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, which considers five domains relevant to skin condition: physical condition, mental condition, activity, mobility, and incontinence. The Norton is a commonly used scale with a variety of populations. However, it omits several items previously found to be important predictors of pressure ulcer development for people with SCI.

### 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.

### Availability

- **Languages:** English

### Assessment Interpretability

<table>
<thead>
<tr>
<th>Minimal Clinically Important Difference</th>
<th>Statistical Error</th>
<th>Typical Values</th>
</tr>
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</table>
| Not established in SCI                 | Not established in SCI | **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; mixed injury type, 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. |
However, there is currently no research evidence to support this value.
### Measurement Properties

#### Validity – **Low to Moderate**

- **Moderate** correlation with Waterlow Pressure Ulcer Scale:
  - Correlation = -0.50 to -0.56

- **Moderate** correlation with Braden Scale:
  - Correlation = 0.48-0.49

- **Low** correlation with Stirling’s Pressure Ulcer Severity Scale:
  - Correlation = -0.28

(Wellard et al., 2000; n=60, SCI individuals with 1+ PU admission to hospital, mixed injury types, mean (SD) length of stay in the hospital: 91 (98) days)

- **Moderate** ROC Analysis;
  - Area under curve = 0.72

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

#### Number of studies reporting validity data: 3

### Reliability

- Not established in SCI

### Responsiveness

- **Floor/Ceiling Effect:**
  - Floor: 86% determined as no risk, 8% at risk, 2% at high risk

(Wellard et al., 2000; n=60, SCI individuals with 1+ PU admission to hospital, mixed injury types, mean (SD) length of stay in the hospital: 91 (98) days)

- **Effect Size:**
  - Not established in SCI

- **Number of studies reporting responsiveness data:** 1