GUIDE

NATIONAL INSTITUTE for MEDICAL RESPITE CARE

Clinical Guidelines for Medical Respite Care: Skin & Subcutaneous Conditions

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Introduction

People experiencing homelessness (PEH) are at increased risk for experiencing dermatologic conditions and related complications compared to people with stable housing[1,2]. The causes of increased prevalence of skin conditions among PEH, related complications, delayed healing, and the development of chronic wounds are multifactorial, stemming largely from the realities of homelessness itself. People experiencing homelessness are often exposed to extreme temperatures and weather, spend increased time on their feet, may not be able to lay down at night, experience increased exposure to ectoparasites, such as lice, scabies, and bed bugs, and face difficulties in maintaining hygiene related to skin and wound care. Once a skin condition has developed, it can be very difficult to manage and treat due to the above factors and issues of access to care facing PEH. A lack of primary care, lack of health insurance, use of the emergency department as a primary source of medical care, delays in seeking and receiving treatment, and challenges accessing needed follow up and specialty care pose further challenges to comprehensive healing. **This document provides guidance to address skin and subcutaneous conditions within the medical respite care setting.**

Key Terms and Definitions

Gangrene: A skin condition characterized by a restriction of blood supply and the death of surrounding tissues. Gangrene usually occurs in the extremities and can be classified as either "wet" or "dry." Dry gangrene is caused by a lack of blood flow without an acute bacterial infection. It causes the affected skin to become dry and turn black; the affected tissue or digit can shrink and/or autoamputate. Among PEH, dry gangrene is often caused by frostbite. Wet gangrene is caused by invasion of affected tissues by bacteria. In wet gangrene, bacterial invasion causes swelling, discoloration, foul smelling drainage, crepitus in affected tissues (from the presence of gas), and severe pain that is sometimes followed by numbness[3]. Wet gangrene is an emergency and requires urgent treatment.

Harm Reduction: A philosophical approach to medical care that extends beyond substance use and, in general, establishes individual agency and self-determination as central to any health intervention or efforts towards well-being. Harm reduction approaches call for the non-judgmental, non-coercive provision of services and resources to people experiencing homelessness to assist people in reducing harms related to chronic health conditions or health behaviors. Harm reduction-based care is collaborative, provides education on available interventions, and centers the goals of the individual in care planning.

Immersion Foot: A tissue injury of the feet caused by prolonged exposure to wet conditions in which the outer layers of skin absorb water, the feet undergo vasoconstriction/ischemia followed by vasodilation and vascular damage, and the skin begins to break down[4]. Early symptoms include macerated, waxy-appearing skin on the feet, numbness, and difficulty walking. Later symptoms may include erythema, edema that can be significant and involve the entire foot, severe pain, petechiae, desquamation, eschars, foul odor, and infection, including gangrene[4]. Immersion foot can happen at any temperature; when it occurs at cold but non-freezing temperatures it is characterized as "trench foot."

Injection Related Abscesses: An abscess resulting from injection using a hypodermic syringe into a vein or subcutaneous tissue. Injection related abscesses can result from the injection of drugs or other substances, for example, hormones like Testosterone. Injection related abscesses are often caused by a missed hit (inadvertently injecting into surrounding tissues instead of into a vein), from particulate matter in the solution, from mixing substances with non-sterile water, from the presence of bacteria on the surface of the skin prior to injecting, reusing syringes or equipment, or from injecting substances into subcutaneous spaces (skin popping) that damage tissues, such as cocaine, heroin, fentanyl, methamphetamine, or bath salts[5].

Necrotizing Fasciitis: An infection of the soft tissue and fascia that requires immediate surgical intervention and antibiotic treatment. Necrotizing fasciitis is typically caused by bacterial invasion through a break in the skin but can also result from blunt force trauma. Necrotizing fasciitis is thought to be most commonly caused by Group A Streptococcus, though it can be caused by other bacteria[6]. Necrotizing Fasciitis caused by Group A Streptococcus is characterized in early infection by fast-spreading erythema and warmth, *pain that is often outsized compared to clinical presentation and that may go beyond the borders of erythema*, and fever. Without treatment, necrotizing fasciitis can quickly go on to cause ulceration, blisters, the emergence of necrotic tissue, and signs of sepsis[6].

Trauma Informed Care (TIC): A patient-centered approach to care that recognizes the impacts of trauma and actively works to prevent re-traumatization and promote recovery. The principles of TIC are grounded in establishing a trusting relationship and a safe physical and psychological space in which to address needs.

Clinical Considerations

Background

Conditions of the skin may be caused by several factors, including:

- Bacteria trapped in pores or hair follicles
- Fungus or parasites living on the skin
- Viruses
- Exposure to environmental triggers, such as allergens
- Co-morbid conditions such as diabetes and those that affect the thyroid, kidney, or immune system
- Exposure to the sun, extreme weather, temperature changes, and excessively dry or damp conditions

People experiencing homelessness are more likely to experience skin conditions compared to housed populations, especially conditions related to exposure, infections, and ectoparasites[1,7]. People experiencing homelessness are especially affected by the following risk factors that impact wound development and delayed healing:

- When presenting to emergency departments for skin conditions, PEH are less likely than their housed counterparts to receive specialty consults, receive aggressive interventions, and to receive referrals for outpatient follow-up[1,8]. They may also be less likely to receive education on the importance of ongoing/follow-up care to prevent worsening issues.
- Bacterial infections are among the most common reasons PEH present to emergency departments for care, especially among people who use drugs (PWUD). For PWUD, seeking care in an emergency department is often a last resort due to previous experiences of maltreatment, stigma, and fear of poor withdrawal management while in the emergency department or hospital; PWUD often present with more advanced wounds and systemic involvement compared to housed and non-substance using populations[1,9].
- Challenges with attending the frequent follow-up appointments that are often needed to manage complex or chronic wounds.
- Decreased sensory awareness related to diabetes or other neuropathies, substance use, or neurological differences that may alter how people perceive and interpret pain and skin changes.
- Mental illness or cognitive impairment may influence executive functioning and can result in delayed recognition of early warning signs of skin conditions or misattribution of the cause of symptoms.
- Stigma from the/a health care system can lead to hesitancy accessing care and result in presentation with more advanced conditions, complex wounds, and systemic involvement, and can lead to early or self-discharge.
- Limited ability to perform activities of daily living (ADLs) due to lack of stable housing results in people not having access to bathe or wash hands, wash/change clothes, remove shoes, store wound care supplies, perform wound care, wash hands before and after wound care, get adequate rest and nutrition, etc.

- Comorbidities can impact wound development and healing, including diabetes, untreated HIV, vascular disease, and malnutrition.
- Lack of access to specialty care can result from limited transportation options, difficulty managing the strict rules around arriving for specialty appointments, frequency of wound care needed to promote healing, lack of access to phone/internet for telehealth appointments, and un- or underinsured status.

Medical respite care can be an opportunity to:

- Allow adequate time for wound healing and stabilization,
- Engage in specialty care,
- Have a safe space to learn to manage wound care with clinical supervision,
- Address other factors contributing to the causes or delayed healing of skin conditions, and
- Move towards housing to support overall health.

Assessment

In all assessment processes, it is important to implement a trauma-informed and harm reduction-based approach, recognizing that people may not be ready to share their entire health history in the first encounter. A good history is key to creating an appropriate plan of care and can be built over several visits. A comprehensive assessment for all skin and subcutaneous conditions includes the following:

Complete a History and Physical which includes:

- Medical history, including family history
- Other medical providers, recent & current
- Prescribed medications and pharmacy/pharmacies used
- Over the counter medications
- Vital signs, including weight/BMI
- Past hospitalizations for any reason
- Complete surgical history, especially surgical flaps, amputations, or hardware placement
- Immunization status and any known allergies
- Behavioral health history and current symptoms/diagnoses (PHQ9)
- Substance use history/current use and if use includes injection drug use (DAST-10; ASI; SBIRT)
- Tobacco use
- Assessment of current cognitive status incorporating tools such as a Mini-Cog or Mini Mental Status Exam©

- Diet and nutritional status (food frequency questionnaire)
- Assess literacy, health literacy, and numeracy
- Exercise and activity level
- History of any traumatic injuries, fractures, blood clots or pulmonary emboli (vascular health)
- Assess gait and any gait alterations to identify areas that might be prone to breakdown
- For wheelchair users, assess for fit of the chair, any pressure points, areas with loss of or decreased sensation
- Comprehensive physical exam, including skin and feet:
    - Any current foot numbness, tingling, burning in feet
    - Sensory testing of feet
    - Ability to self-inspect foot/lower extremities
    - Examination of the lower extremities for swelling, hyperpigmentation, erythema, or breaks in the skin
    - Note quality, onset, and duration of leg swelling if present
    - Evidence of ectoparasites (e.g. body lice, bed bugs, scabies)

Examination of any current wounds/skin conditions and review of medical records related to wound care:

- Location, onset, qualities, and duration
- Quality and quantity of drainage, wound depth, signs of acute infection, wound edges/signs and potential for healing
- History of wounds:
    - Any history of frost nip/bite, immersion foot
    - Wound history, especially large, surgical, or non-healing wounds
    - History of any specialists seen for wounds or skin issues
- Does the patient have appropriate footwear, and are they able to keep it dry/clean?
- History of previous living arrangements/access to resources prior to medical respite care:
    - Sleeping arrangements (e.g. in chair vs. bed)
    - Access to bathroom, running water
    - Assess for ability to change shoes and socks, remove shoes/socks at night
    - Exposure to elements (e.g. rain, sun) or environmental irritants (e.g. allergens, poison ivy)
    - Options/preferences for housing/living arrangements following medical respite care, as access to housing and stable location for continued wound healing will impact length of stay and care plan

Care Plan and Management

Strategies and treatment plans implemented should be person-centered, collaborative, and based on priorities and needs identified during the assessment process. As noted, interventions should be trauma-informed and integrate harm reduction principles to minimize risks and improve care. Providers can find more detailed guidance on assessment and intervention of specific skin conditions in the *National Health Care for the Homeless Council Adapted Clinical Guidelines on Conditions of the Skin and Subcutaneous Tissue*.

Person Specific Strategies

- Follow discharge wound care instructions from inpatient providers. If the instructions are too complex for the patient to take over on their own, seek consultation or order changes prior to discharge, or base plan of care on patient fully completing wound care treatment while within medical respite program.
- Use only appropriate or prescribed dressings for wound care. Do not use specialty dressings if not indicated or if indication for dressing is not known, as this may cause tissue damage or impact healing.
    - Support patient in accessing recommended or prescribed wound care medications and supplies.
- Seek consultation with the discharging provider, wound care, or vascular specialist for:
    - Heavy or increased wound drainage.
    - Foul odor from wound (odor from the wound itself, not from the removed dressing).
    - Increasing wound size despite following wound care instructions.
    - Wound not healing/progressing after 4 weeks of following wound care instructions.
    - If the wound heals, closes and reopens.
- Seek immediate, emergency evaluation for the following:
    - Systemic symptoms – fever, chills, change in mental status.
    - Rapidly worsening wound, especially if the wound had been stable at admission.
    - Pain that is severe and/or disproportionate to wound appearance. For pain that is disproportionate to presentation, consider necrotizing fasciitis.
- If possible, add pictures of the wounds to the person's medical record, which can be a vital communication resource between providers in medical respite, primary care, and specialty providers, and allow monitoring of wound status after discharge from medical respite.
- Support patients in accessing and attending any specialty care appointments, and transition to ongoing outpatient primary care for continued follow-up and management of conditions.
- Support patient in accessing appropriate footwear, which may include new shoes that are appropriate size and fit, or specialty shoes such as diabetic or off-loading orthotics.

- Provide education on signs of worsening wound or infection, when to seek care from their outpatient provider and/or seek emergency care.
- Provide education on prevention and basic foot and skin care to prevent worsening or additional wounds.
- Simplify care instructions and regimens as able and provide education on wound care processes for patient to more independently manage wounds.
- Provide dietary recommendations/nutritional consult service for increased proteins to support wound healing.

Environmental Strategies

- Provide clean linens and laundry facilities to wash and dry personal items.
- Provide supplies and clean space to complete wound and skin care.
- Provide private space to meet with providers for wound care, including medical respite staff or home health services.
- Provide access to bathrooms for activities of daily living (ADLs) and ensure the space is equipped with equipment to support skin care (e.g. biohazard waste bins).
- Provide supplies and durable medical equipment (DME) for ADLs, such as shower chairs/stools, long-handled sponges and extendable mirrors for foot/extremity care.
- Keep basic supplies on hand for wound care needs:
  - Normal saline, sterile abdominal dressings (ABD), sterile gauze, sterile non-adherent dressings, roll gauze/fluff dressing, tape, and antibiotic ointment.

Referrals

- If not already connected, contact a wound care or vascular specialist for diagnosis and management of wound conditions.
- Utilize home health nursing services for onsite wound care, especially if medical respite staff does not include providers able to complete wound care.
- Referral to physical therapy/mobility specialist for wheelchair/mobility assessment and fitting for appropriate wheelchairs and cushions. *Note, due to funding and reimbursement limitations, patients may need additional support or financial assistance to access appropriate wheelchairs and mobility devices.*
- Referral to podiatrist or specialty clinic for orthotics or specialized footwear.
- Referral to nutritionist and/or diabetic educator if the person has co-occurring diabetes, or diabetes management was a source of wound development.

Discharge Planning

If patient will be discharged prior to wound fully healing:

- Ensure patient has adequate supplies for ongoing wound/skin care if needed following discharge from program and information to contact DME company/re-order supplies.
- Ensure patient is connected to outpatient and ongoing care for management and treatment of wound and has access to needed medications to continue care.
- Ensure patient has adequate storage to store wound/skin supplies, such as sealable plastic bags/bins.
- If patient is not discharging to housing or indoor shelter, support patient in accessing additional supplies to keep themselves and their belongings dry and protected from elements.
- Support patient in identifying and accessing resources to clean or replace clothing and shoes.
- Consider keeping patient within medical respite program until wound is fully healed if they will not be able to independently manage wound care and/or have significant barriers to resources for wound management once discharged, the inability to reduce exposure to elements, or adequately rest and follow wound care instructions.

For patients discharged after wound healing:

- Ensure connection with ongoing provider for follow-up to address and prevent future wounds.
- Ensure patient has education and self-management skills to inspect for and address early signs of wounds.

Advanced Training and Advocacy

- Providers can seek out training and certification to enhance wound care knowledge. This will be dependent on the provider's license and state board regulations.
- Advocacy for access to clean, safe places to complete ADLs, wound care, and for washing and drying clothing for those experiencing homelessness, including those staying sheltered and unsheltered.
- Advocacy for patients to access appropriate wheelchairs and receive continued support to maintain wheelchairs and cushions.
- Advocate for harm reduction practices within emergency department and inpatient hospital settings to improve wound and health care for people who use drugs and/or experience homelessness.
- Advocate for syringe service programs and safe injection sites/resources to decrease injection related wounds and infections.

Case Example 1

Background: Sarah (she/her/hers) is 61 years old and sought treatment at the local hospital for an abscess that left four deep wounds in her neck. The wounds are a result of untreated head lice acquired from an outbreak of lice in a COVID-19 quarantine hotel. A combination of scratching and limited hygiene caused her scratches to become infected. Sarah had been homeless for 3 years, sleeping on the streets, in shelters, and most recently on couches of friends and acquaintances. She worked as a physical therapist for 12 years before encountering significant financial difficulties complicated by untreated depression and anxiety. After incision and drainage at the hospital, she was admitted to the medical respite program to finish a course of oral antibiotics and for wound care.

After admission to the medical respite program, providers found lice nits in her hair that also needed continued treatment. Sarah expressed a desire to address all health issues but felt embarrassed by the presence of lice.

Assessment: On arrival at the medical respite site, clinical staff assessed the four wounds including size, depth, tunneling, pain, drainage and exudates and periwound areas. Medical respite staff learned that she had little to no family involvement and was not interested in reconnecting with her family at the time. She initially presented as very well-organized, but later reported to medical respite staff feelings of depressed mood. During her history and physical with a medical provider, the provider noted a concerning breast lump reported by Sarah.

Intervention: Sarah's treatment plan for the medical respite program included 1) daily medication monitoring to ensure appropriate use of antibiotics, 2) wound care, 3) connection to the community wound care clinic for consult, 4) lice treatment, 5) access to mental health care, and 6) case management to assist in benefits acquisition and housing. The wounds required wet to dry packing daily. Medication was applied daily in order to remove yellow slough tissue located on the wounds at the base of her neck. Medical respite staff aided Sarah with a treatment for lice and instructed her on proper use, so as not to allow any permethrin on her wounds. Staff also combed out the nits in her hair. Sarah was also connected with an ongoing primary care provider (PCP), who she was able to establish with for ongoing care. The PCP referred Sarah for further assessment of her breast lump, and medical respite staff assisted her in getting to follow up and work up appointments and provided emotional support. Sarah was also referred to, and supported in attending, an intake appointment with a mental health provider where she was able to establish ongoing care.

Outcomes: After 1 month in the medical respite program, Sarah's wounds healed and she no longer had lice. Sarah was able to enroll in Medicaid and complete the application process for SSI. A case manager helped her complete a housing application and subsequently gain access to supportive senior housing (for eligible adults aged 55 and up) where a nurse and case manager are on site 40 hours a week. Sarah also continued to see her mental health care provider regularly. She was also connected to diagnostics for her breast cancer and necessary oncology follow up, with ongoing management by her new PCP.

Case Example 2

Background: Andre (he/him/his) is a 47-year-old who was sent to the emergency room by his primary care provider at the local health center after a history and physical revealed a significant wound in his left foot, and early signs of a pressure ulcer on his buttocks. Andre is diagnosed with diabetes and uses a wheelchair after having an amputation of his right foot, also related to diabetes complications. Concerned about the high risk for additional amputation, Andre and his provider agreed more comprehensive medical care was needed. Andre has been staying at the nearby men's emergency shelter, which provides access to an overnight bed and showers in the morning but is not open during the daytime. Andre's wound was stabilized within the hospital, and he was referred to the medical respite program for ongoing wound management and monitoring of his diabetes and pressure ulcers. After admission to the medical respite program, Andre engaged well with staff but appeared to have limited initiation of self-management and wound care activities. Andre also appeared to have difficulty following recommendations for diabetes management.

Assessment: The medical respite providers assessed the current status of his left foot wound and monitored for healing and signs of worsening. Andre was consistent in meeting with providers to complete wound care and stated "I am fine with you all taking care of it." With further rapport building and engagement, it was identified that Andre was incredibly uncomfortable with managing his wounds and had difficulty looking at, treating, and wrapping his wounds, stating "I've always been a bit squeamish." He also identified "not knowing what to look for" when doing lower body and foot inspections, or how to recognize a problem area on his skin. He also reported that, at the shelter, the accessible shower didn't work, so he either had to bathed at the sink. His providers also completed a health literacy assessment, and results indicated low levels of literacy and health literacy. When observed administering his insulin, Andre had difficulty following and remembering instructions, requiring guidance. Finally, Andre was observed to often keep various items in his wheelchair seat with him, and his wheelchair was in poor condition. Andre reported that "I bought this off of a friend. I was supposed to get my own wheelchair from the doctor who cut off my foot but that never happened."

Intervention: Andre's providers engaged in comprehensive health and self-management education. For wound care, they began with having Andre participate in wound care by completing small steps (such as prepping materials) and increasing his exposure and observation of the wound. With consent, the providers used printed pictures of wounds at different stages to teach Andre what indicated healthy healing versus worsening of the wound. Andre was also given frequent education and support for diabetes medication management, using step by step instructions and correcting any mistakes as they occurred. Over time, his providers reduced the direct education but observed him to ensure his dosing was accurate. His provider at the health center was also able to advocate for insulin pens through his insurance, which reduced his burden to draw up his doses. Andre was also referred to, and attended, an appointment at a wheelchair clinic, where he was assessed for, and prescribed, a new wheelchair and cushion. Andre was concerned about managing the follow-up and ongoing maintenance for his chair. He was connected to a medical case manager at the health center to support him in following up and managing the new chair. Finally, Andre worked with an occupational therapist for adaptive strategies for bathing when returning to the shelter setting, and ways that he could complete ongoing skin care and foot checks even if the accessible shower was unavailable. The providers at the medical respite program requested a meeting with the shelter and began advocating for the shelter to repair the accessible shower.

Outcomes: Andre stayed in the medical respite program until his wound was fully healed, his diabetes was stable, and he received his wheelchair. Andre demonstrated improved knowledge and self-management of skin conditions and appreciated having access to his medical case manager and his outpatient provider for ongoing support. Andre returned to the overnight shelter but felt better equipped to prevent further complications.

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