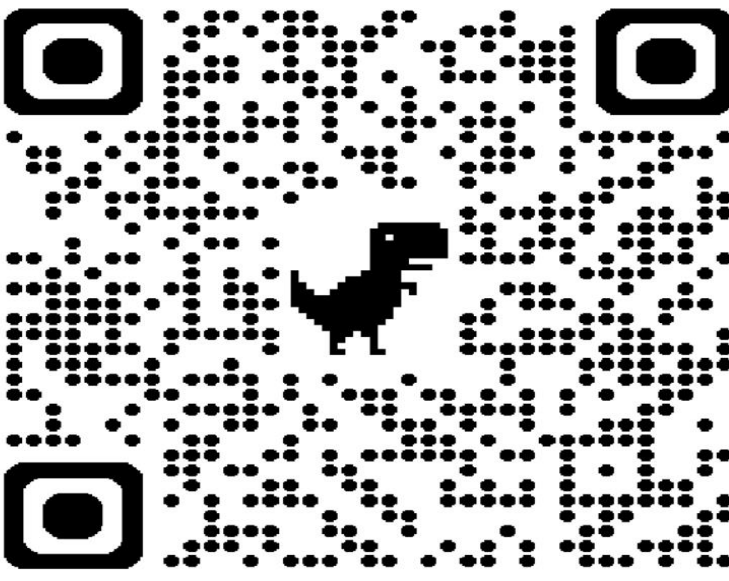


COST EFFECTIVENESS OF ADVANCED WOUND MODALITIES IN A MOBILE WOUND CLINIC

DR. JOSEPH G. SMITH, PODIATRIST, WOUND CARE SPECIALIST

ALL AMERICAN PODIATRY & WOUND CARE, VIRGINIA BEACH VA; EASTERN STATE HOSPITAL, WILLIAMSBURG VA



INTRODUCTION

Chronic, non-healing wounds pose a significant burden on the healthcare system, leading to poor patient outcomes, frequent hospitalizations, and substantial costs. Mobile wound care, which brings specialized treatment to patients in their homes or residential facilities, has shown promise in improving access and clinical outcomes. However, the specific financial advantages of using advanced wound products (AWPs) within this mobile model have not been fully elucidated. This abstract analyzes the effectiveness of integrating AWP into a mobile wound care program compared to traditional outpatient wound center care.



RESORBABLE
BORATE GLASS



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METHODS

This analysis reviewed the complex non-healing wounds managed by a mobile wound care clinic. Patients received comprehensive, evidence-based care, including the application of various AWP such as cellular, acellular, and matrix-like products (CAMPs), and other advanced dressings. Key financial metrics considered were total treatment costs, wound-related hospitalizations, and time to wound closure. Cost data included product expenses, provider time, and transportation.



GROUND
CONNECTIVE TISSUE
MATRIX



PORCINE
XENOGRIFT

RESULTS

The mobile wound care group demonstrated significant improvements in patient outcomes and substantial cost savings.

Reduced Costs: Mobile wound care is highly cost-effective, offering significant savings over traditional, facility-based care by reducing hospital readmissions and emergency room visits. Studies show mobile clinics can treat wounds for \$200 per client, compared to up to \$5,000 for traditional clinic settings. It reduces hospitalization costs and improves healing times for complex wounds.

Fewer Hospitalizations: Hospital admissions related to wound complications were reduced in the mobile group mostly due to patient compliance and convenience of mobile visits.

Faster Healing: The mobile group showed an increase in ulcer-free months and a higher probability of healing, aligning with evidence on effective CAMP treatments.

Operational Efficiency: Eliminating the need for patient transportation to ambulatory wound centers led to improved efficiency and reduced administrative burden for both patients and facilities.

Improved Communication: Enhanced communication and faster delivery of new orders to home health agencies were also observed in the mobile care setting.

Decreased Administrative Overhead: Mobile models, particularly those for vulnerable populations, often have lower overhead costs.

Unsheltered Care: A 15-month pilot for unhoused individuals saved acute care facilities between \$18,000 and \$48,000 per cycle.



TRIPLE HELIX
COLLAGEN

CONCLUSION

This analysis supports the compelling evidence that mobile wound care, when utilizing advanced wound products and innovative technologies, is a cost-effective and clinically superior alternative to traditional outpatient wound care. By delivering personalized, evidence-based care directly to patients, mobile programs can significantly reduce costly hospital admissions and improve healing rates. The financial benefits, alongside improved patient access and outcomes, make this a scalable and effective model for future wound care delivery, particularly for immobile or post-acute patients. Mobile wound care offers a high-value alternative, providing comparable or superior clinical outcomes while significantly lowering the economic burden on the healthcare system.

NEXT STEPS

Improving mobile wound care involves integrating AI-powered imaging, portable diagnostic sensors, and telehealth to bring hospital-level expertise into homes. Future advancements focus on smart, self-monitoring dressings, predictive analytics for infection risk, and increased use of portable Negative Pressure Wound Therapy (NPWT) to reduce hospital visits.

Key Future Innovations in Mobile Wound Care

AI-Powered Digital Documentation: Smartphone apps and AI-assisted imaging (e.g., thermal and fluorescence) allow clinicians to accurately measure healing, assess perfusion, and detect infections on the spot.

Smart Wound Dressings: Future dressings will include embedded sensors to monitor moisture, temperature, and bacterial levels, sending real-time data to providers.

Portable Technology & Diagnostics: Lightweight, portable devices like handheld NPWT systems and compact oxygen generators will enable advanced treatments to be delivered anywhere.

Telehealth Integration: Utilizing telehealth allows for remote monitoring by specialists, improving access for patients in rural areas and enabling faster interventions.

Advanced Therapeutic Modalities: Increased adoption of portable bioengineered skin substitutes, cellular therapies, and ultrasonic debridement in home settings to accelerate healing.

Data-Driven Care & Nutrition: Using predictive analytics to identify high-risk patients, combined with a stronger focus on personalized nutritional support to facilitate healing.

REFERENCES

NIH.GOV, HOMEHEALTHCARENEWS.COM