

**Supplemental Table 3. CHARACTERISTICS OF SELECTED ORIGINAL STUDIES AND CONSENSUS STUDIES**

First Author, Year, Country	Study Aim	Design and Sample Size	Sample Characteristics	Intervention	Outcome	Main Findings of Relevance
<b>Lower Leg Ulcers</b>						
Ratliff et al, 2016, <sup>22</sup> US	To aid clinicians in the selection and application of compression, a consensus- and evidence-based algorithm was constructed that included the primary prevention, treatment, and prevention of recurrent VLU in patients with CVI.	Scoping literature review followed by consensus voting and content validation Consensus panel: 20 Content validation panel: 21	Consensus panel: key opinion leaders representing variety of clinicians Content validation panel: experts in CVI and VLU management	N/A	Validated algorithm for care of VLUs across the continuum	The need for and correct application of compression for persons with CVI with or without VLU was designed to assist clinicians. Adjunctive therapies are not endorsed by the authors and remain controversial. However, their presence in the daily practice of many clinicians managing patients with CVI with or without VLU is reflected by their presence in the algorithm rather than an endorsement of these medications, given the paucity of evidence. When choosing compression, the algorithm provides evidence- or consensus-based guidance toward selection of product categories; recommendation of any specific products is intentionally avoided. Facility considerations such as contractual arrangements, clinician comfort with certain products, and patient individual factors such as access to products, tolerance, and affordability have a profound influence on such choices.
Miller et al, 2014, <sup>25</sup> Australia	Examination of behavior maintenance associated with a client e-learning VLU program across an average 8- to 9-month period	Prospective single sample cohort N = 49	Initially, an active leg ulcer. Community based patients.	E-learning VLU program followed by an RCT comparing wound recurrence associated with the use of moderate and high compression stockings. The 49 patients whose ulcers had healed were transferred to the RCT study.	The sustainability the behavior changes associated with an e-learning program.	Physical activity levels increased over time. Leg elevation, calf muscle exercises, and soap substitute use fluctuated. The use of a moisturizer gradually declined over time. Hard-to-heal wounds were addressed with interventions and steps to guide this period. Facilitate the preparation needed to get a patient to accept having a maintenance wound. Addresses repetitive breakdown within a short time frame, (a sign of a maintenance or heard to heal wounds).

(continues)

**Supplemental Table 3. CHARACTERISTICS OF SELECTED ORIGINAL STUDIES AND CONSENSUS STUDIES, CONTINUED**

First Author, Year, Country	Study Aim	Design and Sample Size	Sample Characteristics	Intervention	Outcome	Main Findings of Relevance
Weller et al, 2012, <sup>24</sup> Australia	To explore current practice nurse management of venous leg ulcers to determine if evidence-based guidelines were used to aid management	Cross-sectional survey N = 151 PNs were included in the distribution of the survey; 54 replied.	PNs in a major general practice network in Melbourne (325 registered general practices). The network includes 151 PNs in 142 practices. Respondents were predominantly women older than 40 years qualified as Division 1 RNs (83%).	Surveys were distributed May-July 2010. The final survey tool consisted of 28 questions to determine VLU management in general practice; knowledge of and adherence to best practice guidelines; barriers, facilitators, and experiences regarding referral to specialist wound clinics; and views on potential improvements to VLU care.	N/A	Improved management and referral pathways for people with VLU are needed Further investigation to determine the most appropriate coordinated VLU model of care is required Investigation of health professional uptake of the Australia New Zealand guidelines is required Further investigation and greater investment in upskilling PNs in ankle-brachial pressure index measurement is required. Compression application may improve VLU management in primary care settings.
<b>Diabetic Foot Ulcers</b>						
Taylor et al, <sup>30</sup> 2011, US	To perform an analysis of functional outcomes to assess current treatment paradigm	Descriptive correlation design N = 917 limbs	Mean age: 64.2 y Sex: men, 61% Diabetes type 2: 87% End-stage renal failure: 26% Approximately 50% of ulcers occurred on limbs with concomitant ischemia.	Endovascular revascularization or open bypass or no revascularization	Ulcer healing, survival, limb salvage, amputation-free survival, maintenance of ambulation, and independence.	Diabetic foot ulcers have a protracted healing time with the mean healing time of 33 w There was little difference in ulcer healing rates for patients with or without ischemia, although it was a significant marker of poor outcomes Wound healing was an independent predictor of survival and amputation-free survival

(continues)

**Supplemental Table 3. CHARACTERISTICS OF SELECTED ORIGINAL STUDIES AND CONSENSUS STUDIES, CONTINUED**

First Author, Year, Country	Study Aim	Design and Sample Size	Sample Characteristics	Intervention	Outcome	Main Findings of Relevance
<b>Pressure Ulcers</b>						
Guihan et al, <sup>35</sup> 2012, US	To describe the potentially modifiable medical and behavioral risk factors among veterans with SCI and severe (stage III and IV) pelvic PIs.	Cross-sectional observational N = 131	Mean age: 55.9 y Sex: 97.7% men. Mean years since injury: 22.2 y (SD 12.8; range, 1-52 y). No participant had a terminal diagnosis. Average duration of PI before admission for treatment: 1 y (range, 1-13 y)	None	N/A	Not many significant differences between group with many comorbidities versus those with fewer. Persons with SCI and severe PIs in general has to manage on average 6.7 comorbid conditions in addition to the SCI and PIs Overall knowledge to effectively manage and prevent PIs over a lifetime was low Skin care and good nutrition are modifiable behaviors that require more attention
<b>Atypical Wounds</b>						
Alavi et al, <sup>40</sup> 2018, Canada	To investigate the contribution of sexual dysfunction to the QoL of patients with HS and the extent to which sexual health predicts QoL in patients with HS	Observational cross-sectional cohort in two legs Intervention, 50 Control, 50	HS group: confirmed HS diagnosis regardless of additional comorbidities. Average BMI 30.7 Control group: age- and sex-matched healthy individuals with no comorbidities or other dermatologic condition. Average BMI 25.45	Four validated sexual health questionnaire and Dermatology Life Quality Index (DLQI)	Men with HS had significantly lower sexual function scores than the healthy control group HS significantly correlated to lower sexual functioning scores Women with HS had significantly higher distress related to sexual function than control group	HS has a significant impact on sexual function in both sexes Men with HS identify sexual performance impairment Women with HS identify increased sexual distress Patients with HS had significantly less QoL than the control on DLQI Sexual dysfunction from a skin condition is an important contributor to impaired QoL Important to connect patients with HS to psychological and counselling networks to minimize the impact on self-image, self-esteem, depression and anxiety

(continues)

**Supplemental Table 3. CHARACTERISTICS OF SELECTED ORIGINAL STUDIES AND CONSENSUS STUDIES, CONTINUED**

First Author, Year, Country	Study Aim	Design and Sample Size	Sample Characteristics	Intervention	Outcome	Main Findings of Relevance
Addison et al, <sup>39</sup> 2017, Ghana	To investigate the assessment and management of BU patients at PHC and SHC	Quantitative descriptive prospective observational cohort N = 133	PHC 111 patients with 121 clinically suspected BU 53% younger than 16 years = PCR 58.1% men Lesion location: Lower extremity 93.3% Upper extremity 6.7% Right side 63.3% Underweight: 6% SHC 22 patients with 27 clinically suspected BU 77.3% older than 15 years = PCR positive BU 63.6% men = PCR positive BU 52.5% men = PCR negative BU Lesion location: Lower extremity 87.5% Upper extremity 4.2% Right side 63.6% Face 8.3% Underweight: 36% Comorbidities: PHC less than SHC	Course of wound healing and predictors of wound closure, assessment of infrastructure, supply and staff performance were investigated prospectively for 22 consecutive months (2013-2015) in a PHC and 3 consecutive months (2013) in SHC Case report form of patient and wound histories, course of healing, physical examination, wound assessment, photographs	Wound categories: PHC 52% Category I SHC 82% Category III Wound healing Complete healing PCR positive BU: PHC 26 (86.7%) no surgery or adjunct treatment SHC 8 (40%) healed; 12.5% no adjunct treatment 75% after split-skin grafting 12.5% after excision PCR negative BU: PHC 76 (98.7%) were either completely or almost closed Time to healing PHC Less than 3 mo 65% 3-6 months 26.9% After 6 mo 7.7% Delayed healing PHC PCR positive: 13.3% underlying pathologies identified: exposed bone (n = 1) Wound infection (n = 1) Wound location at joint (n = 1) Poor adherence to treatment (n = 1) Recaptured PCR negative: 5% missed pathology diagnosis SHC 60% underlying pathologies identified: wound infection (n = 1) venous and arterial insufficiency (n = 4) nutrition deficiency (n = 7) Wound infection: PHC 9% vs. SHC 50% had evidence of infection at least once Pain: PHC 54.8% experienced pain at least once; Intermittent pain: 52.9% Pain during wound dressing: 55.6% Constant pain: 47.1% Mild pain: 23.5% Moderate pain: 52.9% Severe pain: 23.5% SHC localized pain: 59.1% surrounding tissue pain or on the limb: 53.8% Pain during wound dressing: 38% Analgesia: PHC No analgesia received. Analgesia usage unprescribed: 52.9% SHC 53.8% of patients who complained about pain received analgesia. Infrastructure and wound care practices PHC One treatment room for all wound types – BU were treated after non-BU. Availability and quality of materials limited. Clean water irrigation not considered. Insufficient supplies. Bandages washed in patients' homes and re-used. Mechanical cleansing of exudate interfering with granulation. Pain control not perceived as important. SHC Separation of in- and outpatients with infection and wound management standardized protocols inconsistent.	Large or chronic ulcers are a high risk for invasive and costly treatment to achieve closure. Nonhealing wounds can be predicted by wound area reduction between 2 to 4 w after initiation of treatment PHC level can adequately manage patients with BU with basic infrastructure, appropriate quality of standard supplies and equipment, well trained health staff, and adherence to guidelines. Patients managed at PHC can maintain livelihood, stay closer to families, and are less prone to facility-acquired infection. Patients with PCR-negative ulcers and clinical BU suspicion require follow up to capture missed BU diagnosis and therapeutic significant pathology. Hygiene, wound care deficiencies, and lack of identifying underlying conditions, arrested wound healing, and lack of advancement to active wound management Health care workers need to be more sensitive to patient-centered concerns

(continues)

**Supplemental Table 3. CHARACTERISTICS OF SELECTED ORIGINAL STUDIES AND CONSENSUS STUDIES, CONTINUED**

First Author, Year, Country	Study Aim	Design and Sample Size	Sample Characteristics	Intervention	Outcome	Main Findings of Relevance
Pope et al, <sup>41</sup> 2015, International	To generate a list of recommendations to enable practitioners to better care for patients with consensus approach to wound care in EB	Modified Delphi Group drafting recommendations: 11 Delphi rounds: 33 International EB experts	Group drafting recommendations: (physicians and nurses) with EB clinical and research expertise and background in wound care, wound-healing biology, infectious diseases, and bone-marrow transplantation. Delphi rounds: 33 international EB experts	N/A	17 refined recommendations	No RCT evidence at time of publication. 17 recommendations were formulated, including: <ul style="list-style-type: none"> <li>• Evaluate EB type-specific involvement.</li> <li>• Ideal methods of ongoing assessment of EB patients are lacking.</li> <li>• Increased risk of squamous cell carcinoma in the second and third decade of life in patients with severe forms of EB.</li> <li>• Assess and manage poor nutrition.</li> <li>• Optimize nutrition status.</li> <li>• Monitor and maintain hemoglobin levels above 80g/L.</li> <li>• Low levels of hemoglobin may delay healing in EB patients.</li> <li>• No ideal management approach for anemia in EB patients.</li> <li>• Address pain, itch, odor, immobility, depression and anxiety</li> <li>• A centralized interprofessional approach with care co-ordination is most effective.</li> <li>• Debridement involves nonphysical methods. Puncture the blister to facilitate drainage and leave overlying skin in situ.</li> <li>• Long term alternating low dose antibacterial agents may be beneficial</li> <li>• Wound size reduction of 20-40% in 2-4 weeks is a reliable predictor of healing at 12 weeks.</li> <li>• Cliff edges are often seen in nonhealing wounds. Consider advanced therapies with nonadvancing edge.</li> <li>• If a wound is stalled or appears atypical, consider a skin biopsy to rule out cancer</li> <li>• Biopsy wounds that rapidly enlarge, have a change in appearance, increased pain or “feel different”</li> <li>• EB requires involvement of a dedicated team with expertise.</li> </ul>

*(continues)*

**Supplemental Table 3. CHARACTERISTICS OF SELECTED ORIGINAL STUDIES AND CONSENSUS STUDIES, CONTINUED**

First Author, Year, Country	Study Aim	Design and Sample Size	Sample Characteristics	Intervention	Outcome	Main Findings of Relevance
<b>Local Wound Bed Factors</b>						
Schultz et al, <sup>44</sup> 2017, International	To develop consensus statements for the identification and management of biofilms	Modified Delphi 10 experts	Selected on basis of peer-reviewed publications, scholarly activity and reputation as an expert in chronic wounds and impact of biofilm. Diversity in geographical practices, clinical specialists.	Delphi round 1: scoring series of statements Delphi round 2: scoring or reformulated statements (for which consensus was not achieved in round 1) Extensive follow-up discussion of statements for which consensus was not reached.	Total of 61 consensus statements group in 10 generic topic areas	<p>Consensus statements with strong agreement:</p> <ul style="list-style-type: none"> <li>• Wounds that contain biofilm may not be identified, resulting ineffective treatment and delayed healing</li> <li>• Biofilms are present in most chronic wounds and are likely to be located both on the surface and in deeper wound layers</li> <li>• Wound biofilms are difficult to visualize macroscopically</li> <li>• Important indicators that a wound is likely to contain a biofilm include recalcitrance to treatment with antibiotics or antiseptics</li> <li>• The most important measure for future diagnostics tests to consider is indication of where the biofilm is located within the wound</li> <li>• Debridement is one of the most important treatment strategies against biofilms, but does not remove all biofilm and therefore cannot be used alone</li> <li>• Biofilms can reform rapidly; repeated debridement alone is unlikely to prevent biofilm regrowth; effective topical antiseptic application within the time-dependent window can suppress biofilm reformation</li> <li>• Effective topical antiseptic should have strong antibiofilm effects in appropriate in vitro test models against mature biofilms</li> <li>• In vitro biofilm methods with clinically relevant test conditions are useful to screen treatments for their efficacy</li> <li>• RCTs and comparative clinical evidence of antibiofilm treatment should be used to support clinical guidelines, protocols and treatment choices.</li> </ul>

Abbreviations: BMI, body mass index; BU, Buruli ulcer; CVI, chronic venous insufficiency; EB, epidermolysis bullosa; HS, hidradenitis suppurativa; N/A, not applicable; PCR, polymerase chain reaction; PHC, primary health care; PI, pressure injury; PN, practice nurse; QoL, quality of life; RCT, randomized controlled trial; SCI, spinal cord injury; SHC, secondary health care; VLU, venous leg ulcer.