

Abstract

Veterans encounter formidable barriers in accessing essential wound care and managing chronic wounds, stemming from a multifaceted interaction of systemic, geographic, and psychological factors. Geographical disparities pose a significant challenge, as specialized wound care facilities are often concentrated in urban areas, leaving veterans in remote or rural locations with limited access. Veterans are also at increased risk of experiencing hurdles such as limited access to specialized wound care facilities, fragmented healthcare coordination, and insufficient awareness of healthcare providers regarding the distinctive needs of veterans. Mental health issues prevalent in veterans, including post-traumatic stress disorder (PTSD) and depression, contribute to the complexity by impeding proactive engagement in self-care and exacerbating chronic wounds. Additionally, healthcare providers' lack of comprehensive training in veteran-specific wound care further hinders effective treatment. These multifaceted barriers underscore the need for targeted interventions that address geographic disparities, streamline healthcare transitions, enhance mental health support, and provide specialized training for healthcare professionals. This review underscores the importance of furthering interventions to enhance accessibility, improve healthcare coordination, and increase awareness amongst healthcare professionals. Addressing these barriers is essential to ensure that veterans receive timely and effective wound care, promoting overall well-being, health, and quality of life.

Objectives

- Assess the impact of geographic factors on veterans' access to specialized wound care, focusing on rural and remote areas
- Investigate how mental health conditions affect veterans' ability to engage in wound care, particularly PTSD and depression
- Analyze the effectiveness of interventions addressing access challenges, healthcare coordination, mental health support, and healthcare provider training for veterans' wound care
- Review the importance of implementing interventions that specifically target geographic disparities, streamline healthcare transitions, enhance mental health support, and provide specialized training for healthcare professionals



Image 1

Background

- The provision of essential wound care for veterans is complicated by a range of systemic, geographic, and psychological factors. Geographic disparities, with specialized wound care facilities often concentrated in urban areas, leave rural veterans with limited access to crucial services.¹ This divide exacerbates their struggle to receive timely and specialized care, perpetuating the challenges they face in managing chronic wounds effectively.
- A cross-sectional study on diabetic foot ulcers (DFUs), a condition requiring proper and timely wound care, found that rural patients are 50% more likely to require a major amputation (above the ankle),

and have 40% higher odds of inpatient death compared to their urban counterparts.²

- Veterans encounter additional hurdles, including fragmented healthcare coordination, a lack of provider awareness about their unique needs, and prevalent mental health issues like PTSD and depression.³ These psychological challenges hinder proactive self-care engagement and worsen chronic wounds, underscoring the interconnected nature of the barriers veterans encounter.⁴
- A lack of specialized knowledge in veteran-specific wound care inhibits the effective treatment of veterans' wounds, highlighting the pressing need for targeted interventions.⁵ By comprehensively addressing these barriers, we can create a more accessible, coordinated, and effective wound care system for veterans, ultimately improving their overall well-being and quality of life.

Discussions

Overview of Barriers to Wound Care for Veterans

The challenges facing effective wound care for veterans are multifaceted, spanning systemic, geographic, and psychological domains, resulting in various barriers that impede access to essential services. Geographical hurdles present significant obstacles, with specialized wound care facilities primarily clustered in urban areas, leaving veterans in remote regions underserved and facing logistical difficulties in accessing care. For example, a veteran residing in a remote region may face not only the logistical challenge of traveling long distances to reach a specialized facility but also encounter difficulties accessing transportation options.⁶ Systemic issues compound these challenges, including fragmented healthcare coordination and a lack of provider awareness about veterans' unique needs, exemplified by the absence of integrated electronic health records.⁷ Psychological factors, such as prevalent mental health conditions like PTSD and depression, further complicate care management, impacting treatment adherence and engagement in self-care. Additionally, a critical deficiency exists in comprehensive training for healthcare providers in veteran-specific wound care, necessitating targeted educational initiatives to bridge this knowledge gap.

Limited Access to Wound Care: Geographical Barriers in Rural vs. Urban Settings

Access to wound care for veterans faces significant challenges in both rural and urban areas. In rural communities, approximately 4.7 million veterans encounter disproportionately lower healthcare utilization due to sparse population density, extended travel distances to wound care facilities, and limited access to specialized care.⁸ A retrospective cohort study in the Pacific Northwest found fewer outpatient wound care visits for rural veterans (6.8 vs. 9.9) and a similar number of inpatient wound care stays (0.9 and 0.8), respectively.⁹ Challenges are exacerbated by workforce shortages and prolonged appointment wait times, contributing to decreased outpatient visits and inpatient stays for wound care.¹⁰ In urban settings, disparities within underserved populations are influenced by socioeconomic factors, transportation limitations, and language barriers, highlighting the need for targeted interventions to ensure equitable access to wound care services across diverse geographic landscapes.

Fragmentation of Healthcare

Fragmented care introduces risks of higher mortality, a greater number of preventable hospitalizations, increased prescription drug use, risk of adverse medical interactions, unnecessarily repeated medical testing, increased costs of healthcare, and fewer primary care encounters.^{11,12} For veterans, fragmentation of healthcare complicates wound care management as they navigate the Veteran Health Administration (VHA), the largest integrated health system in the U.S. While the VHA offers comprehensive wound care services, including podiatry, prosthetics, and telehealth, geographical barriers and facility limitations may prompt veterans to seek care outside the system.¹⁰ In fact, not all Veterans Affairs (VA) facilities offer the same services; veterans with multiple comorbidities may require complex care across specialties and health systems, and thus may choose to work with renowned specialists outside of the VA system despite the risk of fragmentation.¹² Outside of the VHA, veterans may seek care through Medicare or VA Community Care. However, these options pose challenges in maintaining cohesive patient care due to fragmented information systems and variable service availability. Efforts to minimize the effects of fragmented care are essential to optimizing wound care outcomes for veterans.

Mental Health Barriers to Chronic Wound Care

Elevated depression rates among veterans, particularly among female veterans, exacerbate wound care challenges by hindering self-care practices and delaying healing processes.¹³ Examples include a nutritionally deficient diet, lack of regular physical activity, and the overuse of controlled and/or illegal substances.¹⁴ Addressing mental health concerns is crucial, as psychological stress and negative emotions can further impede wound healing and treatment adherence.¹³ Efforts to recognize the association between mental health and wound care, along with interventions aimed at closing knowledge gaps, are imperative to improving outcomes for veterans managing chronic wounds.

Deficient Provider Awareness for Veteran Needs

Deficient provider awareness of veteran needs, compounded by a lack of specialized training, hinders precise interventions and patient-centered care. When attending to veterans, healthcare professionals need to consider not just the physical injuries incurred during their time in service but also the existing emotional traumas, such as PTSD, acute stress disorder, and depression.¹⁴ Interventions are needed in this space to better address veteran needs and improve wound care outcomes.

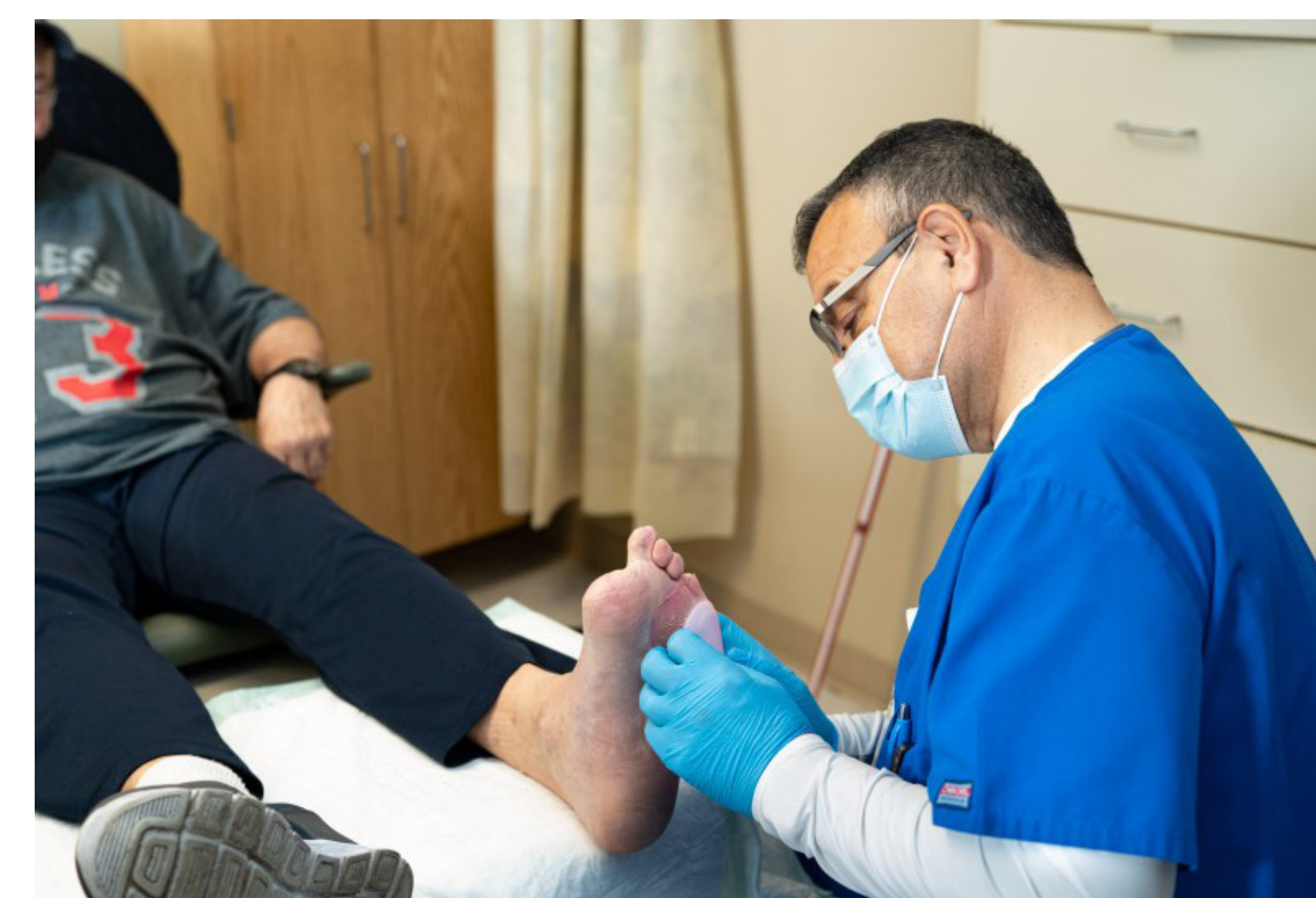


Image 2

Areas for Future Interventions, Education, and Research

Future directions in chronic wound management for veterans should prioritize centralized healthcare, increased accessibility, and holistic patient care.

- Non-VA physician's potential role in veteran care:
 - Implementation of a veteran education curriculum
 - Consideration of establishing a military medicine subspecialty
- Integration of mental health services into chronic wound management:
 - Inclusion of mental health check-ins during follow-up appointments
 - Referrals to mental health resources for veterans
- Addressing geographic barriers through telehealth and home health services:
 - Expansion of telehealth options for wound care consultations
 - Utilization of initiatives like TeleWound Practice (TWP) to streamline access
- Importance of primary care providers in integrated patient care:
 - Ensuring continuity of care for veterans
 - Preventing patients from falling through fragmented care systems

Overall, enhancing chronic wound management for veterans requires concerted efforts to centralize healthcare, improve accessibility through telehealth, and prioritize holistic care, including mental health services—an essential endeavor to support the well-being of those who have served.

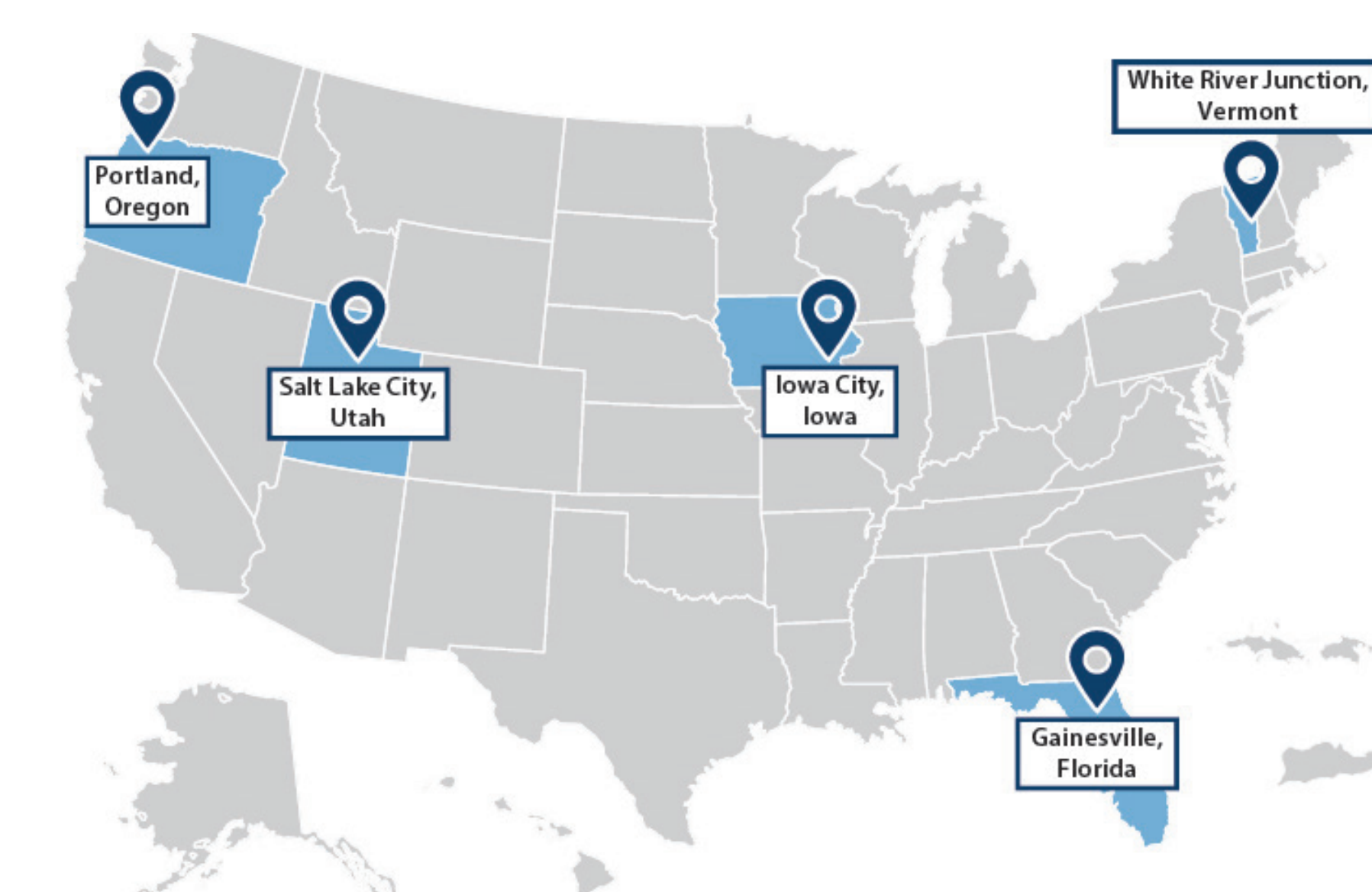


Image 4



Image 3

Summary

Veterans face significant challenges in accessing essential wound care due to systemic, geographic, and psychological factors, necessitating targeted interventions. Geographic disparities, compounded by a concentration of specialized facilities in urban areas, leave rural veterans particularly underserved, while mental health issues such as PTSD and depression further complicate self-care and treatment adherence.

Addressing multifaceted barriers to wound care for veterans requires comprehensive interventions targeting geographic disparities, healthcare coordination, mental health support, and provider training. Efforts should focus on enhancing accessibility, improving coordination across healthcare systems, and increasing awareness among providers to ensure timely and effective wound care, ultimately enhancing veterans' overall well-being and quality of life.

