# Evidence table: Pressure Injury Evidence Table

<table>
<thead>
<tr>
<th>Reference</th>
<th>Evidence level (I-VII)</th>
<th>Key findings, outcomes or recommendations</th>
</tr>
</thead>
</table>
| Pan Pacific Clinical Practice Guideline for the Prevention and Management of Pressure Injury | I-VII                  | - Interventions: positioning, support surfaces, nutrition, education, health professional training and competency, pharmacological management, complementary and/or alternative treatments, wound management products, hyperbaric oxygen, social/education groups, pain management strategies.  
- Diagnosis and assessment: risk assessment, PI assessment tools, pain assessment, health professional education and competency, PI staging scales.  
- Although 12 risk assessment instruments were identified, only three were the subject of validation trials—BPUSRAS, Glamorgan scale and Braden Q.                                                                                                                                                                                                                                               |
| National Pressure Ulcer Advisory Panel (NPUAP) and European Pressure Ulcer Advisory Panel (EPUAP), Pressure Ulcer Prevention, Quick reference Guide. (2009)                                                                                                                                   | II - VII               | **Special Population: Patients in the Operating Room**  
  - Risk for patients undergoing surgery should be defined by:  
    a) Length of the operation  
    b) Increased hypotensive episodes intraoperatively  
    c) Low core temperature during surgery  
    d) Reduced mobility on day one postoperatively  
  - Patients should be positioned to reduce the risk of pressure ulcer development during surgery.  
  - Heels should be completely elevated in such a way as to distribute the weight of the leg along the calf without putting all the pressure on the Achilles tendon. The knee should be in slight flexion.  
  - Hyperextension of the knee may cause obstruction of the popliteal vein, and this could predispose the individual to deep vein thrombosis.  
  - Inspecting the skin for signs of erythema, blanching response, localised heat and induration should be conducted regularly.                                                                                                                                                                                                                   |
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<tr>
<td>Griggs, K, Pressure Area Care: Management. Evidence Summaries – Joanna Briggs Institute. Adelaide: Dec 1, 2008.</td>
<td>I</td>
<td>• The main strategies utilized to reduce the incidence of pressure injuries are those that minimise the mechanical load. This can be achieved by repositioning, the use of pressure-relieving support surfaces or those support surfaces which mechanically vary pressure beneath bed-bound patients. • Specialised foam mattresses compared with standard hospital beds significantly reduce the incidence of pressure injuries • Specialised foam mattresses and hospital grade sheepskins reduce pressure injuries • Dynamic support surfaces should be used for moderate or high risk patients. • The use of massage and doughnut pressure-relieving devices are contra-indicated for at risk patients. • Decisions about support surface choice should be based on overall assessment of the patient, not just the risk assessment tool • Individuals who are considered at risk should not sit for a period longer than 2 hours • Patients who cannot reposition themselves require regular two-hourly turns or more frequent if they are uncomfortable, incontinent, have poor circulation, fragile skin, decreased sensation or poor nutritional status. • Data suggests raising the bed head higher than 30 degrees increases pressure over the ischial tuberosities potentially resulting in additional shearing • Patients who are totally bed-bound must have careful attention to their heels ensuring they are raised from the support surface • Care plans should include documentation about support devices incorporated into care • Repositioning schedule should be clearly documented in care plans • Education of staff regarding repositioning techniques should be mandatory</td>
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The Hierarchy of Evidence

The Hierarchy of evidence is based on summaries from the National Health and Medical Research Council (2009), the Oxford Centre for Evidence-based Medicine Levels of Evidence (2011) and Melynyk and Fineout-Overholt (2011).

I  Evidence obtained from a systematic review of all relevant randomised control trials.

II Evidence obtained from at least one well designed randomised control trial.

III Evidence obtained from well-designed controlled trials without randomisation.

IV Evidence obtained from well designed cohort studies, case control studies, interrupted time series with a control group, historically controlled studies, interrupted time series without a control group or with case-series

V Evidence obtained from systematic reviews of descriptive and qualitative studies

VI Evidence obtained from single descriptive and qualitative studies

VII Expert opinion from clinicians, authorities and/or reports of expert committees or based on physiology

