

Beyond Google: Strategies for Finding Evidence

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Swedish Nursing Quality and Research Conference
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Objectives

- Perform an online search for research evidence
- Identify strategies to improve searching skills to find appropriate evidence to answer research and clinical questions
- Locate resources on HEAL-WA

Searching the Literature

- Where to begin?
- What terms do I use?
- What question am I asking?
- Is the source reliable?
- I have too many results.
- I have too few results.
- How do I find research articles?
- My results are not relevant.
- How do I find similar articles?

Where to Begin...?

- PubMed/MEDLINE
- CINAHL
- DynaMed
- Google Scholar
- and others...

Clarify your Question with PICO

- **P**atient, population or problem?
- **I**ntervention?
- **C**omparison?
- **O**utcome?


Question:

Pressure ulcers: Comparison of pressure redistribution mattresses for prevention of pressure ulcers.

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 Searching: **CINAHL Plus with Full Text** | [Choose Databases](#)

Suggest Subject Terms

pressure ulcer	Select a Field (optional)	▼
AND ▼ mattress*	Select a Field (optional)	▼
AND ▼ redistribut*	Select a Field (optional)	▼

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Research Article

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CE Module

Meta-Synthesis

Human

Any Author is Nurse

Journal Subset
All
Allied Health
Alternative/Complementary Therapies
Biomedical

Language
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Afrikaans
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Evidence-Based Practice

Clinical Queries
All
Therapy - High Sensitivity
Therapy - High Specificity
Therapy - Best Balance

First Author is Nurse

Randomized Controlled Trials

Geographic Subset
All
Africa
Asia
Australia & New Zealand

Publication Type ←
Statistics
Systematic Review
Tables/Charts
Teaching Materials



[Pressure-redistribution Surfaces for Prevention of Surgery-related Pressure Ulcers: A Meta-Analysis.](#)

(includes abstract) Huang, Hai-Yan; Chen, Hong-Lin; Xu, Xu-Juan; Ostomy Wound Management, 2013 Apr; 59 (4): 36-48. (journal article - meta analysis, **research**, systematic review, tables/charts) ISSN: 0889-5899 PMID: 23562873

Pressure-redistribution surfaces are generally recommended to prevent pressure ulcers (PUs) in high-risk patients, but their use in surgery-related PU prevention remains controversial. A meta-ana...

Subjects: Beds and Mattresses; Perioperative Care; Pressure Ulcer

Database: CINAHL Plus with Full Text

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May Link to full text



[A Prospective, In vivo Evaluation of Two Pressure-redistribution Surfaces in Healthy Volunteers Using Pressure Mapping as a Quality Control Instrument.](#)

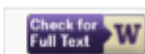
(includes abstract) Miller, Stephannie; Parker, Michael; Blasiolo, Nicole; Beinlich, Nancy; Fulton, Judith; Ostomy Wound Management, 2013 Feb; 59 (2): 44-8. (journal article - case study, pictorial, **research**, tables/charts) ISSN: 0889-5899 PMID: 23388397

Deep tissue injury (DTI) can rapidly evolve into a higher stage pressure ulcer. Use of pressure-redistribution surfaces is a widely accepted practice for the prevention of pressure ulcers in acut...

Subjects: Beds and Mattresses; Deep Tissue Injury; Equipment Design; Interface Pressure; Pressure Ulcer; Software; Adolescent: 13-18 years; Male

Database: CINAHL Plus with Full Text

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[Pressure ulcer incidence and progression in critically ill subjects: influence of low air loss mattress versus a powered air pressure redistribution mattress.](#)

(includes abstract) Black, Joyce; Berke, Christine; Urzendowski, Gail; Journal of Wound, Ostomy & Continence Nursing, 2012 May-Jun; 39 (3): 267-73. (journal article - pictorial, **research**, tables/charts) ISSN: 1071-5754 PMID: 22552108

PURPOSE: The primary objective of this study was to compare facility-acquired pressure ulcer incidence and progression of pressure ulcers present on admission in critically ill patients, using 2 ...

Subjects: Disease Progression; Pressure Ulcer

Database: CINAHL Plus with Full Text

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CINAHL Abstract

Pressure-redistribution Surfaces for Prevention of Surgery-related Pressure Ulcers: A Meta-Analysis.

Authors: [Huang, Hai-Yan](#) ; [Chen, Hong-Lin](#) ; [Xu, Xu-Juan](#)

Affiliation: Affiliated Hospital of Nantong University, Nantong City, Jiangsu Province, China

Source: [Ostomy Wound Management](#) (OSTOMY WOUND MANAGE), 2013 Apr; 59 (4): 36-48. (24 ref)

Publication Type: journal article - meta analysis, research, systematic review, tables/charts

Language: English

Major Subjects: [Beds and Mattresses](#)
[Perioperative Care](#)
[Pressure Ulcer -- Prevention and Control](#)

Minor Subjects: [Chi Square Test](#) ; [Confidence Intervals](#) ; [Data Analysis Software](#) ; [Human](#) ; [Medline](#) ; [Meta Analysis](#) ; [Odds Ratio](#) ; [Post Anesthesia Care Units](#) ; [Systematic Review](#)

Abstract: **Pressure-redistribution** surfaces are generally recommended to prevent **pressure** ulcers (PUs) in high-risk patients, but their use in surgery-related PU prevention remains controversial. A meta-analysis was conducted to assess the relative preventive impact of **pressure-redistribution** surfaces versus standard hospital **mattresses** (usually a hospital-issue, foam-based **mattress**) on the incidence of surgery-related PUs. Systematic literature searches were performed using the terms **pressure ulcer**, operation, surgery, **mattress**, foam, polymer, pad, overlay, surface, and interface. Country, race, language, and publication year of articles was not restricted; randomized or quasi-randomized controlled trials were eligible for analysis. Odds ratio (OR) with 95% confidence intervals (CIs) for surgery-related PU incidence in patients using support surfaces versus standard **mattress** were calculated by random-effects model. Of the 316 studies identified, 10 involving a total of 1,895 patients were eligible for inclusion in the meta-analysis. Seven studies were randomized, controlled and three were quasi-randomized controlled trials. Patients who were provided a support surface had a significantly decreased incidence of surgery-related PUs (OR 0.31 [95% CI 0.17-0.59]) compared to patients using a standard **mattress**. Subgroup analysis showed **pressure-redistribution** surfaces used intra-operatively did not decrease the incidence of surgery-related PUs (OR 0.59, [95% CI 0.34-1.01]), but PU incidence decreased with postoperative (OR 0.07 [95% CI 0.01-0.49]) as well as with intra-operative and postoperative use (OR 0.20 [95% CI 0.06-0.73]). Funnel plot diagrams suggest a minimal risk of bias. Sensitivity analysis did not materially change the result of the main metaanalysis. Postoperative use of **pressure-redistribution** surfaces can effectively decrease the incidence of surgery-related PUs, but evidence to substantiate intra-operative use is insufficient. Patients at high risk for surgery-related PUs should be placed on a **pressure-redistribution** surface during the postoperative period, but intra-operative use can remain prudent until more well-designed, adequately powered, urgently needed studies are performed.

Journal Subset: Double Blind Peer Reviewed; Editorial Board Reviewed; Expert Peer Reviewed; Nursing; Online/Print; Peer Reviewed; USA



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PubMed: 2 Strategies for Finding Evidence-Based Citations

Strategy 1:

Use **Filters** under Article Type, e.g., Randomized Controlled Trial, Meta-Analysis, Practice Guideline, Clinical Trial, Consensus Development Conference, and more

Strategy 2:

Use the PubMed **Clinical Queries** section

Search: PubMed

pressure ulcers mattress* redistribut*

Search

Clear



PubMed

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Article types clear

- Clinical Trial
- Meta-Analysis
- Practice Guideline

Randomized Controlled Trial

Review

Systematic Reviews

More ...

Text availability

- Abstract available
- Free full text available
- Full text available

Publication dates

- 5 years
- 10 years
- Custom range...

Species

Humans

Languages clear

English

More ...

Ages

- Adult: 19-44 years
- Aged: 65+ years
- Child: birth-18 years
- Preschool Child: 2-5 years
- More ...

[Pressure-redistribution surfaces for prevention of surgery-related pressure ulcers: a](#)

1. [meta-analysis](#)

Huang HY, Chen HL, Xu XJ.
Ostomy Wound Manage. 2013 Apr;59(4):36-8, 42, 44, 46, 48.
PMID: 23562873 [PubMed - in process]
[Related citations](#)

[Support surfaces for treating pressure ulcers.](#)

2. McInnes E, Dumville JC, Jammali-Blasi A, Bell-Syer SE.
Cochrane Database Syst Rev. 2011 Dec 7;(12):CD009490. doi: 10.1002/14651858.CD009490. Review.
PMID: 22161450 [PubMed - indexed for MEDLINE]
[Related citations](#)

[Preventing pressure ulcers--Are pressure-redistributing support surfaces effective? A](#)

3. [Cochrane systematic review and meta-analysis.](#)

McInnes E, Jammali-Blasi A, Bell-Syer S, Dumville J, Cullum N.
Int J Nurs Stud. 2012 Mar;49(3):345-59. doi: 10.1016/j.ijnurstu.2011.10.014. Epub 2011 Nov 20. Review.
PMID: 22104042 [PubMed - indexed for MEDLINE]
[Related citations](#)

[Pressure-relieving devices for treating heel pressure ulcers.](#)

4. McGinnis E, Stubbs N.
Cochrane Database Syst Rev. 2011 Sep 7;(9):CD005485. doi: 10.1002/14651858.CD005485.pub2. Review.
PMID: 21901698 [PubMed - indexed for MEDLINE]
[Related citations](#)

[A pilot randomised controlled trial comparing reactive air and active alternating pressure mattresses in the prevention and treatment of pressure ulcers among medical ICU patients.](#)

5. Malbrain M, Hendriks B, Wijnands P, Denie D, Jans A, Vanpellicom J, De Keulenaer B.
J Tissue Viability. 2010 Feb;19(1):7-15. doi: 10.1016/j.jtv.2009.12.001. Epub 2010 Jan 15.
PMID: 20079647 [PubMed - indexed for MEDLINE]

All (10)

[Diagnosis/Narrow \(0\)](#)

[Etiology/Narrow \(4\)](#)

[Nursing Journals \(7\)](#)

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Titles with your search terms

Preventing **pressure ulcers** in long-term care: a cost-effectiveness ar [Arch Intern Med. 2011]

Early prevention of **pressure ulcers** among elderly patients admitt [Ann Emerg Med. 2011]

Support surfaces for intraoperative prevention of **pressure ulcers** in patients [Surgery. 2011]

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Pressure-redistributing support surface use and pressure ulcer ir [J Am Geriatr Soc. 2011]

Pressure ulcer prevention: an evidenc [Ont Health Technol Assess Ser. 2009]

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J Tissue Viability. 2010 Feb;19(1):7-15. doi: 10.1016/j.jtv.2009.12.001. Epub 2010 Jan 15.

A pilot randomised controlled trial comparing reactive air and active alternating pressure mattresses in the prevention and treatment of pressure ulcers among medical ICU patients.

Malbrain M, Hendriks B, Wijnands P, Denie D, Jans A, Vanpellicom J, De Keulenaer B.

Intensive Care Unit, ZiekenhuisNetwerk Antwerpen, Campus Stuivenberg, Lange Beeldekensstraat 267, B-2060 Antwerpen 6, Belgium. manu.malbrain@skynet.be

Abstract

BACKGROUND: Data on the prevention and treatment of pressure ulcers (PU's) among ICU patients is sparse.

OBJECTIVE: To compare PU outcomes in medial ICU patients nursed on a pressure redistributing mattress overlay (ROHO, ROHO Inc, Belleville, IL, USA) or an active alternating pressure mattress (NIMBUS3, ArjoHuntleigh, Luton Bedfordshire, UK).

DESIGN: Pilot prospective single blind randomised controlled clinical trial.

INTERVENTION: Two types of pressure redistributing mattress.

PATIENTS: Two groups of eight patients.

METHODS: Patients included in the study were those at high risk (Norton scale <8) or with a PU on admission.

RESULTS: The two groups had similar patient characteristics. However, the NIMBUS 3 group presented with more ulcers per patient on admission (62.5%) and more severe ulcers (20% category 3) while four patients (50%) presented with a single superficial ulcer in the ROHO group. **HEALING:** The progress of the ulcers showed significant decreases in PU surface area (p=0.05), total PUSH tool score (p=0.01) in the NIMBUS 3 group compared to the ROHO group. In the NIMBUS 3 group 82% of the ulcers improved versus none in the ROHO group (p=0.002) and 18% remained stable versus 33%. None of the ulcers deteriorated in the NIMBUS 3 group versus 67% in the ROHO group (p=0.006). Full thickness wounds (Category 3) were present in 22% of the NIMBUS 3 group versus 0% of the ROHO group on admission and in 0% versus 66.7% (p=0.008) respectively at the end of the pilot study.

PREVENTION: Non-blanching erythema occurred equally in both arms at baseline; skin remained intact for the NIMBUS 3 group while 50% in the ROHO group worsened with superficial tissue loss.

CONCLUSION: This small pilot study suggests that 'active' alternating therapy is a useful adjunct in the care of highly vulnerable patients, while the outcomes may be less favourable when using 'reactive', constant low pressure devices.

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PMID: 20079647 [PubMed - indexed for MEDLINE]

Publication Types **MeSH Terms**

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Related citations in PubMed

Pressure relieving support surfaces: a randomised evaluation [Health Technol Assess. 2006]

"Constant force technology" versus low-air-loss therapy [Ostomy Wound Manage. 2001]

Pressure ulcer incidence and progression in critical care [J Wound Ostomy Continence Nurs. 2012]

[Review](#) Support surfaces for pressure ulcer prevention [Cochrane Database Syst Rev. 2008]

[Review](#) Support surfaces for pressure ulcer prevention [Cochrane Database Syst Rev. 2004]

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MeSH: Medical Subject Headings

Publication Types, MeSH Terms

Publication Types

Comparative Study

Randomized Controlled Trial

MeSH Terms

Aged

Air Pressure*

Beds/standards*

Belgium

Clinical Nursing Research

Equipment Design

Female

Humans

Intensive Care

Male

Middle Aged

Nursing Assessment

Patient Positioning

Pilot Projects

Pressure Ulcer/diagnosis

Pressure Ulcer/etiology

Pressure Ulcer/prevention & control*

Prospective Studies

Risk Assessment

Risk Factors

Severity of Illness Index

Single-Blind Method

Treatment Outcome

Wound Healing*

Construct a search using MeSH terms

- MeSH terms are Medical Subject Headings.
- They are assigned to all indexed articles in PM.
- MeSH terms describe what the article is about.
- *They are key in constructing targeted searches.*

Results of searches on this page are limited to specific clinical research areas. For comprehensive searches, use

pressure ulcers mattress* redistribut*

Clinical Study Categories

Category:

Scope:

Results: 5 of 5

[A pilot randomised controlled trial comparing reactive air and active alternating pressure mattresses in the prevention and treatment of pressure ulcers among medical ICU patients.](#)

Malbrain M, Hendriks B, Wijnands P, Denie D, Jans A, Vanpellicom J, De Keulenaer B.
J Tissue Viability. 2010 Feb; 19(1):7-15. Epub 2010 Jan 15.

[Clinical effectiveness of a low-tech versus high-tech pressure-redistributing mattress.](#)

Cavicchioli A, Carella G.
J Wound Care. 2007 Jul; 18(7):34-8.

[Profiling beds versus static pressure ulcer incidence.](#)

Keogh A, Dealey C.
J Wound Care. 2001 Feb; 12(2):12-5.

[Should weaker study designs ever be preferred over randomised controlled trials.](#)

Chaloner D, Cave J.
J Tissue Viability. 2000 Jul; 10(3 su):7-9.

[Providing correct pressure-relieving devices for optimum outcome.](#)

Phillips L.
Br J Nurs. 1999 Nov 25-Dec 8; 8(21):1447-52.

Systematic Reviews

Results: 5 of 7

[Pressure-redistribution surfaces for prevention of surgery-related pressure ulcers: a meta-analysis .](#)

Huang HY, Chen HL, Xu XJ.
Ostomy Wound Manage. 2013 Apr; 59(4):36-8, 42, 44, 46, 48.

[Support surfaces for treating pressure ulcers.](#)

McInnes E, Dumville JC, Jammali-Blasi A, Bell-Syer SE.
Cochrane Database Syst Rev. 2011 Dec 7; (12):CD009490. Epub 2011 Dec 7.

Preventing pressure ulcers--Are pressure-redistributing support surfaces effective? A Cochrane systematic review and meta-analysis. McInnes E, Jammali-Blasi A, Bell-Syer S, Dumville J, Cullum N. Int J Nurs Stud. 2012 Mar; 49(3):345-59. Epub 2011 Nov 20.

McGinnis E, Stubbs N.

Cochrane Database Syst Rev. 2011 Sep 7; (9):CD005485. Epub 2011 Sep 7.

[Pressure ulcer prevention: an evidence-based analysis.](#)

Health Quality Ontario.

Ont Health Technol Assess Ser. 2009; 9(2):1-104. Epub 2009 Apr 1.

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PubMed Tips

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Search by phrase (“ ”)	Add quotations around words to tell PubMed to find an <i>exact phrase</i>
Search for words in the title [ti]	PubMed to search for words in article titles [Do not use this for comprehensive searches.] Ex: “ pressure ulcer ”[ti] AND mattress [ti].
Use Limits	Limit your results by <i>type of article, date range, age group, journal sets</i> , and more.
Search by Author [au]	Search PubMed for a particular author Ex: Rivara FP [au]
Find Related Citations	In the <i>abstract view</i> , take a look at <i>the related citations</i> generated for a particular article (right hand side of page)

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Try This...	Tell PubMed...
<p>Construct a search using MeSH terms</p> <p>MeSH terms are Medical Subject Headings and are assigned to all indexed articles in PubMed</p> <p>MeSH terms describe what the article is about and <i>are a key in constructing targeted searches.</i></p>	<p>Once you've identified an article that looks relevant, take a look at the article's MeSH terms.</p> <ul style="list-style-type: none">• In the abstract view, click on the + next to Publication Types, MeSH terms.• Click on a term to send it to the PubMed search box.• You may combine terms, but you may receive better results by starting with two or three terms.• You may add keywords to your search to narrow your results.

CINAHL vs PubMed

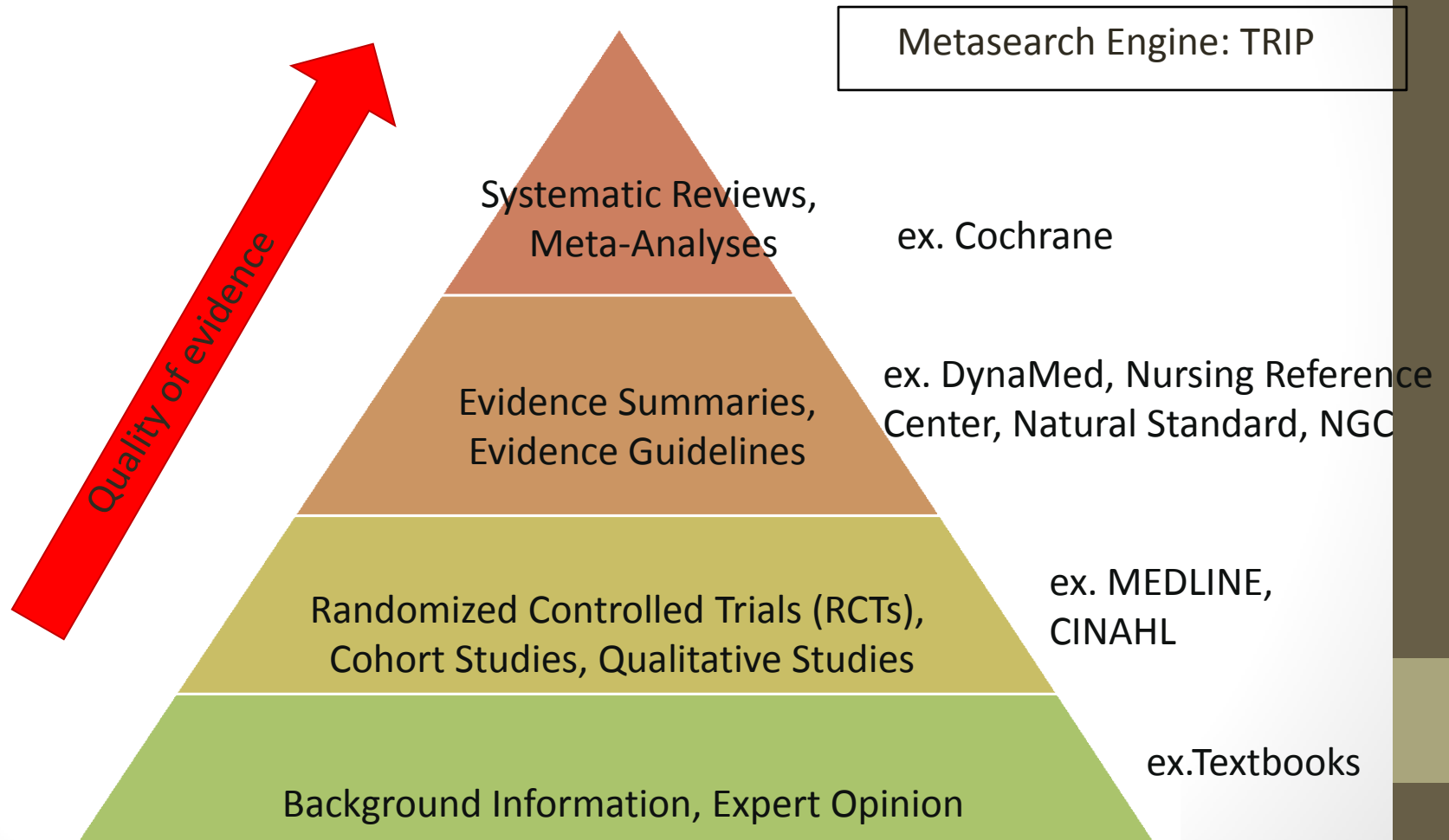
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- Has peer-reviewed limit
- Includes cited references at end of many refs

PubMed

- Coverage: early 1940's+
- Indexes 5200 journals
- Focuses on biomedical literature
- Uses MeSH as its controlled vocabulary
- No peer-reviewed limit
- No cited references

Evidence Pyramid





Pressure ulcer

Updated 2013 Aug 12 05:20:00 AM: benefit associated with various interventions for treatment of pressure ulcers but insufficient evidence to clearly recommend any treatment over another (Ann Intern Med 2013 Jul 2) [view update](#) [Show more updates](#)

Related Summaries:

- o Diabetic foot ulcer
- o Venous ulcer
- o Osteomyelitis
- o Cellulitis
- o Peripheral arterial disease (PAD) of lower extremities

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- ▶ Quality Improvement
- ▶ Guidelines and Resources
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- ▶ Quality Improvement
- ▶ Guidelines and Resources
- ▶ Patient Information
- ▶ ICD-9/ICD-10 Codes
- ▶ References

Pressure relief (support surfaces):

- among many patient safety practices, use of pressure-relieving bedding materials for pressure ulcers has greatest strength of evidence for impact and effectiveness ([Agency for Healthcare Research and Quality \(AHRQ\) evidence-based report](#) in JAMA 2002 Jul 24-31;288(4):501)
- methods with evidence for reducing risk of new pressure ulcers (based on Cochrane review reported below)
 - higher specification foam mattresses may reduce incidence of pressure ulcers compared to standard hospital foam mattresses ([level 2 \[mid-level\] evidence](#))
 - pressure-relieving overlays on operating table may reduce postoperative pressure ulcer incidence ([level 2 \[mid-level\] evidence](#))
 - medical grade sheepskin may reduce risk of pressure ulcers ([level 2 \[mid-level\] evidence](#))
 - alternating pressure mattress associated with reduction in incidence of pressure ulcers compared to standard foam mattress ([level 2 \[mid-level\] evidence](#))
 - alternating pressure mattresses and alternating pressure overlays have similar efficacy for prevention and healing of pressure ulcers ([level 2 \[mid-level\] evidence](#))
- potential methods include
 - mattresses - foam overlay mattresses (convoluted foam "egg crate", Clinisert, Ultra-form, Geo-Matt), special mattresses (Stryker DMS), alternating-air pressure mattresses (Dyna-CARE, Sof-Care), low air-loss mattresses (microAIR, Acucair)
 - special beds - low-air-loss beds (Flexicaire, KinAir), air-fluidized beds (Clinitron, Fluid-Air)
 - heel protectors - standard cushioning (foam, pillow, "heel protectors"), special devices (Lunax Boot, L'Nard, Foot Waffle)
 - seat cushions - standard cushioning (foam, pillow), special padding (BBD, Roho)
- Cochrane review of support surfaces for pressure ulcer prevention
 - systematic review of 53 randomized trials evaluating different support surfaces for pressure ulcer prevention
 - **constant low-pressure (CLP) supports might reduce incidence of pressure ulcers compared to standard foam mattresses ([level 2 \[mid-level\] evidence](#))**
 - based on analyses of individual trials
 - 5 trials found CLP mattresses reduced incidence of pressure ulcers compared to standard foam, but meta-analysis could not be performed due to heterogeneity of CLPs (mattresses included cubed foam, bead-filled, soft-form, water-filled, and alternative foam)
 - 1 large trial with 1,166 patients found no significant differences between viscopolymer energy absorbing foam mattress (a type of CLP) and standard foam mattress
 - 5 trials found no significant differences in comparisons of various CLP supports to each other, but meta-analysis could not be performed due to heterogeneity of CLPs used
 - **alternative foam mattresses may reduce incidence of pressure ulcers compared to standard hospital foam mattresses ([level 2 \[mid-level\] evidence](#))**
 - based on meta-analysis of 5 trials without blinding of outcome assessors
 - alternatives included



- seat cushions (4 trials)
- limb protectors
- emergency trolley overlays (1 trial)
- electric profiling bed (1 trial)
- Reference - [Cochrane Database Syst Rev 2011 Apr 13;\(4\):CD001735](#)
- **advanced static support surfaces may be more effective than standard mattresses for preventing pressure ulcers in higher-risk populations (level 2 [mid-level] evidence)**
 - based on systematic review limited by clinical heterogeneity
 - systematic review of 62 randomized trials evaluating effects of preventive interventions in patients at increased risk for pressure ulcers
 - meta-analysis not performed due to variability in treatment settings, medical comorbidities, and prevention interventions
 - advanced static support surfaces (including viscoelastic and polyurethane foam mattress, Softfoam mattress, sheepskin overlay, and air overlay) associated with decreased risk for pressure ulcers compared with standard mattresses (relative risk range 0.2-0.6) in 1 good-quality and 4 fair-quality trials
 - insufficient evidence regarding efficacy of repositioning, nutritional support, and topical creams, dressings, or pads compared with usual care
 - Reference - [Ann Intern Med 2013 Jul 2;159\(1\):28](#)  [EBSCOhost Full Text](#)
- **pressure redistribution mattresses for prevent pressure ulcer prevention in long-term care facilities appear cost-effective**
 - based on Markov model analysis comparing the evidence-based strategies to prevent pressure ulcers in long-term care facilities
 - pressure redistribution mattresses and foam cleansing associated with small improvement in quality-adjusted life-years for high-risk residents requiring incontinence care
 - Reference - [Arch Intern Med 2011 Nov 14;171\(20\):1839](#)
- **skin protection seat cushions in fitted wheelchairs associated with fewer ischial tuberosities pressure ulcers (level 2 [mid-level] evidence)**
 - based on randomized trial with high dropout rate
 - 232 patients ≥ 65 years old using wheelchairs ≥ 6 hours/day in nursing homes randomized to fitted wheelchair with skin protection (air, viscous fluid and foam, or gel and foam) cushion vs. 7.6 cm crosscut segmented foam cushion for 6 months
 - 78% analyzed for pressure ulcers
 - ischial tuberosities ulcers in 0.9% with skin protection cushion vs. 6.7% with foam cushion ($p = 0.04$, NNT 17)
 - Reference - [J Am Geriatr Soc 2010 Dec;58\(12\):2308](#)  [EBSCOhost Full Text](#)
- **insufficient evidence to support alternating pressure air mattresses for prevention of pressure ulcers**
 - based on systematic review of 35 studies with 15 randomized trials evaluating pressure ulcer incidence
 - air pressure mattresses more effective than standard hospital mattress in 1 randomized controlled trial
 - Reference - [Int J Nurs Stud 2008 May;45\(5\):784](#)

Guidelines:

Guideline comparison:




- synthesis of 2 guidelines (RNAO 2007, WOCN 2010) on management of pressure ulcers can be found at [National Guideline Clearinghouse 2011 Jan 24:16417](#)
- synthesis of 2 guidelines ([HIGN 2008, WOCN 2010) on prevention of pressure ulcers can be found at [National Guideline Clearinghouse 2011 Jan 24:25078](#)

International guidelines:

- international expert evidence-based recommendations for negative pressure wound therapy: treatment variables (pressure levels, wound filler and contact layer) can be found in [J Plast Reconstr Aesthet Surg 2011 Sep;64 Suppl:S1](#)
- European Pressure Ulcer Advisory Panel and National Pressure Ulcer Advisory Panel international guidelines
 - prevention of pressure ulcers can be found at [National Pressure Ulcer Advisory Panel 2009 PDF](#) or in [Spanish PDF](#) or in [Japanese PDF](#)
 - treatment of pressure ulcers can be found at [European Pressure Ulcer Advisory Panel 2009 PDF](#) or in [Japanese PDF](#)
- Italian Society of Infectious Tropical Diseases (Societa Italiana di Malattie Infettive e Tropicali)/International Society of Chemotherapy (SIMIT/ISC) guideline on diagnosis and management of skin and soft-tissue infections can be found in [J Chemother 2011 Oct;23\(5\):251](#)

United States guidelines:



- Institute for Clinical Systems Improvement (ICSI) pressure ulcer prevention and treatment protocol can be found at [ICSI 2012 Jan PDF](#) or at [National Guideline Clearinghouse 2012 Jul 30:36059](#)
- Agency for Healthcare Research and Quality, formerly Agency for Health Care Policy and Research (AHCPR), guidelines on
 - treatment of pressure ulcers can be found at [AHCPR 1994 Dec](#)
 - prevention of pressure ulcers can be found at [AHCPR 1992](#)
- Association for the Advancement of Wound Care (AAWC) guideline on pressure ulcer guidelines can be found at [AAWC 2010 Oct 1 PDF](#) or at [National Guideline Clearinghouse 2011 Aug 1:24361](#)
- Wound Healing Society guideline on treatment of pressure ulcers can be found in [Wound Repair Regen 2006 Nov-Dec;14\(6\):663](#) 
[EBSCOhost Full Text](#) full-text
- HIGN protocols for best practice of preventing pressure ulcers and skin tears can be found at [National Guideline Clearinghouse 2008 Jan 10:12262](#)

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Closing Thoughts

- Use **CINAHL** and **PubMed** to find research articles.
- Use **DynaMed** to find summaries for point-of-care evidence.
- Use **HEAL-WA** for access to a wide selection of evidence-based eResources.

Questions?

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