



# Use of Novel Longer-Duration Wear Negative Pressure Wound Therapy Dressing at Discharge for Patients with Complex Social Determinants of Health

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## Introduction

Negative Pressure Wound Therapy can promote healing in difficult wounds. Barriers to discharging patients with standard NPWT include being uninsured and limited home health resources. Novel longer-duration wear NPWT dressings\* allow for up to seven-day wear time which can facilitate continued wound care for patients with complex discharge circumstances. This case study explores the application of novel longer-duration wear dressings as an outpatient wound care plan for an uninsured patient to limit his out-of-pocket burden and to protect a graft site that he could not manage independently.

\* 3M V.A.C.® Peel and Place Dressing Kit

## Methods

56-year-old patient admitted after crush injury underwent left foot second toe amputation with second metatarsal resection, and later debridement with skin substitute application. Postoperatively, the patient underwent NPWT dressings changes three times weekly while inpatient. Due to lack of insurance, family support, existing diabetes, and low health literacy, he was unable to be discharged with a home-based dressing change plan.

As a result of interdisciplinary collaboration among wound care, podiatry and case management, a novel longer-duration wear dressing was applied inpatient care to meet patient's complex wound care and case management needs. Case management obtained funding for patient's home use of the NPWT machine and novel longer-duration wear dressings after discharge.



Post debridement and graft placement, prior to Longer-Duration Wear Negative Pressure Wound Therapy Dressing	One week of Longer-Duration Wear Negative Pressure Wound Therapy Dressing	Ten weeks of Longer-Duration Wear Negative Pressure Wound Therapy Dressing
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## Results

The novel longer-duration wear dressing aided wound healing in the setting of patient's comorbidities and patient's social determinants of health. With weekly outpatient podiatry dressing changes, the wound was nearly healed within 3 months.

## Discussion

The use of novel longer-duration wear dressings is a valuable outpatient option for patients facing challenges related to having no insurance and limited home health support. Using the dressing created a patient centered care plan to address his limited outpatient resources. However, financially supporting the accompanying NPWT machine can complicate discharge plans.

## References

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