
Diabetic Foot Ulcer (DFU) Healing or Closure

MEASURE ID: CDR 2

MEASURE DESCRIPTION:

Percentage of diabetic foot ulcers among patients aged 18 or older that have achieved healing or closure within 6 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 off-loading would still be required.

DENOMINATOR:

All Diabetic Foot Ulcers of patients aged 18 years and older.

NUMERATOR:

Diabetic Foot Ulcers within the denominator that achieved healing or closure within 6 months of its initial encounter

DENOMINATOR EXCLUSIONS:

Death, Palliative care patients, DFU patients receiving amputation, DFU patients seen for consultations only, DFU patients with less than 2 visits in 30 days.

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, Nursing Home, Office Based Surgery Center, Outpatient Services, Post-Acute Care, Rehabilitation Facility

PUBLISHED SPECIALTY:

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

PUBLISHED CLINICAL CATEGORY:

Foot/Ankle Care; Wound Care, Diabetes

MEANINGFUL MEASURE AREA:

Functional Outcomes

MEANINGFUL MEASURE AREA RATIONALE:

This measure enables the reporting of honest (risk stratified) Diabetic foot ulcer outcome. DFU healing impacts quality of life, ambulation, hospitalization, and risk of amputation.

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 three buckets (minimum-maximum) which are the following: 1. 0.00 – 62.42 2. 62.42 – 73.19 3. 73.19 – 100 4. The average of the three risk stratified buckets which will be the performance rate in the XML submitted.

INDICATE OVERALL PERFORMANCE RATE:

4th Performance Rate

RISK ADJUSTED STATUS:

Yes

RISK ADJUSTED INDICATION:

Performance rate by category (1,2,3) uses the Wound Healing Index

CLINICIAN TESTED QCDR MEASURE:

Yes

CLINICAL RECOMMENDATION STATEMENT:

DFU healing should be reported in a risk stratified way so that practitioners caring for the most difficult cases will not appear to have worse outcomes than their peers. The WHI is currently the only validated method to risk stratify DFUs, containing both patient and wound elements.

QCDR MEASURE RATIONALE:

Healed DFUs are less likely to be associated with amputations among diabetics. However, data gleaned from prospective studies and real-world data suggest that DFU healing rates are less than 50% overall, with healing rates of 20% for the most severe. Nearly all wound care organizations report “healing rates” but their outcome data are vetted post hoc by retrospectively classifying patients who do not heal as “palliative care” so that the apparent success of wound care programs is not impacted by patients who do not do well. (Fife CE, Eckert KA, Carter MJ. Publicly Reported Healing Rates: The Fantasy and the Reality. 7(37): 77-94, 2018.) Reporting healing rates using the WHI ensures that practitioners who care for the worst ulcers do not appear to have worse outcomes than their peers and will reduce the current practice of publicly reported “fantasy healing rates”. The reporting of healing rates stratified by the WHI also makes it possible to see individual variations in quality between practitioners since the outcomes of EPs with similar wound severity can be fairly compared.

STUDY CITATION:

Publicly Reported Wound Healing Rates: The Fantasy and the Reality Caroline E. Fife, Kristen A. Eckert, and Marissa J. Carter, *Advances in Wound Care*, Vol 7(3) 2018.

MEASURE PERFORMANCE DATA:

In 2020, performance rate ranged from 4.1% to 43% with an average performance rate of 21%. This low healing rate is actually consistent with real world healing rates overall and demonstrate why risk stratification is necessary. We analyzed the WHI distribution for diabetic foot ulcers over a 2-year period from 2018-2020 (n=44,406 DFUs). We divide the ulcers into 3 categories which can be described as: 1) DFUs not likely to heal, DFUs which might or might not heal, and 3) DFUs highly likely to heal. Only 40% of DFUs fell into a WHI category that would predict healing with routine care. About 60% of DFUs are predicted either to never heal (20%) or be at risk of non-healing (40%). When this measure was reported in previous years (as it has been since 2015), the average performance rate was about 50%.

The importance of Risk Stratification in reporting wound healing rates was demonstrated in a peer reviewed article evaluating the way that healing rates are publicly reported which differ dramatically from those from clinical trials and real-world data.

REFERENCES:

1. Horn SD, Fife CE, Smout RJ, Barrett RS, Thomson B. Development of a Wound Healing Index for Patients with Chronic Wounds. *Wound Rep Reg.* 21; 823-832, 2013.
2. Fife CE, Horn Susan D, Smout RJ, Barrett RS, Thomson B. A Predictive Model for Diabetic Foot Ulcer Outcome: The Wound Healing Index. *Adv Wound Care.* 5(7): 279-287, 2016.
3. Fife CE, Eckert KA, Carter MJ. Publicly Reported Healing Rates: The Fantasy and the Reality. *Advances in Wound Care*, 7(3): 77(3), 2018.