Declaration of
Financial Interests or Relationships

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I have no financial interest or relationship(s) to disclose.
Prescription of pressure injury preventative interventions following risk assessment: An exploratory, descriptive study

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Background & Aim

- Hospital-acquired pressure injuries [PI] are largely preventable\(^1\), but continue to occur\(^2\), causing patient harm\(^3,4\).
- Risk assessment is the initial step in PI prevention\(^5\), but risk assessment alone does not prevent PI\(^6,7\).
- Preventative interventions must be prescribed, and then implemented, based on the identified level of risk\(^6,7,8\).
- Prescription = recognising risk, identifying and planning interventions, and documenting selected interventions\(^9\).
- Documentation of PI prevention is key to prescription and is fundamental to continuity of care and patient safety\(^10\).

**Aim:** To identify and describe nurses’ prescription of PI preventative interventions following risk assessment and to investigate the relationship between level of risk and intervention prescription.
Methods

- Exploratory, descriptive research design
- 630-bed tertiary hospital in Queensland
- Four wards: cardiology, rehabilitation/acute stroke, orthopaedic surgical, general medical
- Convenience sample of 50 patients per ward (total $n = 200$)
- Adult patients admitted within the previous 24 hours with no PI on admission
- Each patient chart audited with standardised data collection form:
  - Demographics
  - Risk score and level as per Waterlow risk assessment tool (at risk $> 10$, high risk $> 15$, very high risk $> 20$)
  - PI prevention management plan
Results

- 50 cardiology, 47 general medical, 50 rehabilitation/acute stroke, 53 orthopaedic surgical

- 98% had a risk assessment completed (28.1% not at risk, 26.5% at risk, 28.1% high risk, 17.3% very high risk)

- **Not at risk patients**: some prescribed interventions intended for those at any level of risk

- **Patients at any level of risk**: prescription rates of interventions intended for this patient group ranged from 6-64%

- **Nearly a third (n = 41, 29.1%) of patients at any level of risk were not prescribed any interventions**

- Overall, as risk level rose, the prescription rates of the interventions recommended and available for those at any level of risk rose

- **Significant associations between level of risk and prescribed interventions were found**
Given that significant associations were found between risk levels and the majority of interventions, a PI prevention bundle can be drawn from nursing consensus (>40%) identified in this study.

<table>
<thead>
<tr>
<th>Risk level</th>
<th>Nursing interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at risk</td>
<td>Complete PI risk assessment and identify level of risk</td>
</tr>
<tr>
<td>At risk</td>
<td>Document assessment on care plan</td>
</tr>
<tr>
<td>High risk</td>
<td>Give patient handout on PI information and in partnership with patient and/or carer discuss PI risk factors and develop PI management plan</td>
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<tr>
<td>Very high risk</td>
<td>Daily, Twice daily, Three times daily</td>
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<tr>
<td></td>
<td>Complete skin assessment</td>
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<td></td>
<td>Select appropriate pressure-redistribution mattress</td>
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<tr>
<td></td>
<td>Heel elevation</td>
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<tr>
<td></td>
<td>Increase mobility and repositioning</td>
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<tr>
<td></td>
<td>Apply prophylactic sacral border dressing</td>
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<tr>
<td>Optional</td>
<td>Conduct a continence assessment</td>
</tr>
<tr>
<td>Optional</td>
<td>Provide seating cushion</td>
</tr>
<tr>
<td>Optional</td>
<td>Provide bed cradle</td>
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<tr>
<td>Optional</td>
<td>Refer to occupational therapist</td>
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</tbody>
</table>
Conclusion

- PI preventative intervention prescription was inadequate
- The significant association between many prescribed interventions and risk level indicates nurses do prescribe interventions relative to assessed risk
- The suggested PI prevention bundle provides a plan for all patients of any risk level based on nursing consensus
- Further research into the prescription AND implementation of preventative interventions based on PI risk is required
References


