Critical appraisal of wound resources and literature

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La Trobe University
Declaration of Financial Interests or Relationships

Speaker Name: Bill McGuiness

I have no financial interest or relationship(s) to disclose
Quick introductions

- Work setting
- What you would like to get out of the workshop
Participant goals
Key Learning Objectives

1. Define evidence based practice
2. Differentiate internal evidence from external evidence
3. Identify reliable sources that aggregate external evidence concerning wound management practice
4. Critique published wound management evidence
5. Implement a process of research translation to implement evidence into their own practice environment
6. Evaluate practice outcomes resulting from an evidenced based translation process
On each table is a clinical challenge

• We would like you to present a recommendation to the group for addressing the challenge
• It is importance that this recommendation is evidence based
• The evidence should be derived from e-resources using your phone (or other device). WIFI login: XXXX
• You recommendation should suggest how to translate the findings into practice
• We recommend that you delegate task to different members of the group (e.g. literature, web, clinical experience)
• Time allocation 40 mins
The Challenges
Challenge one:

For the last 2 years the health care provider has stocked a silver dressing – Evidence AG

The Health care provider is rationalizing product availability and is proposing to no longer stock Evidence AG

You have relied heavily on this product to manage local wound infections in chronic wounds

You decide to review the evidence on topical silver in an effort to mount an argument that this product is retained.

What would you recommendation be and why?
Challenge two:

• Mr Proof suffers from a chronic lower leg ulceration

• A duplex scan has determined he is suffering from a venous leg ulcer

• You plan to use compression therapy to help heal the wound and begin to explain to Mr Proof that in the first two to three weeks this will result in a large amount of exudate.

• During the discussion he mentions that his daughter is getting married next week and he doesn’t want the exudate to ‘ruin the day”. You decide to scan the evidence for the best approach.

• What exudate management options could be used and why?
Challenge three:

• You are the group responsible for providing a chronic wound management clinic within a hospital.

• An audit of clinical outcomes has demonstrated that the average time to heal for patients with a venous leg ulcer is 28 weeks. This is outside the national time frame.

• Further investigate reveals that 65% of the patients comply with the recommendation for compression. The remaining 35% remove the compression within hours of application or refuse to wear any.

• Your team decide to improve the compliance rate for compression to 75% over the next year.

• What interventions could be implemented and why?
But first some help

• What is EBP?
• What resources are available
• How to judge the evidence

OVER TO CHARNE
Evidence Based Practice
What do you currently use to guide your wound care practice to optimise patient outcomes?
Evidence-Based Practice

EBP......is the conscientious, explicit and judicious use of current best evidence in making decisions about the care of individual patients (Sackett, 1996)

Why EBP?

• To assist clinical decision making in order
• to provide effective care
• achieve best outcomes for clients
Evidence-Based Practice: Principles

2 EBP principles

1) Sources of information

decisions about practice should be supported by the best available relevant evidence, along with professional expertise, consideration of the clinical circumstances and setting, and should take into account the rights, values and preferences of patients, clients and consumers.

2) Maintaining currency

evidence-based practice requires ongoing professional development.

Evidence-Based Practice: Process

5 A’s
• Ask a question
• Access the information
• Appraise the articles found
• Apply the information
• Assess
Wound resources
Wound Resources

• Database Searches
• Systematic Reviews
• Clinical Guidelines & Professional Association Resources
Database Searching
Database Searching

• Ask a clear and specific question
  Use the PICO mnemonic to help derive key search terms

• Use Library database such as CINAHL, Medline, AgeLine, psycINFO, EBSCO Host
  Use ‘advanced search’ options for effective / efficient search

• Use resources from service/ affiliations (librarians / academics)

• Use critiquing tools to help appraise the literature
PICO

WHAT IS PICO?

PICO is a way (i.e., a method) to unpack your question. That is, to grasp what your question about clinical practice is really about.

Another way of explaining it is by saying that you dissect your question into its component parts and then restructure it and this can make it easier to answer.

HOW TO USE PICO?

You take your question and subject it to (i.e., compartmentalises it for) these four themes, or sub-topics:

- POPULATION/PROBLEM/PATIENT
- INTERVENTION
- COMPARISON/CONTROL
- OUTCOME

These themes/sub-topics are usually inherent in all clinical questions. In so doing, the main concepts are identified.
PICO Example

You’re at a party and a friend of yours tells you that they’ve discovered a new remedy for a hangover called Alcodol tablets taken before drinking (and after if required). After informing your friend that the easiest way to avoid a hangover is simply not to drink too much, you decide that their remedy might be worth further investigation.

<table>
<thead>
<tr>
<th>The PICO elements:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population and Problem (P)</td>
</tr>
<tr>
<td>Adults who drink alcohol</td>
</tr>
</tbody>
</table>

PICO Question:
Do Alcodol tablets reduce the symptoms of a hangover in adults who drink alcohol?
Critiquing tools


CASP critiquing tools: [https://casp-uk.net/casp-tools-checklists/](https://casp-uk.net/casp-tools-checklists/)
Systematic Reviews
Systematic Reviews

“A systematic review is a method for systematically locating, appraising and synthesizing research from primary studies and is an important means of condensing the research evidence from many primary studies.”
(Bennett, Doyle, O’Connor, 2009, pg 241)
Systematic Review Sites

1. The Cochrane Library:  http://www.cochranelibrary.com/

2. The Joanna Briggs Institute:  http://joannabriggs.org/

3. Database of Abstracts of Reviews of Effects (DARE) (includes The Campbell Collaboration):  https://www.crd.york.ac.uk/CRDWeb/
Cochrane Library

Type “wound” into the Cochrane Library search and get
• 403 reviews from 10,000+ records.

Type in the following into the Cochrane Library search and get
• N=9 “Pressure Injury” / N=37 “Pressure Ulcer”
• N=29 “Venous Leg Ulcer”
• N=17 “Diabetic foot ulcer”
Cochrane Library... last 3 months

- Negative pressure wound therapy for open traumatic wounds
- Protease activity as a prognostic factor for wound healing in venous leg ulcers
- Mechanical dilatation of the cervix during elective caesarean section before the onset of labour for reducing postoperative morbidity
- Vaginal preparation with antiseptic solution before caesarean section for preventing postoperative infections
- Dressings and topical agents for treating venous leg ulcers
- Adverse side effects of dexamethasone in surgical patients
- Immunonutrition for patients undergoing surgery for head and neck cancer
- Prophylactic abdominal drainage for pancreatic surgery
- Anticoagulation for perioperative thromboprophylaxis in people with cancer
- Mesh versus non-mesh for inguinal and femoral hernia repair
- Local anaesthetics and regional anaesthesia versus conventional analgesia for preventing persistent postoperative pain in adults
- Autologous cells derived from different sources and administered using different regimens for "no-option" critical lower limb ischaemia patients
- Antifibrinolytic therapy for preventing oral bleeding in people on anticoagulants undergoing minor oral surgery or dental extractions
- Ketorolac for postoperative pain in children
- Single-dose intravenous diclofenac for acute postoperative pain in adults
JBI Wound Healing & Management

- N=35 Evidence Based Recommended Practices linking to the wound node.
- Need to be subscribed to access.

<table>
<thead>
<tr>
<th>ID</th>
<th>Publication Title</th>
<th>Author</th>
<th>Nodes</th>
<th>Date</th>
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<tr>
<td>JBI13811</td>
<td>Amputation: Patient Education</td>
<td>Rehabilitation, Wound Healing and Management</td>
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<td>JBI5412</td>
<td>Ankle-Brachial Pressure Index (ABPI) Using Hand Held Doppler Ultrasound</td>
<td>Aged Care, General Medicine, Wound Healing and Management</td>
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<td>JBI1831</td>
<td>Closed Wound Suction</td>
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<td>25/01/2017</td>
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Guidelines
Guidelines & Prof. Assoc.

1. NHMRC Clinical Guideline Portal (www.clinicalguidelines.gov.au) and locate a guideline.

2. Others....
Pressure injury prevention for critically ill adults

Primary Developer:
NSW Health, NSW Agency for Clinical Innovation

Publication Date: 2014

Post-operative wound management

Primary Developer:
Collaborating Authors

Publication Date: 2013
Wounds Australia

Wounds Australia publications

Wounds Australia (and formerly Australian Wound Management Association, AWMA) has published resources and information for members and other health professionals with an interest in wound prevention and management. These are available for electronic download. If you are interested in purchasing hard copies of any publications please email info@woundsaustralia.com.au

- Application of Aseptic Technique in Wound Dressing Procedure
- Standards for Wound Prevention and Management (Third Edition)
- Australian and New Zealand Clinical Practice Guideline for Prevention and Management of Venous Leg Ulcers
- Pan Pacific Clinical Practice Guideline for the Prevention and Management of Pressure Injury
- Prevention and Treatment of Pressure Ulcers: Clinical Practice Guideline (2014 International Guideline)
- Managing Wounds as a Team
- eHealth in Wound Care
- AWMA Inventory of Wound/Skin Care products and devices
http://ewma.org/it/resources/
Links to Position Docs/Papers

- Advanced Therapies in Wound Management
- Wound Curriculum for Nurses
- Use of Oxygen Therapies in Wound Healing
- Negative Pressure Wound Therapy: Overview, Challenges and Perspectives
- Antimicrobial stewardship in wound care
- Management of patients with Venous Leg Ulcers
- eHealth in Wound Care
- EWMA Home Care-Wound Care
- Managing Wounds as a Team
- Antimicrobials and Non-healing Wounds
- EWMA Document: Debridement
Wound Resources

• Database Searches
• Systematic Reviews
• Clinical Guidelines & Professional Association Resources

ALSO

• Clinical experts (in service/ associations)
• Education (inservice/ association training/ webinars / conferences/ CPD/ higher degree edu)
Over to you

40 mins
Recommendations of challenge one
Recommendations of challenge two
Recommendations of challenge three
Conclusion
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Thank You