



Federaal Kenniscentrum voor de Gezondheidszorg Centre Fédéral d'Expertise des Soins de Santé Belgian Health Care Knowledge Centre

# A national guideline for the treatment of pressure ulcers

Dimitri Beeckman, Cathy Matheï, Aurélie Van Lancker, Geert Vanwalleghem, Sabine Van Houdt, Luc Gryson, Hilde Heyman, Christian Thyse, Adinda Toppets, Sabine Stordeur, Koen Van den Heede





#### Request from

SPF Santé Publique – FOD Volksgezondheid



#### In collaboration with

- Academic teams UGent/KULeuven
- National Clinical Guideline Centre (NCGC) who produces a guideline on behalf of NICE
- Wound care organisations (CNC vzw, WCS, AFISCeP.be)







NHS
National Institute for
Health and Clinical Excellence







## Rationale



Resulting from an external mechanical load (pressure and/or shear)



High prevalence: 12% in Belgian hospitals (Category I-IV)



Various settings: hospitals, nursing homes, homecare



A plethora of treatment options



#### Pressure ulcers are not trivial











# Topics: clinical effectiveness

- 1. Nutritional support
- 2. Pressure-redistributing devices (mattresses, overlays, beds, cushions)
- 3. Debridement
- 4. Topical agents
- 5. Dressings
- 6. Indications for surgery
- 7. Systemic antimicrobials
- 8. Electrotherapy
- 9. Light therapy
- 10. Hyperbaric oxygen therapy
- 11. Negative pressure wound therapy
- 12. Heel ulcers



## Methods

Clinical effectiveness: (Systematic review of) RCTs

If non available: cohort studies with control group

GRADE: level of evidence and strength of recommendations

Best practices: high-quality guidelines + experts and stakeholders



## Methodological considerations

Body of evidence

Low to very low quality

Frequent problems

- Heterogeneity and under-powered studies
- Lack of blind or independently verified outcome assessment
- Poor description of standard care and co-interventions



# Topics: clinical effectiveness

- 1. <u>Nutritional supplements</u> may be more effective compared to standard hospital diet. No evidence in favour of a particular supplement
- 2. Re-distributing devices: Constant low pressure and alternating devices
- 3. No evidence in favour of a particular <u>debridement method</u>
- 4,5. <u>Modern dressings and topical agents</u> (e.g. hydrocolloids, hydrogels, hydrofibres, foams, alginates, silver dressings) instead of basic dressing types (e.g. gauze, paraffin gauze)
- 6,7. Indications for <u>surgery</u> and <u>systemic agents</u>: no studies
- 8-11. <u>Adjuvant therapies</u> (electrotherapy, HBOT, light therapy, NPWT): no evidence for effectiveness
- 12. <u>Heel ulcers</u>: No evidence in favour of a particular intervention





#### Discussion



An important health problem BUT lack of high-quality research on how to treat them



Absence of evidence is not the same as evidence of absence of effectiveness



## Clinical recommendations



Holistic assessment and individual plan of care tailored to general health status, patient preferences, overall plan of care



Primary and secondary prevention

Pressure redistributing mattresses

Use devices that ensure heels are free of the surface of the bed Nutritional interventions



Use of modern dressings and topical agents to improve healing NPWT, HBOT, light therapy, electrotherapy are not recommended as routine treatments



# Policy recommendations

Health Research System

• To support research programs on the effectiveness of different treatment options (e.g. dressing types, Negative Pressure wound therapies) currently used in daily practice

Federal Council on the quality of the Nursing activities

• To develop and implement process and outcome indicators. These should be aligned with existing pressure ulcer (and other quality) indicator initiatives

FOD / SPF

• To transform and disseminate this guideline in procedures, protocols, educational programs, etc. in close collaboration with professional organisations

Health practitioners & institutions

- To develop comprehensive programs for pressure ulcer treatment (e.g. monitoring and feedback, wound care resource nurses, multidisciplinary wound care committees)
- Multidisciplinary approach





#### Colophon

- Author(s): Dimitri Beeckman (UGent), Cathy Matheï (KULeuven), Aurélie Van Lancker (UGent), Geert Vanwalleghem (CNC vzw/ WCS/ AZ Delta), Sabine Van Houdt (KULeuven), Luc Gryson (CNC vzw), Hilde Heyman (WCS), Christian Thyse (AFISCeP.be), Adinda Toppets (UZLeuven), Sabine Stordeur (KCE), Koen Van den Heede (KCE)
- Publication date: 4 July 2013
- Domain: Good Clinical Practice (GCP)
- MeSH: Pressure ulcer; Practice Guidelines
- NLM Classification: WR 598

#### Colophon

- Language: English
- Format: Adobe® PDF™ (A4)
- Legal depot: D/2012/10.273/29
- Copyright: KCE reports are published under a "by/nc/nd" Creative Commons Licence <a href="http://kce.fgov.be/content/about-copyrights-for-kce-reports">http://kce.fgov.be/content/about-copyrights-for-kce-reports</a>.

This document is available on the website of the Belgian Health Care Knowledge Centre.