Venous Leg Ulcer (VLU) Healing or Closure

MEASURE ID: CDR6

MEASURE DESCRIPTION:
Percentage of venous leg ulcers among patients aged 18 or older that have achieved healing or closure within 12 months, stratified by the Wound Healing Index. Healing or closure is defined as complete epithelialization without drainage or the need for a dressing over the closed ulceration, although venous compression would still be required.

DENOMINATOR:
All venous leg ulcers of patients 18 or older with an encounter during the measurement period.

NUMERATOR:
Venous Leg Ulcers within the denominator that achieved healing or closure within 12 months of its initial encounter.

DENOMINATOR EXCLUSIONS:
Death, Palliative care patients, hospice patients, VLU patients who have an amputation, VLU patients seen for consultations only, VLU patients with fewer than 2 visits, patients for whom data are insufficient to calculate a WHI score. Wounds the outcome of which are not known

DENOMINATOR EXCEPTIONS:
none

NUMERATOR EXCLUSIONS:
none

HIGH PRIORITY MEASURE:
Yes

HIGH PRIORITY TYPE:
Outcome

MEASURE TYPE:
Outcome

NQS DOMAIN:
Person and Caregiver Centered Experience and Outcomes

CARE SETTING:
Ambulatory, Ambulatory Care: Clinician Office/Clinic, Ambulatory Care: Hospital, Ambulatory Surgical Center, Hospital Outpatient, Office Based Surgery Center, Outpatient Services, Rehabilitation Facility, Rehabilitation Facility: Inpatient

PUBLISHED SPECIALTIES:

Emergency Medicine; Family Medicine; General Surgery; Geriatrics; Internal Medicine; Physical Medicine & Rehabilitation; Physical Therapy/Occupational Therapy; Plastic and Reconstructive Surgery; Podiatry; Primary Care; Vascular; Wound Care

PREFERRED MEASURE PUBLISHED CLINICAL CATEGORY:
Wound Care

INCLUDES TELEHEALTH:
No

MEANINGFUL MEASURE AREA:
Functional Outcomes

MEANINGFUL MEASURE AREA RATIONALE:
Healing a venous stasis ulcer has a profound impact on quality of life and activities of daily living (e.g. walking, dressing), as well as hospitalization and episodes of infection. When the USWR evaluated the activities of daily living in 500 patients with venous ulcers, we found that 60% of them were not able to dress their lower bodies unaided (Limitations of Daily Living Activities in Patients With Venous Stasis Ulcers Undergoing Compression Bandaging: Fife, et al, Wounds, Volume 26 (1) Jan 2014 http://www.woundsresearch.com/article/7891). Healing a venous ulcer has a significant impact on patient function.

MEASURE CALCULATION TYPE:
Proportional Measure

NUMBER OF PERFORMANCE RATES:
4

PERFORMANCE RATE DESCRIPTION:
There are four rates reported for this measure. Three of the rates will be risk stratified into 3 categories based on the Wound Healing Index for VLUs which roughly represent: 1) VLUs likely to heal with conservative care, 2) VLUs which might or might not heal, and 3) VLUs highly unlikely to heal with conservative care. The average of the three risk stratified buckets which will be the performance rate in the JSON XML submitted.

INDICATE OVERALL PERFORMANCE RATE:
4th Performance Rate

RISK ADJUSTED STATUS:
Yes

RISK ADJUSTED INDICATION:
Performance rate is risk adjusted by the wound healing index for venous leg ulcers (rates 1, 2, 3)

CLINICAL RECOMMENDATION STATEMENT:
Reporting VLU healing stratified by the WHI enables honest reporting of VLU healing rates. VLU patients have a high prevalence rate of conditions that impact treatment and healing. Reporting healing rate in relation to risk score ensures that practitioners caring for the sickest patients with the most severe wounds will not appear to have worse outcomes than their peers who care for less severe patients/wounds.

QCDR MEASURE RATIONALE:

Many wound care practitioners report “healing rates” as a measure of their success, typically at rates >95% based on a systematic, national review of publicly reported healing rates, However, these data have been vetted to exclude patients who do not heal so that so that the apparent success of the program is not impacted by patients unlikely to do well. When the outcomes of patients with chronic leg ulcers were evaluated from 59 hospital outpatient wound centers, nearly one third never healed, even though they were followed for more than one year. The average leg ulcer patient had at least 2 major co-morbid conditions. Approximately 30% of patients with venous stasis ulcers have diabetes as a co-morbid condition, 70% are obese or morbidly obese, about 20% have heart failure, 8% are on dialysis or have had a transplant, 10% have known peripheral arterial disease and 8% are taking steroids or transplant medications. The WHI allows honest reporting of healing rates which enables fair comparisons between practitioners and makes it possible to evaluate whether a specific intervention actually improved predicted outcome.

The Venous WHI contains the following elements: 1 Wound age (duration) in days (calculated from wound onset) at first encounter 2 Wound area in cm2 (calculated from length x width) at first encounter 3 Does the patient have peripheral vascular disease (for example, symptoms like claudication, rest pain, gangrenous changes, or other findings suggestive of leg ischemia, or studies confirming vascular disease)? 4 What is the patient’s primary ambulatory method? (walks unaided, cane, crutches, walker, roll about, scooter, wheelchair bound, bed bound) 5 Was the patient admitted to the hospital or the emergency department on the date of service? 6 How many total wounds or ulcers of any type does the patient have? 7 Does this wound have evidence of infection or bioburden? (evidenced by: purulent, green, malodorous drainage, peri-wound induration, tenderness to palpation, warmth).

Study Citation:

When the outcomes of patients with chronic leg ulcers were evaluated from 59 hospital outpatient wound centers, nearly one third never healed, even though they were followed for more than one year. Thus, the 12-week healing rate is often less than 50%. Nevertheless, publicly reported healing rates are >95%. There is a large gap between publicly reported healing rates of VLUs (and all other wound types) and actual healing rates. However, the high prevalence of comorbid disease necessitates reporting healing rate by risk category, for which the WHI was designed.

- Fife CE, Eckert KA, Carter MJ. Publicly Reported Healing Rates: The Fantasy and the Reality. 7(37): 77-94, 2018 .
- S Horn, C Fife, R Smout, R Barrett, B Thomson: Development of a Wound Healing Index for Patients with Chronic Wounds; Wound Rep Regen (2013) 21 823-832.
- Fife CE, Horn SD. The Wound Healing Index for Predicting Venous Leg Ulcer Outcome. The Wound Healing Index for Predicting Venous Leg Ulcer Outcome. Adv Wound Care (New Rochelle). 9(2):68-77. 2020.

Measure Performance Data:

In 2018, the average performance rate for clinicians reporting this measure to CMS was 64%. In 2020, the average performance rate was only 23%. It seems likely that the low average performance rate in 2020 was due to low participation but COVID had a profound impact on patient visit frequency, patient volume, etc. at outpatient wound centers. The USWR actually has over 100 practitioners who report this measure internally if not to CMS, and the numbers for the entire group regardless of MIPS reporting are: 2018: Ave rate 61%; 2019: ave. performance 40%; 2020; Ave. 42%. These healing rates emphasizes the need to report VLU healing using the WHI to stratify by severity so that practitioners who see the sickest patients do not appear to have worse outcomes than their peers. In 2020, the USWR reviewed data on 53,510 ulcers and found the mean WHI was 74.6 (which is the middle category of risk). About 55% of the

VLUs fell in this middle category (ulcers which might fail to heal). VLUs that are likely to heal VLUs represented only about 30% and likely to fail about 25% of all VLUs. In other words, the *minority* of VLUs seen by wound care practitioners each year fall into the "likely to heal" category (which is why they end up in a specialized care setting.) Each year we perform statistical analyses to adjust the break points of the WHI groupings to make sure they reflect current patterns of care.