BALLARAT HEALTH SERVICES

IMPROVES WOUNDCARE OUTCOMES

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In 2009, as part of the continuous improvement program, the Ballarat Health Services (BHS) Executive identified woundcare as a critically important concern that presented broad opportunities for clinical, operational and financial improvement.
Partnering for Better Outcomes

The Woundcare Improvement Project was commissioned, 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 standardize 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.
Project Planning Disciplines

**Investment in Project Administrator**

- 1 EFT Project Manager

**Critical Success Factors**

- Executive leadership
- Organisational commitment and involvement in decision making
- External support – program partners
- Good data management
- Willingness
- Dedicated staffing resources
Woundcare Steering Group

- Executive Director – Nursing Services
- Director of Nursing- Women’s & Children’s & CNCs (Chair)
- Wound Care Project Manager
- Clinical Nurse Consultant- Ostomy/Wound /Breast
- Director of Education
- Procurement & Contracts Manager
- Governance & Risk Management Unit representative
- Supply Manager
- Infection Control Consultant
- Nursing Acute (surgical)
- Nursing Acute (medical)
- Nursing Sub-acute
- Nursing Residential Aged Care
- Medical
- Allied Health
- Health Information Management - Clinical Coder
- Smith & Nephew representative
The ICS approach
Baseline Data Collection

**Metrics**

- Point Prevalence Survey
  - Organisation wide
  - All patients & Residents
  - All wounds
- Staff Skills/Knowledge Assessment
- Health Informatics – Coding Data
- Purchasing
Ballarat Health Services – Wound Audit

Wound numbers and broad prevalence

• 695 inpatients
• 630 consented to participate
• 634 wounds identified in total
  (max 31 wounds on one patient)
• 284 patients with at least one wound
  • Crude prevalence of 45% for all BHS
  • Acute 58%
  • Sub-acute 49%
  • Residential 33%
Dressing changes

Of the 634 wounds:
• 352 (56%) wounds had wound dressing information
  • Generating 1364 dressing changes per week
  • Average of 10 mins per dressing = 227 hours/week of staff time for dressing changes

• Dressing change frequency
  • 3/day (tds) to once weekly
  • 91 wounds dressed daily or more frequently

Total number of different dressing products in use = 110!
Wound origin/documentation

*Origin of 122 Pressure wounds:*

- Hospital 38 (32%)
- Residential Care 61 (50%)
- Home 16 (13%)
- Unknown 7 (5%)

*Documentation – Wound Chart in use*

- 90 wound charts across BHS (634 wounds, 14%)
- Some inconsistent documentation in patient history
Key Findings –

**Educational Needs Assessment**

- Over 60% reported ‘basic’ or ‘no’ wound care knowledge and experience
- Topics to address in education – reflects practice
  - Basic wound care principles, wound assessment, wound care products
- Quotes from educational needs assessment:
  - “Too many wound products available for use on ward at the moment”
  - “Need to know more about which wounds require what dressing types”
  - “Need resource material on ward for easy access”
  - “Set products for certain wounds and availability of same products on all wards”
Learning and Development

Structured Education Plan –

Train-the-Trainer

Modules 1 – 8

• Introduction

• TIME

• Pressure Ulcers

• Diabetic Foot Ulcer

• Leg Ulcer

• Surgical Wounds

• Palliative Wounds

• Burns
Barriers to Implementation

Many & Varied, including:

- Changes in personnel
- Reluctance to engage
- Brand loyalty
- Resistance to change
- Ownership
  - Education programs
  - Tools & processes
## Improvement in Pressure Ulcer Point Prevalence

<table>
<thead>
<tr>
<th></th>
<th>August 2009</th>
<th>March 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total PU Prevalence</strong></td>
<td>11%</td>
<td>6%</td>
</tr>
<tr>
<td><strong>Acute</strong></td>
<td>11%</td>
<td>9%</td>
</tr>
<tr>
<td><strong>Sub Acute</strong></td>
<td>26%</td>
<td>11%</td>
</tr>
<tr>
<td><strong>Residential</strong></td>
<td>9%</td>
<td>5%</td>
</tr>
</tbody>
</table>
Nursing Efficiencies

Daily dressing changes decreased from 1364 per week to 77!

Nursing time decreased from 228hrs/week to 12.8hrs

Dressing change frequencies are reliant on the type of dressings used.

Advanced dressings, based on moist wound healing principles require far less frequent changes.
# Bed Days

## Analysis of difference in bed days with/without PU

<table>
<thead>
<tr>
<th>Bed Day Ranges</th>
<th>Total Bed Days</th>
<th>Average Bed Days</th>
<th>Cost according to WEIS $</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DRGs with PU (n36)</strong></td>
<td>1 - 89</td>
<td>532</td>
<td>532</td>
</tr>
<tr>
<td><strong>DRGs without PU (n36)</strong></td>
<td>1 - 60</td>
<td>401</td>
<td>401</td>
</tr>
<tr>
<td><strong>Variance</strong></td>
<td><strong>131</strong></td>
<td><strong>3.64</strong></td>
<td><strong>94,303</strong></td>
</tr>
</tbody>
</table>

Nationwide estimates indicate a hospital acquired pressure ulcer costs an average of $15,958*

* AHRQ, 2005 - 'Payments for Adverse Events'
## Efficiencies

### Analysis of wound care purchasing costs

<table>
<thead>
<tr>
<th></th>
<th>Beginning Dates</th>
<th>End Dates</th>
<th>Months</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pre Program</strong></td>
<td>1/12/2008</td>
<td>31/07/2010</td>
<td>19</td>
<td>399,999.54</td>
</tr>
<tr>
<td><strong>Post Program</strong></td>
<td>1/08/2010</td>
<td>31/03/2012</td>
<td>19</td>
<td>333,196.07</td>
</tr>
<tr>
<td><strong>Variance</strong></td>
<td></td>
<td></td>
<td></td>
<td>66,803.47</td>
</tr>
</tbody>
</table>
Partnering for Better 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
Standard 8

Preventing and Managing Pressure Injuries

- Australian Commission on Safety & Quality in Health Care
- 1 of 10 National Safety & Quality Health Service Standards
- Endorsed by Australian Health Ministers in November 2010
- Aim to protect the public from harm and improve the quality of service provision
- Nationally consistent uniform measure for accreditation
Standard 8: Preventing and Managing Pressure Injuries
Clinical leaders and senior managers of the health service organisation implement evidence-based systems to prevent pressure injuries and manage them when they do occur. Clinicians and other members of the workforce use the pressure injury prevention and management systems.

The intention of this Standard is to:
Prevent patients from developing pressure injuries and effectively managing pressure injuries when they do occur.

Context
It is expected that this Standard will be applied in conjunction with Standard 1, ‘Governance for Safety and Quality in Health Service Organisations’ and Standard 2, ‘Partnering with Consumers’.

Criteria to achieve the Preventing and Managing Pressure Injuries Standard:
Governance and systems for the prevention and management of pressure injuries
Preventing pressure injuries
Managing pressure injuries
Communicating with patients and carers
### Criterion: Governance and systems for the prevention and management of pressure injuries

Health service organisations have governance structures and systems in place for the prevention and management of pressure injuries.

<table>
<thead>
<tr>
<th>C/D</th>
<th>This criterion will be achieved by:</th>
<th>Actions required:</th>
<th>Examples of evidence that can be used to demonstrate an action is being met.</th>
<th>Self assessment</th>
</tr>
</thead>
</table>
| C   | 8.1 Developing and implementing policies, procedures and/or protocols that are based on current best practice guidelines | 8.1.1 Policies, procedures and/or protocols are in use that are consistent with best practice guidelines and incorporate screening and assessment tools | • Policies, procedures and/or protocols that are evidence bases and consistent with best practice guidelines and incorporate screening and assessment tools  
• Descriptions of roles, responsibilities and accountabilities related to screening and assessment for pressure injuries that are included in position descriptions, staff duty statements and/or employment contracts  
• Audit of clinical practice and the tools and procedures employed to identify individuals at risk  
• Evaluation reports of the organisation’s pressure injury prevention program that includes the use of policy, procedures and/or protocols and areas that require modification and education requirements  
• Reports tracking trends over time  
• Benchmarking against high performing agencies  
• Audit of compliance with policies, procedures and/or protocols for pressure injury prevention and management  

(i) Australian Wound Management Association Clinical Practice Guidelines for Pressure Ulcer Prevention and Management are available at: www.awma.com.au | ✓ MM  
☐ SM  
☐ NM → add to action plan |
| C   | 8.1.2 The use of policies, procedures and/or protocols are regularly monitored | 8.1.2 The use of policies, procedures and/or protocols are regularly monitored | • Policies, procedures and/or protocols that are available to the workforce  
• Observation audit of the use of policies, procedures and/or protocols  
• Reviews of patient clinical records against policies, procedures and/or protocols  
• Audits, prevalence surveys and/or incident reporting are conducted and findings inform organisational prevention and management policies, protocols and procedures.  
• Agenda papers, meeting minutes and/or reports of relevant committees that detail improvement actions | ✓ MM  
☐ SM  
☐ NM → add to action plan |
| C   | 8.2 Using a risk assessment framework and reporting systems to identify, investigate and take action to reduce the frequency and severity of pressure injuries | 8.2.1 An organisation-wide system for reporting pressure injuries is in use | • Incident reporting forms and processes included in policies, procedures and/or protocols  
• Reports on pressure injuries and interventions to manage pressure injuries  
• Education resources and records of attendance at training by the workforce on pressure injury reporting systems  
• Agenda papers, meeting minutes and/or reports of relevant committees that include pressure injury reports | ☐ MM  
✓ SM  
☐ NM → add to action plan |
Thank You

Questions?