LIGHTEN THE LOAD

Making Wound Care Everyone’s Priority

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Background

Ballarat Health Services recognises **Pressure Injury Prevention** as a critically important concern that presents broad opportunities for **clinical, operational and financial** improvement.
Partnering for Better Outcomes

In 2009 BHS commissioned the Wound Care Improvement Project, working with third party partners Smith & Nephew and Nursing Practice Solutions Inc.

Objectives

• To improve patient outcomes by implementing best practices in wound care.

• To standardise wound care practices among health care providers across BHS.

• To reduce the cost of wound care services throughout the BHS community, including reductions in cost of supplies and nursing time dedicated to wound care.

• To improve patient quality of life by reducing the number of wounds and increasing evidence based wound care across BHS.

• To improve internal business processes related to wound care.
Wound Care Steering Group

Executive Director Nursing
Director of Nursing
Project Manager
Infection control
Nursing Acute Medical
Nursing Acute Surgical
Nursing SubAcute
Nursing Residential Aged Care
Medical/Surgical

Director of Education
Contracts Manager
Governance & Risk Management Unit
Clinical Nurse Consultants
Procurement & Supply Manager
Allied Health Podiatry
Health Information Management
Allied Health Dietetics
Smith & Nephew
A partnership was developed involving BHS and third party partners Smith & Nephew and Nursing Practice Solutions Inc. enabling the on-going implementation of a comprehensive Wound Prevention and Healing System, incorporating all of the essential components of best-practice, evidence-based wound management. Including:

- **Leadership**
  - Clear leadership and commitment to pressure ulcer reduction as a clinical priority at the senior executive level
  - Clear definition of roles and responsibilities

- **Planning**
  - Detailed project planning, involving participation from all organisational levels and clinical disciplines

- **Measurement/Monitoring**
  - Systems in place for data collection, measurement and monitoring of all key indicators
  - Assessment of pressure ulcer prevalence and current practices prior to program implementation to provide data benchmarks

- **Best Practice Clinical Protocols**
  - Evidence-based best-practice pathways and protocols for all aspects of pressure ulcer prevention and management
  - Clinical resources developed locally or drawn from available sources and changed to meet local requirements as appropriate

- **Education and Training**
  - Education and training programs and support materials
  - Application of advanced adult learning method

- **Product Formulary**
  - Detailed specification of all wound care products and appropriate use to streamline purchasing and ensure consistency across the organisation

- **Reporting and Communication**
  - Regular reporting on clinical indicators to all clinical staff
  - Staff meetings, ongoing communications to support program objectives and continuous improvement

- **Engage of Patients and Families**
  - Education of patients and families on pressure ulcers and pressure ulcer prevention
  - Tools such as posters and pamphlets to engage family members
Clear leadership and commitment to pressure ulcer reduction as a clinical priority at the senior executive level

Clear definition of roles and responsibilities

Actions:
- Priority item at Executive Staff Council
- Reporting to Board of Management
- Included in Clinical Audit Program
- Budget allocation for Project Officer
- Funding for Clinical Nurse Consultant EFT
- Funding for Nurse Educator EFT
- Clinical Governance Structure
- Attendance at Industry Events
- Position Descriptions
- Promotional Material
Detailed project planning, involving participation from all organisational levels and clinical disciplines

Actions:
- Outcome metrics identified
- Performance benchmarks determined
  - Organisation-wide Clinical audit
  - Staff skills surveys
- Objectives agreed
- Project Plan developed
- Learning and Development Plan developed
- Roles and responsibilities allocated
- Steering Group established
Systems in place for data collection, measurement & monitoring of key indicators
Assessment of pressure ulcer prevalence and current practices prior to program implementation to provide data benchmarks

Actions:
- Adoption of NPS Audit Tools
- Benchmark performance established
- Organisation wide clinical audit including:
  - Skin integrity check
  - Pressure Injury Risk Screening
  - Pressure Injury prevention interventions
  - Pressure Injury Staging
  - Pressure Injury Management
- Clinical Skills survey
- Data collection and reporting software adopted
Evidence-based best-practice pathways and protocols for all aspects of pressure ulcer prevention and management

Clinical resources developed locally or drawn from available sources and changed to meet local requirements as appropriate

Actions:
- Collection of all existing tools
- Nursing Practice Solutions tools adopted
- Clinical coding requirements included
- Clinical staff engagement in piloting tools
- TIME Wound Assessment & Management
- Product formulary included in Wound Chart
- Braden Risk Assessment for all patients
- Linking of all documents organisation-wide
Education and training programs and support materials
Application of advanced adult learning method

Actions:

- Benchmark clinical skill levels & confidence
- Adopt Nursing Practice Solutions Programs
- Implement Train-the-Trainer Program
- Calendar regular class education sessions
- Maximise bed-side education opportunities
- Implement Training Modules including:

  - Intro to Chronic Wounds
  - TIME Assessment & Management Principles
  - Pressure Injury
  - Diabetic Foot Ulcer
  - Leg Ulcers
  - Surgical Wounds
  - Palliative Wounds
  - Burns
  - Topical Negative Pressure

Nurse Educators
Wound Care Team
Steering Group
Medical & Allied Health Staff
Clinical Staff
Patients & Families
Detailed specification of all wound care products and appropriate use to streamline purchasing and ensure consistency across the organisation.

Actions:
- Stocktake – 130+ different products in wards
- Remove out-of-date stock ($30,000+)
- Develop simplified Product Formulary
- Implement Impress System
- Centralise ordering and supply
- Develop clinical resources – posters, manuals
- Redraft clinical governance documents
- Include in education sessions
- Include in Wound Care Chart
- Track spending
Regular reporting on clinical indicators to all clinical staff
Staff meetings, ongoing communications to support program objectives and continuous improvement

Actions:
- Benchmark data collected for each clinical unit
- Regular ward based clinical audits & reports
- Formal organisation-wide repeat audits
- Media Liaison interventions
- Formalised Clinical Governance arrangements:
Actions:
- Uniformity of updated information materials
- Redrafting of Patient Information Handbook
- Attention to consent processes
- Patient/resident questionnaires
- Patient engagement with case study presentations
- Patient Care Plan inclusive of Pressure Injury Prevention and Management strategies
In order to collect baseline data a data collection form was developed. Independent Consultants together with BHS staff performed a head to toe assessment on each inpatient, reviewed documentation (including patient wound charts) and assessed nurses on knowledge.

The data collection form captures data on specific clinical indicators, for example:

- Different types of wounds and distribution across BHS
- Prevalence of pressure ulcers
- Other patient safety initiatives
- Frequency of dressings changes
- Type of dressings used
- Prevalence of wound infections
- Documentation

**Prevalence of Pressure Injury by location: Acute Care**

<table>
<thead>
<tr>
<th>Pressure Injury:</th>
<th>#</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stage 1</td>
<td>16</td>
<td>47%</td>
</tr>
<tr>
<td>Stage 2</td>
<td>12</td>
<td>35%</td>
</tr>
<tr>
<td>Stage 3</td>
<td>3</td>
<td>9%</td>
</tr>
<tr>
<td>Stage 4</td>
<td>1</td>
<td>3%</td>
</tr>
<tr>
<td>Unstageable</td>
<td>2</td>
<td>6%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>34</td>
<td>100%</td>
</tr>
</tbody>
</table>

**Demographics -2009**

- Acute n=186
- Age (mean years) 50
- Gender % female 55%
- Diabetic 16%
- Pressure risk assessment done 61%
- Prevention care for high pressure risk 15%
- Incontinent (any) 5%
- Falls risk 42%

**Prevalence of Pressure Injury by location: Acute Care**

- CCU: 0%
- ICU: 0%
- 4N: 20%
- 4S: 25%
- 3N: 18%
- 35: 16%
- 5th Floor: 0%
- 2N: 25%

**Fig. 17: Advanced vs. Non-Advanced All BHS**

- Advanced 71%
- Non-Advanced 7%
- 3%
OUTCOMES

Implementation of the pressure ulcer reduction program has proved to be highly effective, showing measurable results. Table 1 provides a comparative summary of key indicators before and after program implementation. The results are highlighted by significant reductions in overall pressure ulcer prevalence rates, reflecting both faster healing rates and improved pressure ulcer prevention.

<table>
<thead>
<tr>
<th></th>
<th>August 2009</th>
<th>March 2011</th>
<th>June 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total PU Prevalence</td>
<td>11%</td>
<td>6%</td>
<td>3.7%</td>
</tr>
<tr>
<td>Acute</td>
<td>11%</td>
<td>9%</td>
<td>2.5%</td>
</tr>
<tr>
<td>Sub Acute</td>
<td>26%</td>
<td>11%</td>
<td>8%</td>
</tr>
<tr>
<td>Residential</td>
<td>9%</td>
<td>5%</td>
<td>3%</td>
</tr>
</tbody>
</table>

Table 1.
OUTCOMES

The data also confirm major changes in wound management practices. One of the most important changes was the shift away from dry gauze dressings, which are typically changed at least once daily, to advanced wound dressings, which are based on moist wound healing principles and require far less frequent changes. Significant reductions in daily dressing changes and corresponding increases in advanced dressing utilisation were achieved.

Daily dressing changes decreased from 1364 per week to 77!

Nursing time decreased from 228 hrs/week to 12.8 hrs!
## OUTCOMES

<table>
<thead>
<tr>
<th>Wound Product Costs</th>
<th>Beginning Dates</th>
<th>End Dates</th>
<th>Months</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre Program</td>
<td>1/12/2008</td>
<td>31/07/2010</td>
<td>19</td>
<td>399,999.54</td>
</tr>
<tr>
<td>Post Program</td>
<td>1/08/2010</td>
<td>31/03/2012</td>
<td>19</td>
<td>333,196.07</td>
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**Saving**: 66,803.47
## OUTCOMES

<table>
<thead>
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<th></th>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2009 Benchmark</td>
<td>33,607</td>
<td>11%</td>
<td>13,456</td>
<td>Nil</td>
</tr>
<tr>
<td>2011</td>
<td>34,909</td>
<td>9%</td>
<td>11,436</td>
<td>2,020</td>
</tr>
<tr>
<td>2012</td>
<td>36,531</td>
<td>2.5%</td>
<td>3,324</td>
<td>10,132</td>
</tr>
</tbody>
</table>
OUTCOMES

By adopting the ‘Integrated Customer Solutions’ Wound Care Program, Ballarat Health Services has:

✓ Improved clinical performance outcomes
✓ Improved organisational performance outcomes
✓ Improved financial performance outcomes

And meets STANDARD 8!
LESSONS LEARNT

A number of practical recommendations for health care organisations evaluating pressure ulcer reduction options can be drawn from this program. These include:

• Understand the scope and nature of the pressure injury problem. Implement data collection and measurement systems. Conduct a prevalence survey and an assessment of clinical practices to benchmark key indicators prior to program launch.

• Identify clear leadership at the executive level. Pressure injury prevalence reduction must be established and maintained as an organisational priority.

• Select clinical and administrative leaders with experience in program implementation and organisational change. These leaders will be required to identify and navigate barriers to change.

• Build a multi-disciplinary team that includes specialists such as physiotherapists, nutritionists, podiatrists, etc. Involve these disciplines in all stages of planning and implementation.

• Promote the central role of nurses in pressure injury prevention and management. Appeal to the fundamental desire of nurses to provide for the health, comfort and well-being of patients.

• Help build broad organisational support by linking pressure injury prevalence to resource management issues such as length-of-stay in acute care and SubAcute care beds. Pressure injuries are an important cause of preventable acute care stays.

• Recognise and build upon the role of pressure injury reduction as an important part of the organisation’s overall patient safety agenda. The program can serve to reduce pressure injuries, which are a major patient safety risk, while also establishing basic clinical and organisational practices that contribute to a patient safety culture.

• Report regularly on clinical and practice indicators such as pressure injury prevalence, infection rates, healing times and use of best-practices. Evaluate progress. Identify gaps and opportunities for continuous improvement.
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