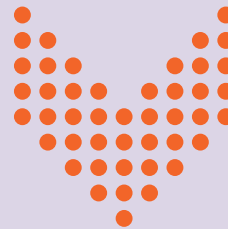
CASE STUDY: HOW ONE HEALTHCARE ORGANIZATION DECREASED ANTIMICROBIAL SPENDING BY 33%

A study conducted in 2020 sought to evaluate the impact of incorporating fluorescence imaging into routine wound care.¹

The study involved 229 residents who were treated using routine wound care. Taking place over two years, residents in the second year of the study received the same wound care protocols but with the additional guidance and data provided by fluorescence imaging. They were then compared to the control group from the previous year.



Cross Hospital saw a **27%** increase in the number of reported wounds



47% decrease in the expenditure on antimicrobial dressings per wound

The results of the study were highly encouraging, revealing a 23% increase in the 12-week wound healing rate and a 33% decrease in the prescribing of antibiotics. Additionally, there was a 47% decrease in the expenditure on antimicrobial dressings per wound.

The findings of this study provide valuable insight into the potential benefits of incorporating digital wound imaging into routine wound care. By using fluorescence imaging to find bacteria in wounds, doctors can better assess wounds and choose the right treatment based on accurate information. The savings can be significant.



SUMMING THINGS UP

It is clear that digital wound technology is a powerful solution to wound management challenges in long-term care. With benefits such as improved diagnostic information and enhanced wound assessment, digital wound assessment is rapidly becoming an essential system for long-term care facilities.

The cost-effectiveness of this technology is also hard to argue with. Despite the potential challenges in implementation, its ability to save costs, improve the quality of care, and reduce legal exposure makes it a solution that is well worth exploring.





ABOUT JOERNS

Joerns is one of the top providers of healthcare products and services in the US. Founded in 1889, Joerns is a fully integrated healthcare equipment and technology company of passionate associates who believe every interaction has the power to change a life. We've built a brand dedicated to simplifying customer clinical operations by optimizing efficiencies, removing costs and standardizing care through evidence-based therapies supported by complimentary services.

With over 130 years of skin in the game, we understand the complex and frequently changing landscape of healthcare more than anyone. As your partner, we strive to simplify care delivery with our people, products, and expertise so you can focus on what matters most — providing quality care for patients and residents.

WHO WE SERVE



HAVE A QUESTION?

Curious about how we can help you improve care outcomes, reduce expenditures, and use data to drive more decisions?

Get the conversation started so we can dive into your organization's goals and how Joerns can help you achieve them.

Let's Talk



joerns.com



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