

Norton Pressure Ulcer Risk Scale

Assessment Overview

Assessment Area

ICF Domain:

Body Function

Subcategory:

Functions of the skin

Subscales (domains):

Physical condition, mental condition, activity, mobility, and incontinence

You Will Need

Length:

5-10 minutes, 5 items

Scoring:

Scales are scored on a domain specific ordinal scale from 1 to 4. A summary score ranging from 5 – 20 is calculated. Higher scores equal better prognosis.

Training:

None, but pressure ulcer risk assessment experience is needed.

Summary

The Norton Pressure Ulcer Risk Scale was the first pressure ulcer risk assessment developed and was intended for use with a geriatric hospital population.

It is a clinician-administered scale and is commonly used in a variety of populations. However, it omits several items previously found to be important predictors of pressure ulcer development for people with SCI.

It considers five domains relevant to skin condition:

- 1) Physical condition
- 2) Mental condition
- 3) Activity
- 4) Mobility
- 5) Incontinence

Availability

Worksheet: Can be found [here](#).

Languages: English

Assessment Interpretability

Minimal Clinically Important Difference

Not established in SCI

Statistical Error

Not established in SCI

Typical Values

Mean (Range) Scores:

All patients: 12.2 (11.9-12.5)

Patients w/ PUs at any stage (n=80): 11.6 (11.2-12.0)

Patients w/o PUs at any stage (n=64): 13.1 (12.6-13.6)

(Ash 2002; n=144; mean time from injury to discharge: 152 (range: 9–506) days)

Threshold Values:

Not established for SCI. But for the general population, a score of < 14 has been suggested to identify individuals at risk for developing pressure sores.

(Norton et al 1962)

Measurement Properties

Validity – **Low** to **Moderate**

Moderate correlation with Waterlow Pressure Ulcer

Scale:

$r = -0.50$ to -0.56

Moderate correlation with Braden Scale:

$r = 0.48$ - 0.49

Low correlation with Stirling's Pressure Ulcer Severity

Scale:

$r = -0.28$

(Wellard & Lo 2000; $n=60$, mean (SD) age: 43 (18) years; individuals with SCI and 1+ PU admission to hospital, mean (SD) length of stay in the hospital: 91 (98) days)

Moderate ROC Analysis:

AUC = 0.72

(Ash 2002; $n=144$; mean time from injury to discharge: 152 (range: 9–506) days)

Number of studies reporting validity data: 3

Reliability – **Not Established in SCI**

Not established in SCI

Number of studies reporting reliability data: 0

Responsiveness

Floor/Ceiling Effect:

Floor: 86% determined as no risk, 8% at risk, 2% at high risk

(Wellard & Lo 2000; $n=60$, mean (SD) age: 43 (18) years; individuals with SCI and 1+ PU admission to hospital, mean (SD) length of stay in the hospital: 91 (98) days)

Effect Size:

Not established in SCI

Number of studies reporting

responsiveness data: 1