



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

# A national guideline for the prevention of pressure ulcers



# Request from the 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)









### Rationale

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

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

Pressure ulcer prevention: very frequent nursing intervention

Various settings: hospitals, nursing homes, homecare



# Topics: clinical effectiveness

•Risk assessment: + predictive value

Skin assessment: + predictive value

•Skin massage

Repositioning

Re-distributing devices

•Re-distributing devices heels

Nutrition or hydration



### Methods

Clinical effectiveness: (Systematic review of) RCTs

Prognostic questions: (Systematic review of) Prospective cohort studies

GRADE: level of evidence and strength of recommendations

Best practices: high-quality guidelines + experts and stakeholders



# Results in general

#### Body of evidence

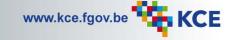
• Low to very low quality

Frequent problems

- Heterogeneity
- Under-powered studies
- Lack of blind or independently verified outcome assessment
- Patients free from pressure ulcers at baseline: not reported
- Poor description of standard care and co-interventions

# Topics: clinical effectiveness

•Risk assessment: + predictive value Skin assessment: + predictive value •Skin massage Repositioning Re-distributing devices Re-distributing devices heels Nutrition or hydration



### Results: risk & skin assessment

#### **RISK SCALE**

No tool outperforms the others in assessing the risk of pressure ulcer development

#### SKIN

Thermography and non-blanchable erythema have a better predictive value than blanchable erythema

#### Combined?

Start preventive measures based on a combined approach of risk and skin assessment





# Topics: clinical effectiveness

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•Skin massage: beneficial or harmful? no evidence

4.

• Repositioning: effective, no clear differences between schemes

5.

- •Re-distributing devices:
- •1. Constant low pressure and alternating devices
- •2. Operation overlay system

6.

• Re-distributing devices heels: Devices that ensures heels are free of the surface of the bed + redistributing mattress

**7**.

Nutrition or hydration: no clinically important effect of nutritional supplements



### Discussion

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

Absence of evidence is not the same as evidence of absence

Variability between organisations

Indications that comprehensive programs are successfull





## Clinical recommendations

Structured, combined approach for risk & skin assessment

Repositioning protocol

Pressure redistributing mattressess

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

Pressure redistributing overlays on the operating table

Tailored interventions: level of risk, skin status, general health status, comfort, overall plan of care



# Policy recommendations

# Health Research System

• Assessment for need of update

#### Federal Council on the quality of the Nursing activities

 Process and outcome indicators based on the content of this guideline and aligned with existing initiatives

#### FOD / SPF

• To transform and disseminate in a user-friendly format for daily use. This should be done in close collaboration with *professional organisations*.

### Providers & institutions

• To integrate comprehensive programs for preventing pressure ulcers (e.g. bundles of best-practices, staff education, awareness campaigns, skin care resource nurses, multidisciplinary pressure ulcer prevention committees) in the global quality improvement policy



### Colophon

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