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PRESSURE ULCERS

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RCSI DEVELOPING HEALTHCARE LEADERS WHO MAKE A DIFFERENCE WORLDWIDE

Outline

- Pressure ulcers – overview
- Staging
- Risk Assessment
- SSKIN bundle

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Definition

"A pressure ulcer is localized injury to the skin and/or underlying tissue usually over a bony prominence, as a result of pressure, or pressure in combination with shear. A number of contributing or confounding factors are also associated with pressure ulcers; the significance of these factors is yet to be elucidated"

National Pressure Ulcer Advisory Panel, European Pressure Ulcer Advisory Panel and Pan Pacific Pressure Injury Alliance. Prevention and Treatment of Pressure Ulcers: Quick Reference Guide. Emily Haesler (Ed.). Cambridge Media: Osborne Park, Western Australia; 2014.

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Pressure Ulcers in Ireland

- 9 published studies have explored pressure ulcer prevalence in Ireland (Moore & Pitman 2000, Sheerin et al. 2005, Gethin et al. 2005, Gallagher et al. 2008, McDermott-Scales et al. 2009, Moore & Cowman 2012, Moore et al. 2015, Skerritt & Moore 2014, Jordan O'Brien et al. 2016)

- Mean prevalence of pressure ulcers is 15%, varying from 4% (McDermott-Scales et al. 2009) to 37% (Sheerin et al. 2005)

- The lowest prevalence, 4%, is seen in the community setting (McDermott-Scales et al. 2009) with the highest, 37%, in spinal cord injury services (Sheerin et al. 2005).

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Pressure Ulcers in Ireland

- One study, from older person services, notes a pressure ulcer prevalence of 9% (Moore & Cowman 2012)
- From the acute care perspective, findings suggest that prevalence rates vary from 12%-18.8% (Moore & Pitman 2000, Gethin et al. 2005, Gallagher et al. 2008)
- No published prevalence figures from paediatrics, hospice or obstetric services are available for Ireland

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Pressure Ulcers in Ireland

- 5 published studies report pressure ulcer incidence figures from Ireland (Moore & Pitman 2000, Gallagher et al. 2008, Jordan O Brien & Cowman 2011, Moore et al. 2011, Corcoran et al. 2013)
- Mean incidence is 10%, varying from 0.71% (Corcoran et al. 2013) to 14.4% (Gallagher et al. 2008)
- One study explored incidence from older persons' services and an incidence of 11% is reported (Moore et al. 2011)
- The remaining incidence studies are from the obstetrics and the acute care setting and figures vary from 0.71% (Corcoran et al. 2013) to 14.4% (Gallagher et al. 2008)
- Once again, no published incidence figures from paediatrics or the hospice services are available for Ireland

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Human Costs

- **Essex et al 2009:** PU impacts negatively on HRQoL, even after adjusting for confoundings
- **Gorecki et al 2009:** physical, social, psychological, symptoms, financial, need for Rx vs. effects of Rx, impact on others……
- **Gorecki et al 2011:** HRQoL impacted, influenced by health behaviours, are impacted by experiences of care & individual factors, cognition, social support and comorbidity

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Human Costs

Global mortality rates across 187 countries, from 1990 to 2010, finds that there has been a 32·5% increase in deaths directly attributable to pressure ulcers

	All ages deaths (thousands)		
	1990	2010	%Δ
(Continued from previous page)			
Down's syndrome	22·0 (9·8–37·5)	17·4 (11·1–25·4)	-21·0%
Other chromosomal abnormalities	34·6 (11·9–80·3)	18·9 (9·7–33·8)	-45·4%
Other congenital anomalies	200·8 (115·8–298·9)	176·0 (118·9–218·7)	-12·3%
Skin and subcutaneous diseases	100·6 (77·5–118·3)	109·2 (84·9–124·0)	8·5%
Cellulitis	26·1 (19·9–30·8)	26·6 (20·4–30·2)	2·0%
Abscess, impetigo, and other bacterial skin diseases	42·1 (31·2–51·0)	39·7 (31·1–45·1)	-5·7%
Decubitus ulcer	32·1 (26·0–38·5)	42·6 (32·9–48·7)	32·5%
Other skin and subcutaneous diseases	0·3 (0·1–0·1)	0·4 (0·1–0·1)	4·4%
Sudden infant death syndrome	30·0 (15·4–56·7)	22·0 (13·1–36·5)	-26·7%

Lozano, R., Naghavi, M. & et al (2010) Global and regional mortality from 235 causes of death for 20 age groups in 1990 and 2010: a systematic analysis for the Global Burden of Disease Study 2010. *The Lancet,* 380(9859), 2095-128.

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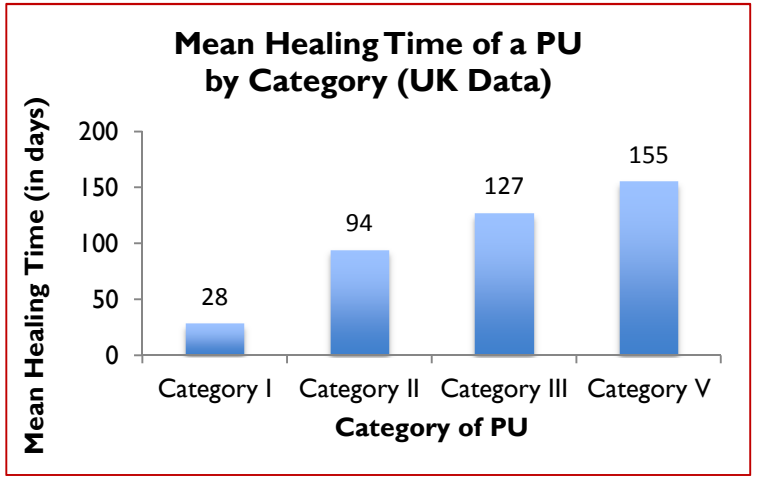
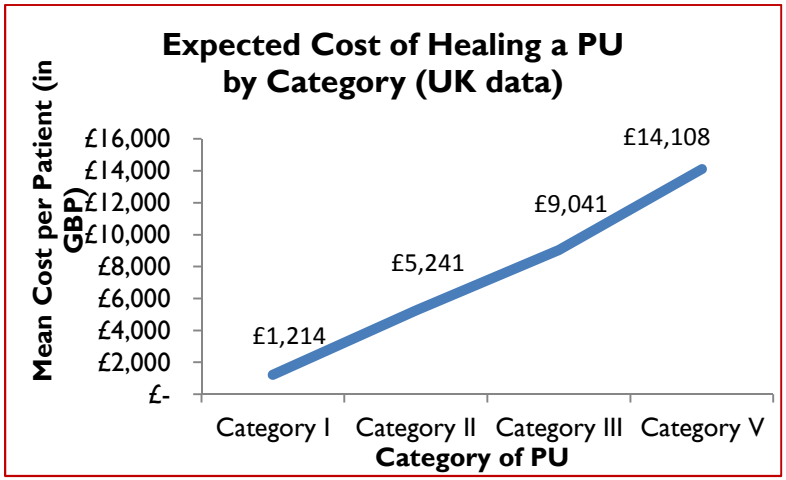
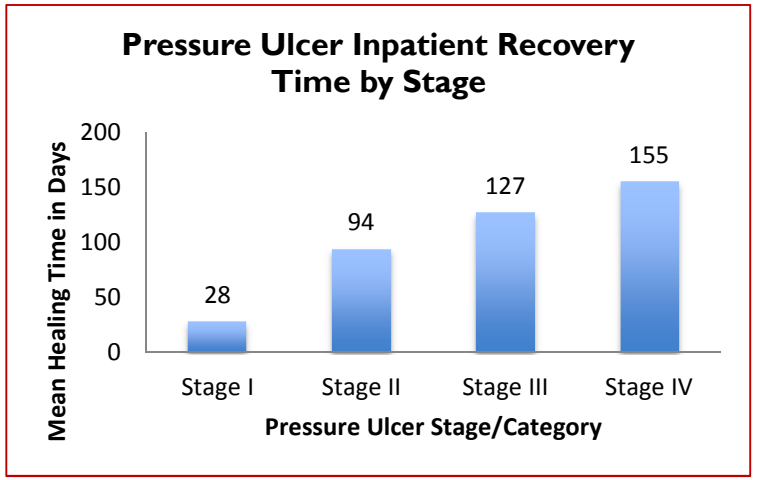
Pressure Ulcer - Cost

Cost

- £2B in cost to UK healthcare system, in aggregate
- Average cost to treat: £10K vs average cost to prevent: £7K







Bennett, G., Dealey, C. and Posnett, J. (2004). The cost of pressure ulcers in the UK. Age and ageing, 33(3), pp.230--235.
Brem, H., Maggi, J., Nierman, D., Rolnitzky, L., Bell, D., Rennert, R., Golinko, M., Yan, A., Lyder, C. and Vladeck, B. (2010). High cost of stage IV pressure ulcers. The American Journal of Surgery, 200(4), pp.473--477.
Dealey, C., Posnett, J. and Walker, A. (2012). The cost of pressure ulcers in the United Kingdom. Journal of wound care, 21(6), pp.261—266.

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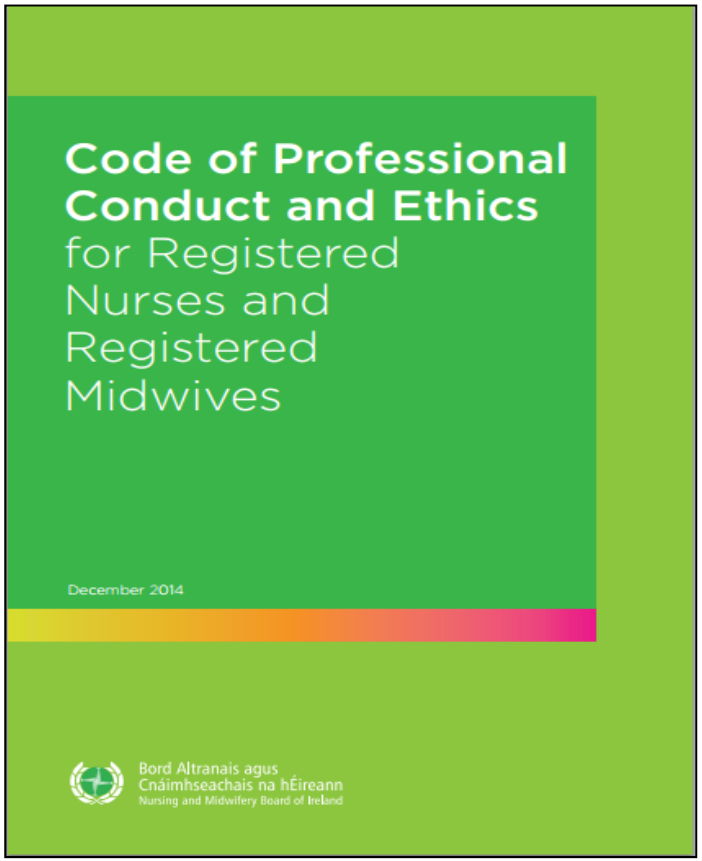
Regulation Requirements



NURSING AND MIDWIFERY BOARD OF IRELAND 2015. Scope of Nursing and Midwifery Practice Framework. *In:* NURSING AND MIDWIFERY BOARD OF IRELAND (ed.). Dublin: Nursing and Midwifery Board of Ireland.

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Values for Nursing & Midwifery

DoH; NMBI; HSE (2016) Position Paper - Re-affirming Nursing and Midwifery Values available from https://www.nmbi.ie/NMBI/media/NMBI/Position-Paper-Values-for-Nurses-and-Midwives-June-2016.pdf accessed 13th October 2016

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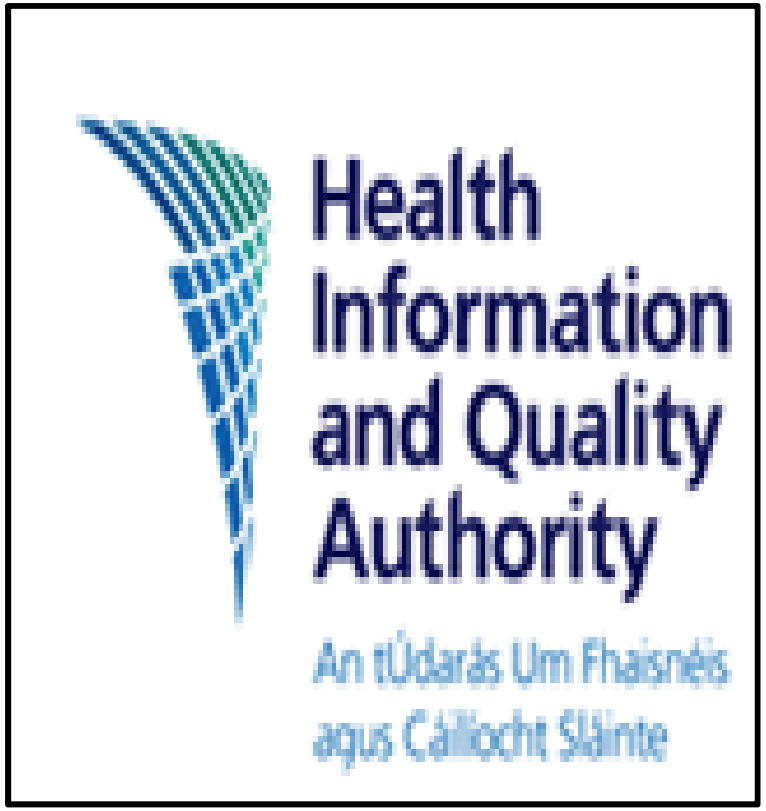
Regulation Requirements

Feidhmeannacht na Seirbhíse Sláinte
Health Service Executive

Safety Incident Management Policy

Document Reference Number	QPSD-D-060-1.1	**Document Drafted By**	*The HSE National Incident Management Team*
Revision Number	*1*	**Document Approved By**	*Dr. Philip Crowley, National Director, Quality and Patient Safety*
Approval Date	*23.05.2014*	**Responsibility for implementation**	*HSE Leadership Team*
Review Date	*23.05.2015*	**Responsibility for review and audit**	*Quality and Patient Safety Division*



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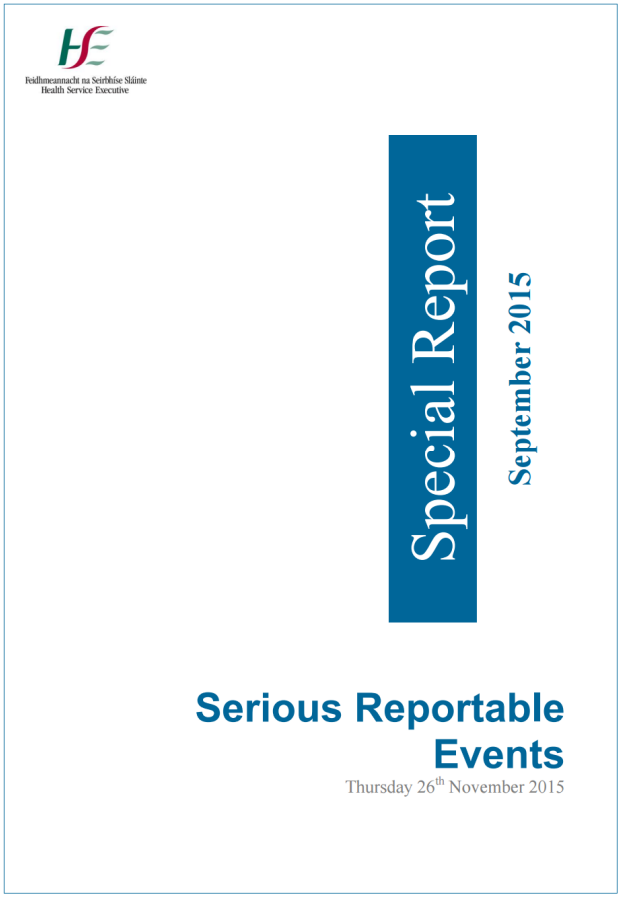
HSE Serious Reportable Events



- **20 (19%) of the 103 care management events reported relate to category 4i a Stage 3 or Stage 4 pressure ulcer acquired after admission to a healthcare and social care residential facility.**
- **In 3 cases it was confirmed that a person had died.**

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Outline

- Pressure ulcers – overview
- **Staging**
- Risk Assessment
- SSKIN bundle

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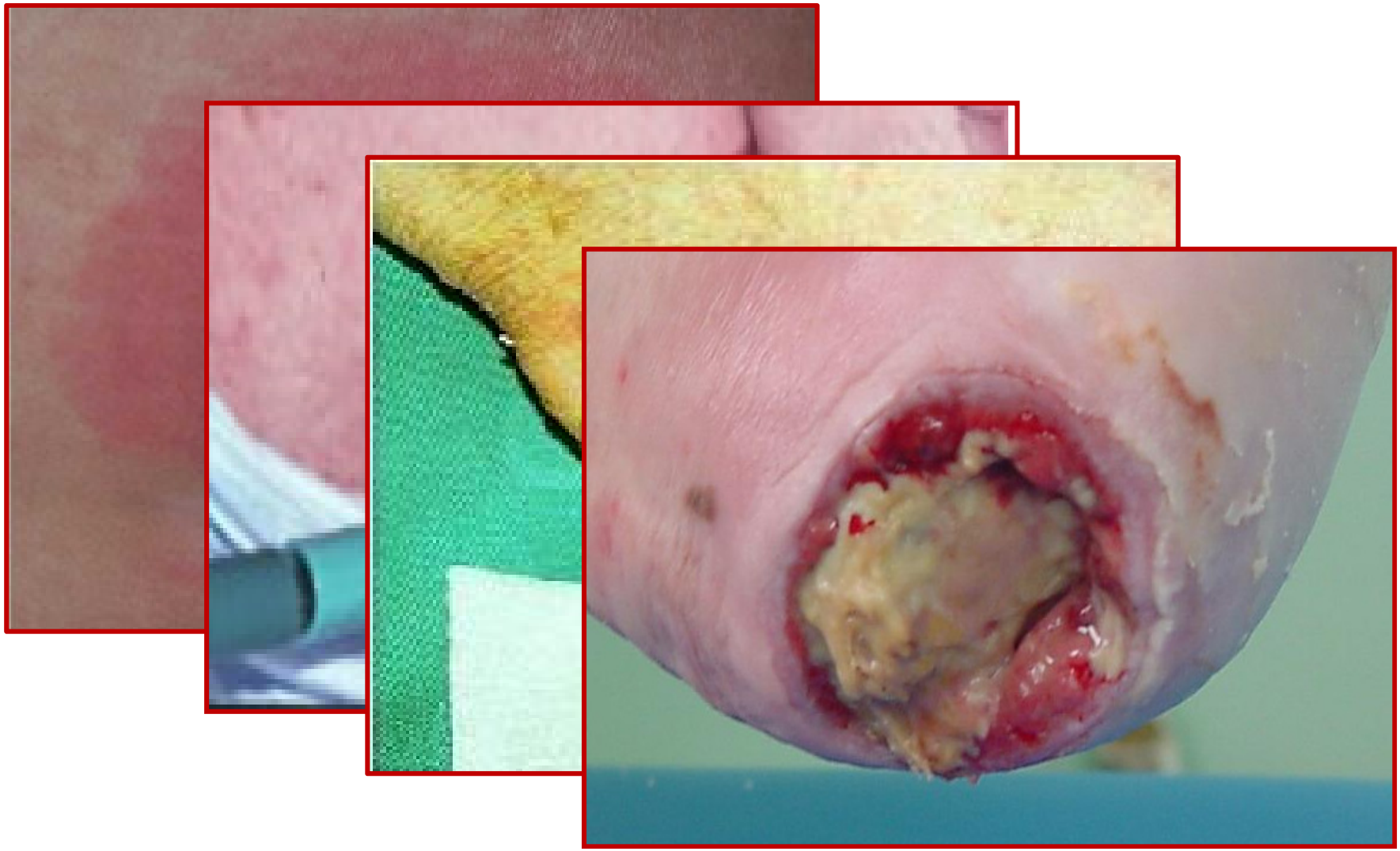

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Pressure Ulcer Staging

Category/Stage I: Non-blanchable redness of intact skin

Intact skin with non-blanchable erythema of a localized area usually over a bony prominence. Discoloration of the skin, warmth, oedema, hardness or pain may also be present. Darkly pigmented skin may not have visible blanching

(EPUAP/NPUAP 2009)

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Pressure Ulcer Staging

Category/Stage II: Partial thickness skin loss or blister

Partial thickness loss of dermis presenting as a shallow open ulcer with a red pink wound bed, without slough. May also present as an intact or open/ruptured serum-filled or sero-sanginous filled blister.

(EPUAP/NPUAP 2009)

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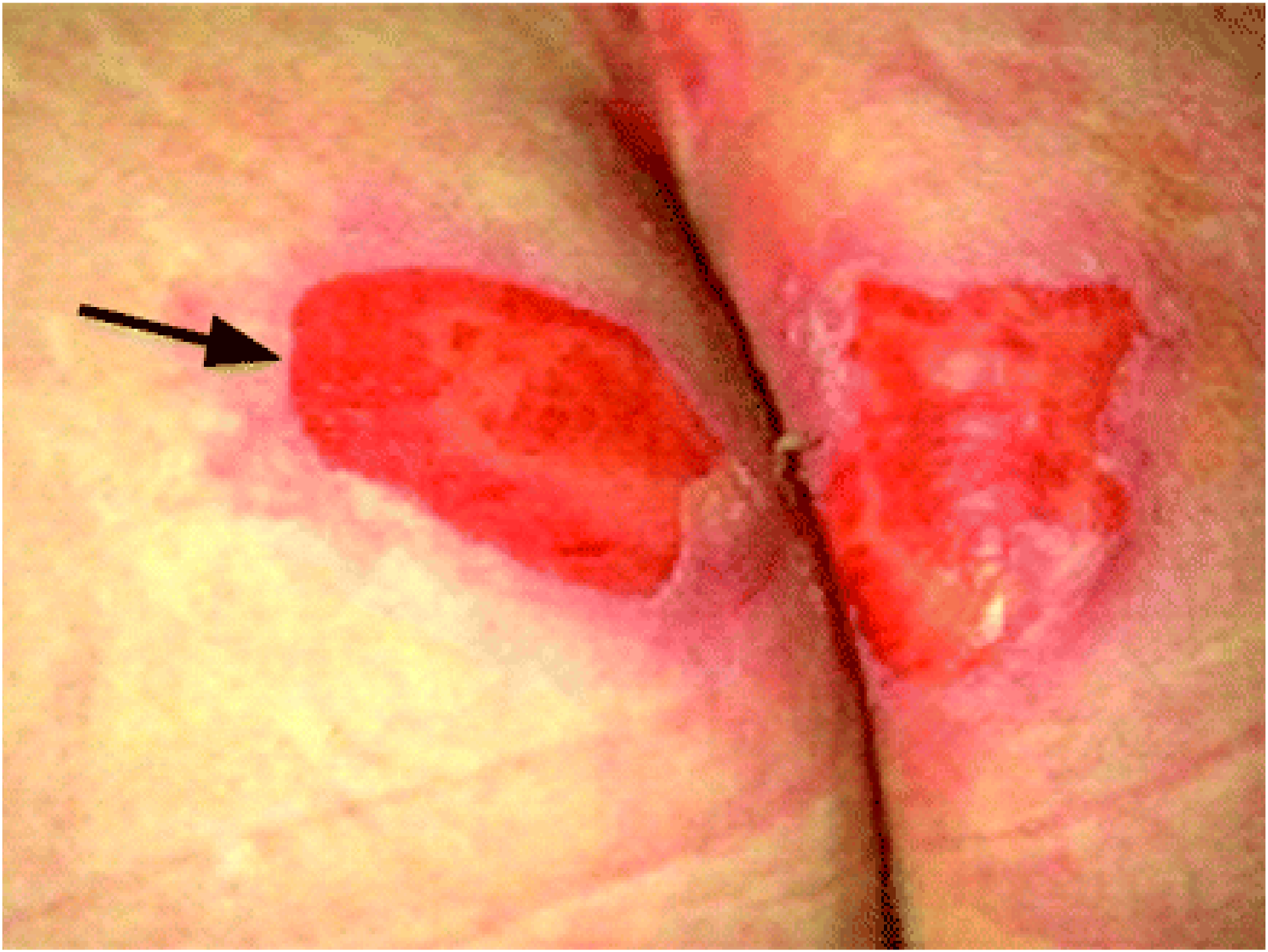

Pressure Ulcer Staging

Category/Stage III: Full thickness skin loss (fat visible)

Full thickness tissue loss. Subcutaneous fat may be visible but bone, tendon or muscle are not exposed. Some slough may be present. May include undermining and tunnelling

(EPUAP/NPUAP 2009)

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1
2
3
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11
12
Wound Measuring Guide
Discard after single use
See other side for inch scale
4/25
Use with Restore™ Wound Care
Hollister® Wound Drainage Coll
Patient Name

Pressure Ulcer Staging

Category/Stage IV: Full thickness tissue loss (muscle/bone visible)

Full thickness tissue loss with exposed bone, tendon or muscle. Slough or eschar may be present. Often include undermining and tunnelling

(EPUAP/NPUAP 2009)

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Pressure Ulcer Grading

Unstageable

Full thickness tissue loss in which the base of the ulcer is covered by slough (yellow, tan, gray, green or brown) and/or eschar (tan, brown or black) in the wound bed. Until enough slough and/or eschar is removed to expose the base of the wound, the true depth, and therefore Category/Stage, cannot be determined

National Pressure Ulcer Advisory Panel, European Pressure Ulcer Advisory Panel and Pan Pacific Pressure Injury Alliance. Prevention and Treatment of Pressure Ulcers: Quick Reference Guide. Emily Haesler (Ed.). Cambridge Media: Osborne Park, Western Australia; 2014.

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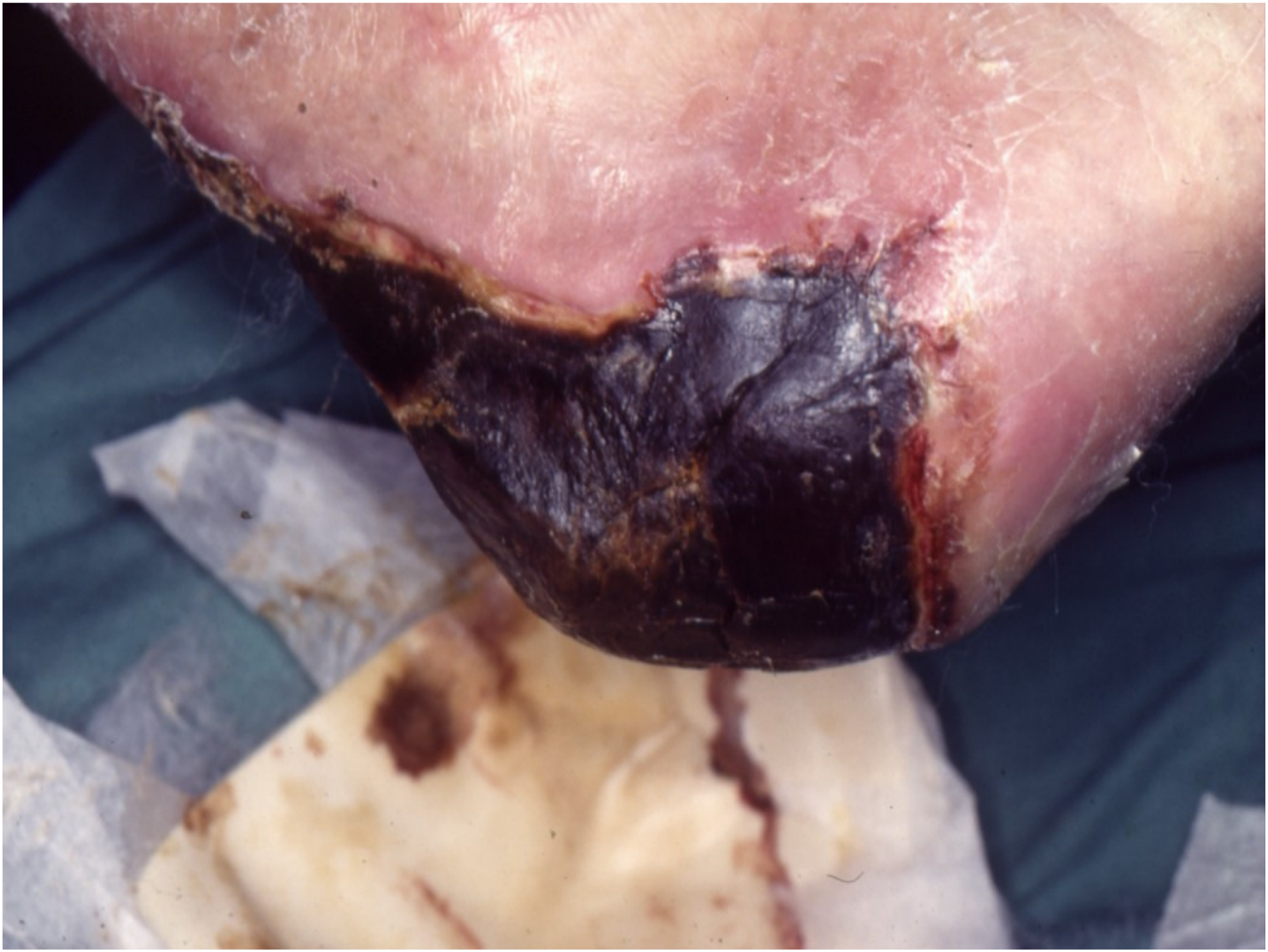

Pressure Ulcer Grading

Suspected Deep Tissue Injury

Purple or maroon localized area of discoloured intact skin or blood-filled blister due to damage of underlying soft tissue from pressure and/or shear. The area may be preceded by tissue that is painful, firm, mushy, boggy, warmer or cooler as compared to adjacent tissue.

National Pressure Ulcer Advisory Panel, European Pressure Ulcer Advisory Panel and Pan Pacific Pressure Injury Alliance. Prevention and Treatment of Pressure Ulcers: Quick Reference Guide. Emily Haesler (Ed.). Cambridge Media: Osborne Park, Western Australia; 2014.

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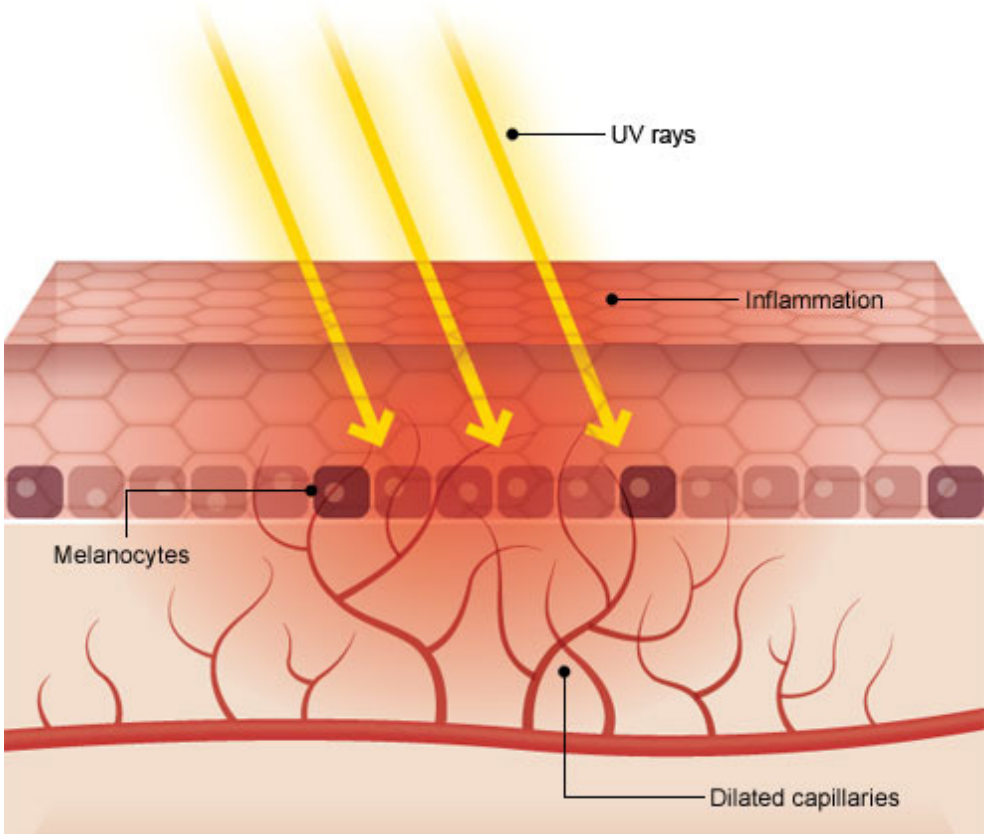
03/24/2006

Pressure Ulcer Development



Classification has its origins in the classification of burn injuries

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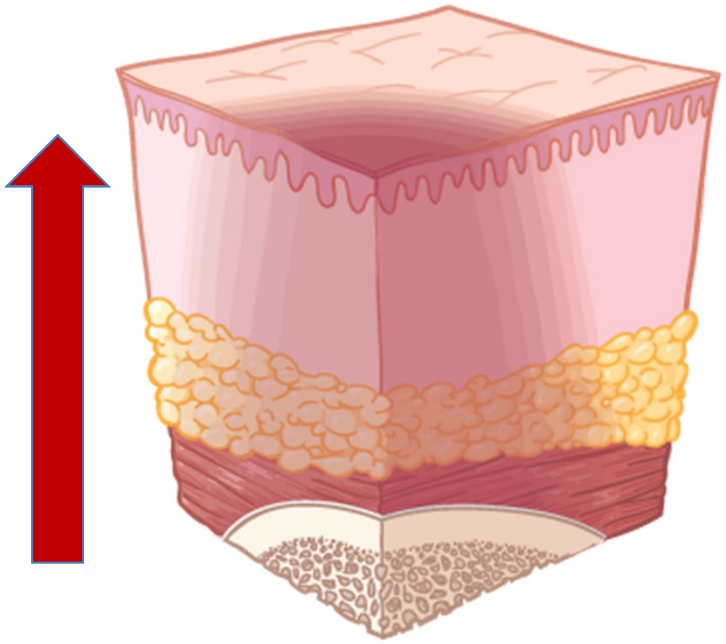
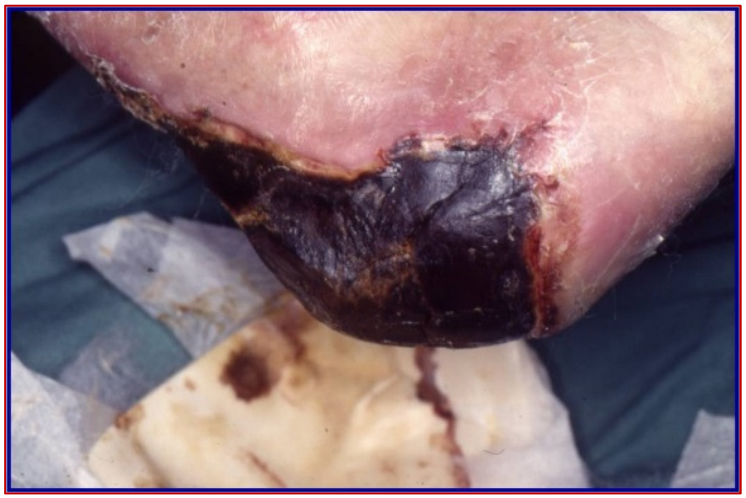
Pressure Ulcer Development





But pressure ulcers develop from the inside out

Oomens C.W.J., Sandra Loerakkera, S. Bader D (2010) The importance of internal strain as opposed to interface pressure in the prevention of pressure related deep tissue injury *Journal of Tissue Viability* 19(2):35–42

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Outline

- Pressure ulcers – overview
- Staging
- **Risk Assessment**
- SSKIN bundle

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Definition of Risk Assessment

"A process that involves *measurement* of *risk* to *determine priorities* and to enable *identification* of appropriate level of *risk treatment*"

www.minesafe.org/trainingeducation/terms.html

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What is a risk factor?

“A risk factor is any attribute, characteristic or exposure of an individual that increases the likelihood of developing a disease or injury”

www.minesafe.org/trainingeducation/terms.html

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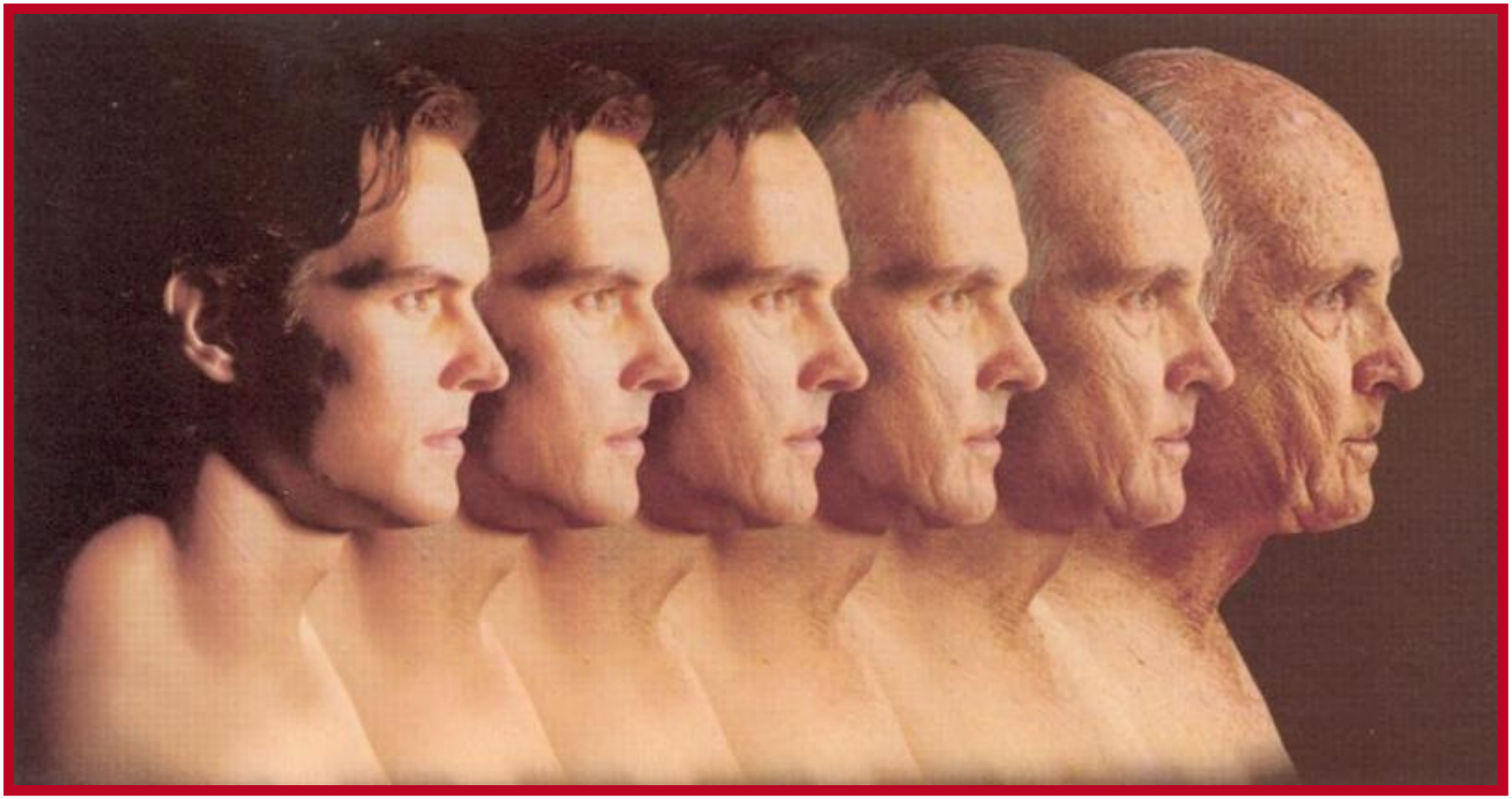
Which risk factors?



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Which Risk Factors?

Table 3 Old population and total deaths, 1991, 2011 and 2031 (M2F2 Traditional)

Regional Authority area	Persons aged 65+			Deaths		
	1991	2011	2031	1991	2011	2031
	Thousands					
Border	54	65	115	4	4	4
GDA	127	187	362	10	10	13
Dublin	99	139	249	8	7	9
Mid-East	29	48	114	2	2	4
Midland	24	32	62	2	2	2
Mid-West	37	47	85	3	3	3
South-East	45	62	116	4	3	4
South-West	65	82	150	5	4	6
West	50	57	100	4	3	4
State	403	532	991	31	28	36

http://www.cso.ie/en/releasesandpublications/er/rpp/regionalpopulationprojections2016-2031/

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Which Risk Factors?

- **Inequalities in healthy life years in the 25 countries of the European Union in 2005: a cross-national meta-regression analysis**

- **In all 25 EU countries, men aged 50 years could expect to live a further 17·3 years (SE 0·17)—i.e., 60% of their remaining life free of activity limitation—whereas the number of HLYs at 50 years for women was 18·1 years (SE 0·18), i.e., 54% of their remaining life free of activity limitation**

Jagger C et al. (2008) Inequalities in healthy life years in the 25 countries of the European Union in 2005: a cross-national meta-regression analysis The Lancet , Volume 372 , Issue 9656 , 2124 - 2131

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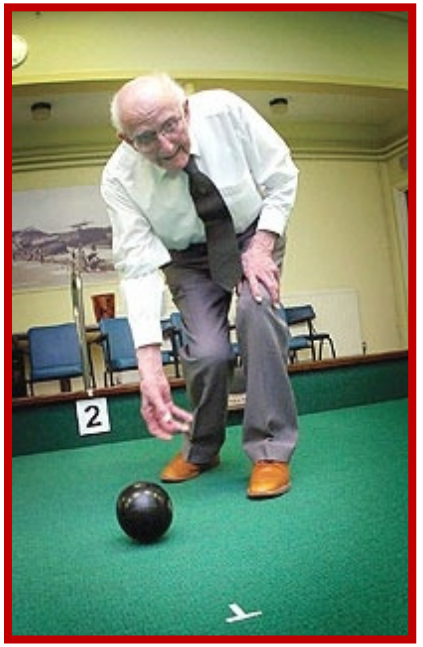
BUT.....



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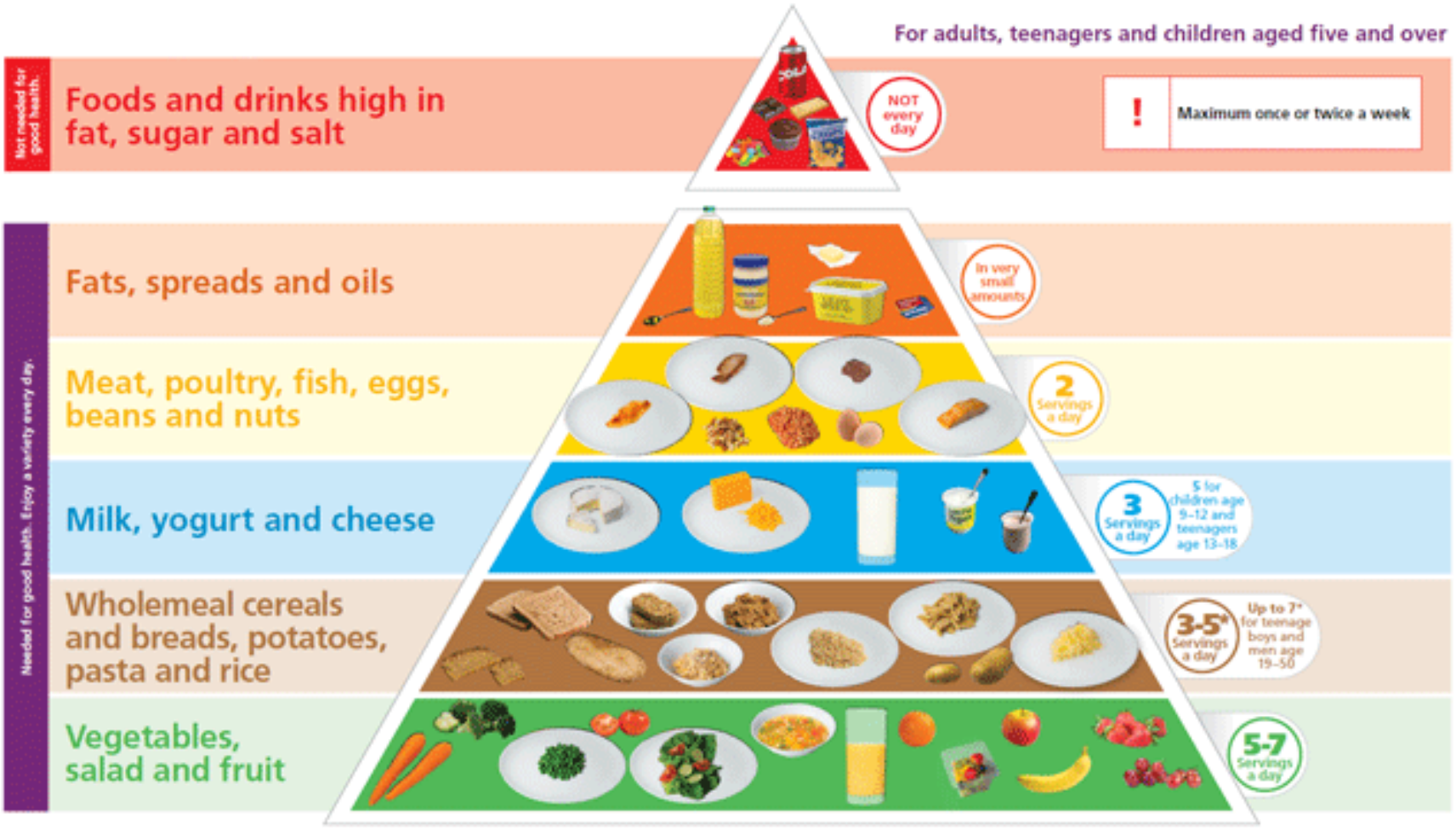
MalNutrition



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BUT.....

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Incontinence

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BUT.....

37% of general female population suffer with some form of urinary incontinence

AVELLANET, M., FITER, M., CIRERA, E. & COLL, M. 2003. Prevalence of urinary incontinence in Andorra: impact on women's health. BMC Womens Health, 3, 5.

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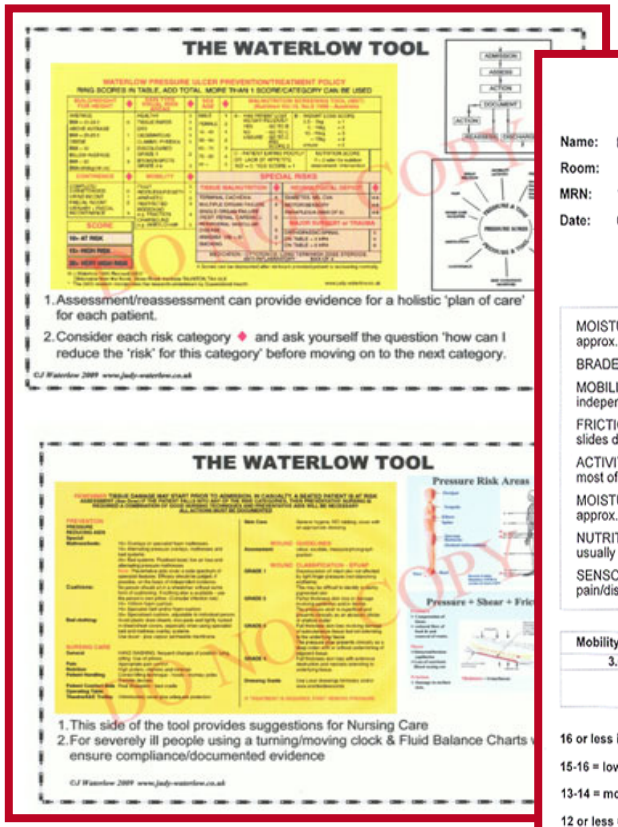
Risk Assessment Tools



BRADEN SCALE FOR PREDICTING PRESSURE SORE RISK

Name: Edwards, Jack C
Room: 108-2
MRN: 1265
Date: 09/05/2001

MOISTURE: Occasionally moist - Skin is occasionally moist, requiring an extra linen change approx. once a day.

BRADEN SCALE:

MOBILITY: Slightly limited - Makes frequent though slight changes in body/extremity position independently.

FRICTION/SHEAR: Potential problem - Moves w/min assist. Some sliding w/repositioning. Occ. slides down in bed/chair.

ACTIVITY: Walks occasionally - Walks occ. during day, very short dist. w/wo assist. In bed/chair most of time.

MOISTURE: Occasionally moist - Skin is occasionally moist, requiring an extra linen change approx. once a day.

NUTRITION: Adequate - Eats > 1/2 most meals. Eats 4 protein/day. Occ. refuses a meal, usually takes supplement.

SENSORY PERCEPTION: Slightly limited - some sensory impairment limits ability to feel pain/discomfort in 1 or 2 extremities.

Mobility	Friction	Activity	Nutrition	Sensory	Moisture	Total
3.00	2.00	3.00	1	1	3.00	13.00

16 or less indicates risk of pressure sore development

15-16 = low risk

13-14 = moderate risk

12 or less = high risk

TABLE 4
AGREEMENT OF EXPERT NURSES ON RELEVANCE AND CLARITY OF QUESTIONS REGARDING DEVICES AND METHODS TO PREVENT PRESSURE ULCERS (PHASE TWO)

	Relevance (total n/%)	Clarity (total n/%)
Technical devices		
Synthetic sheepskin or sheep skin slippers	42/79%	35/80%
Genuine sheepskin or sheepskin slippers	38/74%	32/78%
Skin foams (eg, DuoDERM* Extra thin)	43/98%	40/87%
Positioner pillow (eg, under the calf)	41/98%	39/79%
Hydraulic hoisting	38/95%	35/97%
Transfer sheet	43/98%	39/90%
Silk sheet	41/88%	40/85%
Draw sheet as a lifting sheet	40/90%	37/89%
Transfer board	40/92%	36/86%
Beds		
Special bed for pressure ulcers	39/90%	37/81%
Mattress		
Air-filled	40/100%	38/87%
Granule-filled	35/91%	34/73%
Down-filled	36/89%	34/82%
Foam gel-filled	37/97%	35/80%
Water filled	36/78%	35/77%
Gel-filled	37/95%	35/80%
Regular hospital mattress	39/67%	38/89%
Mattress pad		
Air-filled	33/88%	31/87%
Granule-filled	32/91%	30/87%
Down-filled	31/84%	28/86%
Foam gel-filled	31/84%	30/87%
Water filled	31/74%	30/73%
Gel-filled	31/84%	31/77%
Cushions		
Air-filled	35/94%	36/86%
Granule-filled	32/81%	31/87%
Down-filled	32/75%	31/87%
Foam gel-filled	32/87%	30/80%
Water-filled	33/76%	29/79%
Gel-filled	33/85%	29/79%
Methods		
Basic cream applied to skin in areas susceptible to pressure	42/98%	39/90%
Antithrombotic cream applied to skin in areas susceptible to pressure	38/68%	35/71%
Continuous monitoring of the skin at least once a day	42/98%	39/90%
Diet	39/95%	36/78%
Dietary supplements	40/97%	39/87%
Massage	38/63%	36/61%
Patient counseling	42/98%	39/77%
Counseling of significant others	42/98%	41/76%

*DuoDERM, ConvaTec, a Bristol-Myers Squibb Company, Princeton, NJ

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Which Risk Factors?

Norton	Braden	Waterlow	Maelor
Risk Factor	Risk Factor	Risk Factor	Risk Factor
Physical Condition	Sensory perception	Build/weight for height	Predisposing disease
Mental Condition	X	X	Level of consciousness
X	Nutrition	Malnutrition	Nutritional Status
Activity	Activity	X	Ambulation
Mobility	Mobility	Mobility	Mobility
Incontinence	Moisture	Continence	Incontinence
X	X	Skin type/visual risk areas	Skin Condition
X	Friction and Shear	Sex and age	Pain

AND.....

Assessment tool	Sensitivity (True +)	Specificity (True -)	Odds Ratio (risk prediction)	95% Confidence Intervals
Braden Scale	57.1%	67.5%	4.08	2.56-6.48
Norton Scale	46.8%	61.8%	2.16	1.03-4.54
Waterlow Scale	82.0%	27.4%	2.05	1.11-3.76
Clinical Judgement	50.6%	60.1%	1.69	0.76-3.75

Bethell et al 1992; Thomas et al 2001; Gould et al 2004; Pancorbo-Hidalgo et al 2006; Kottner et al 2010; Walsh et al 2011

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Example - Braden

13

Braden	
Risk Factor	**Score**
Sensory perception	3
Nutrition	1
Activity	3
Mobility	3
Moisture	1
Friction and Shear	2

Moderate Risk

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Example - Braden

Braden	
Risk Factor	**Score**
Sensory perception	2
Nutrition	4
Activity	2
Mobility	2
Moisture	4
Friction and Shear	2

Low Risk

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Who is actually at risk?

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What does it all mean for you?

Definition of a Pressure Ulcer

"A pressure ulcer is localized injury to the skin and/or underlying tissue usually over a bony prominence, as a result of *pressure*, or *pressure in combination with shear*. A number of contributing or confounding factors are also associated with pressure ulcers; the primary of which is impaired mobility."

NATIONAL PRESSURE ULCER ADVISORY PANEL, EUROPEAN PRESSURE ULCER ADVISORY PANEL & PAN PACIFIC PRESSURE INJURY ALLIANCE 2014. Prevention and Treatment of Pressure Ulcers: Clinical Practice Guideline, Emily Hesler (ED.) Cambridge Media: Osborne Park, Western Australia.

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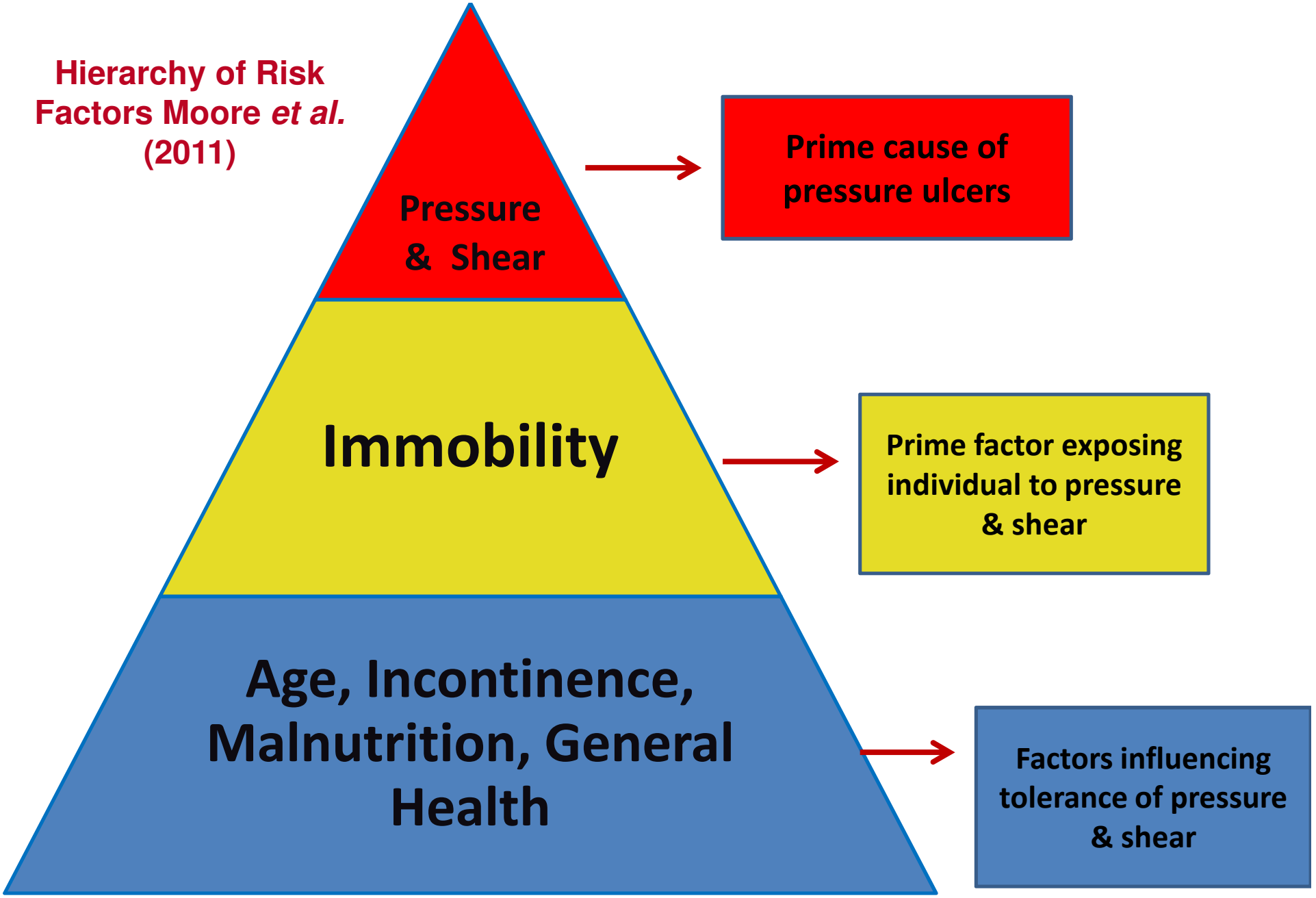
Hierarchy of Risk Factors Moore *et al.* (2011)



Guidelines

- **Use a structured approach to risk assessment that is refined through the use of clinical judgment and informed by knowledge of relevant risk factors.**
- **Use a structured approach to risk assessment that includes assessment of activity/mobility and skin status.**
- **Do not rely on the results of a risk assessment tool alone when assessing an individual's pressure ulcer risk.**

National Pressure Ulcer Advisory Panel, European Pressure Ulcer Advisory Panel and Pan Pacific Pressure Injury Alliance. Prevention and Treatment of Pressure Ulcers: Quick Reference Guide. Emily Haesler (Ed.). Cambridge Media: Osborne Park, Western Australia; 2014.

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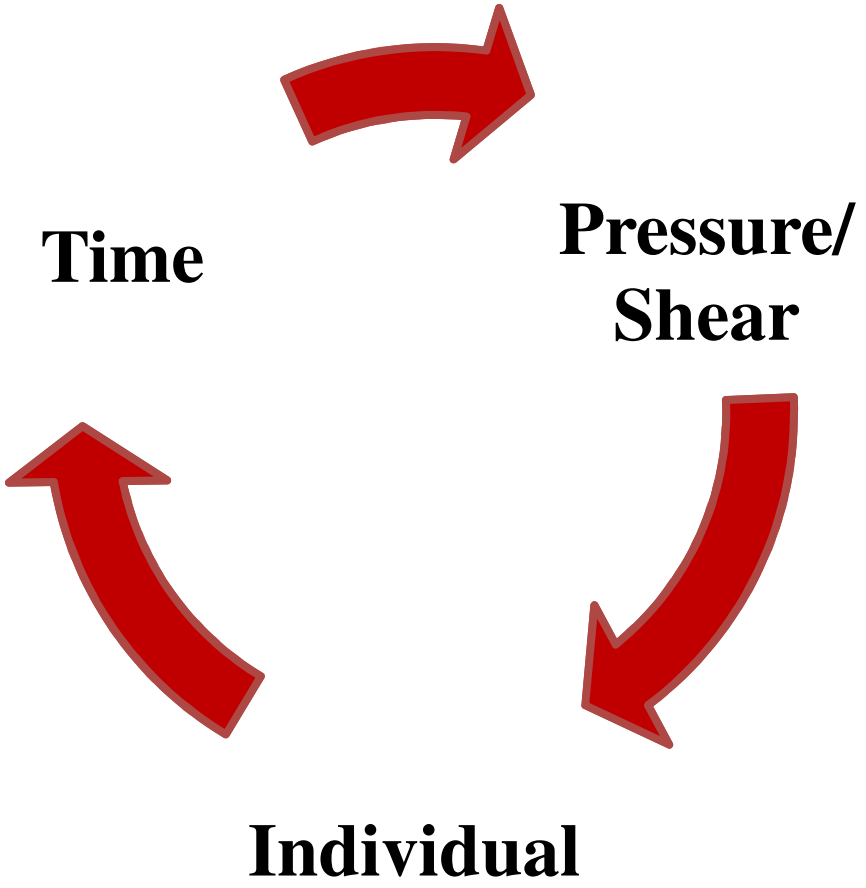
Bringing it all together



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Outline

- Pressure ulcers – overview
- Staging
- Risk Assessment
- **SSKIN bundle**

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SSKIN

- Skin assessment
- Surface
- Keep moving
- Incontinence
- Nutrition

Gibbons W, Shanks HT, Kleinhelter P, Jones P Eliminating facility-acquired pressure ulcers at Ascension Health Jt Comm J Qual Patient Saf. 2006 Sep;32(9):488-96.

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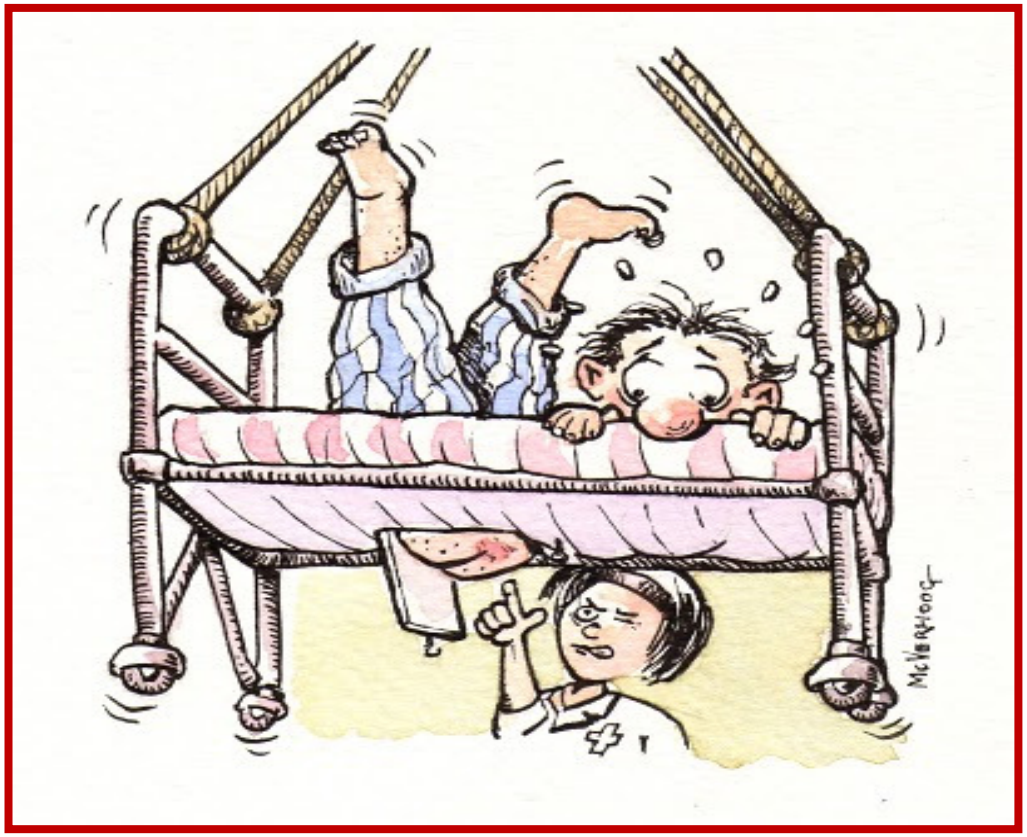
Skin Assessment



Skin Assessment

- There is strong association between Stage/Grade 1 pressure ulcers (Allman et al., 1995; Reed et al., 2003; Nixon et al., 2006, 2007) and subsequent Stage/Grade 2 pressure ulcers

- 2 large high quality studies (Reed et al., 2003; Nixon et al., 2006) suggest that the presence of a Stage/Grade 1 pressure ulcer increases the odds of subsequent Stage/Grade 2 by 2–3 fold

Coleman S, Gorecki G, Nelson EA, Closs SJ, Defloor T, Halfens R, Farrin A, Brown J, Schoonhoven L, Nixon J Patient risk factors for pressure ulcer development: Systematic review International Journal of Nursing Studies (2013) 50(7): 974-1003

RCSI

The Role of Dressing & Topical Agents for Prevention of Pressure Ulcers

- **Four trials (561 participants), all of which were of high or unclear risk of bias, showed that dressings applied over bony prominences reduced pressure ulcer incidence; RR 0.21 (95% CI 0.09 to 0.51; P value 0.0006)**

Moore ZEH, Webster J. Dressings and topical agents for preventing pressure ulcers. Cochrane Database of Systematic Reviews 2013, Issue 8. Art. No.: CD009362. DOI: 10.1002/14651858.CD009362.pub2.

RCSI

The Role of Dressing & Topical Agents for Prevention of Pressure Ulcers

- Five trials (940 participants) of unclear or high risk of bias compared a topical agent with a placebo

- When results from the five trials were combined, the risk ratio (RR) was 0.78 (95% CI 0.47 to 1.31; P value 0.35) indicating no overall beneficial effect of the topical agents

Moore ZEH, Webster J. Dressings and topical agents for preventing pressure ulcers. Cochrane Database of Systematic Reviews 2013, Issue 8. Art. No.: CD009362. DOI: 10.1002/14651858.CD009362.pub2.

RCSI

The Role of Dressing & Topical Agents for Prevention of Pressure Ulcers

There is insufficient evidence from RCTs to support or refute the use of topical agents applied over bony prominences to prevent pressure ulcers. Although the incidence of pressure ulcers was reduced when dressings were used to protect the skin, results were compromised by the low quality of the included trials.

These trials contained substantial risk of bias and clinical heterogeneity (variations in populations and interventions); consequently, results should be interpreted as inconclusive.

Moore ZEH, Webster J. Dressings and topical agents for preventing pressure ulcers. Cochrane Database of Systematic Reviews 2013, Issue 8. Art. No.: CD009362. DOI: 10.1002/14651858.CD009362.pub2.

RCSI

Surface

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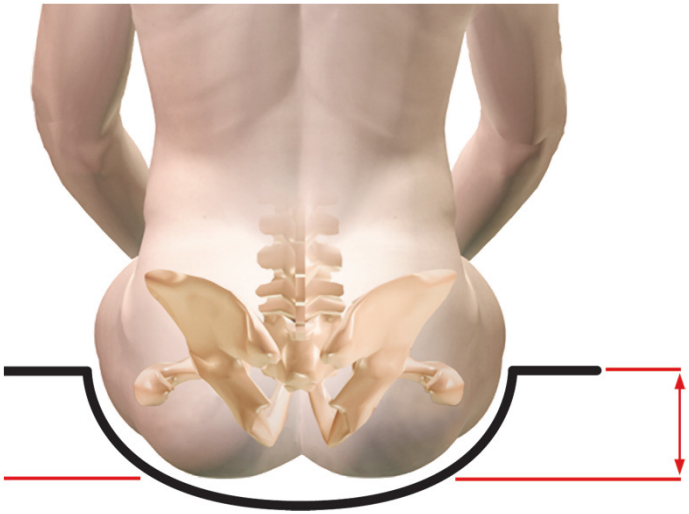
Surface

- **Pressure re-distribution:**
  - **Distribute as much as possible of the pressure (body weight) over as large as possible a surface**
  - **Reduce tissue deformation**
- **Pressure re-distribution with:**
  - **Immersion**
  - **Envelopment**

RCSI

Surface

- How deep do you sink into the material
  - Too soft = bottoming out
  - Too hard = sitting on top (increased deformation)
  - Too thin = ?
- Higher cushion… more immersion



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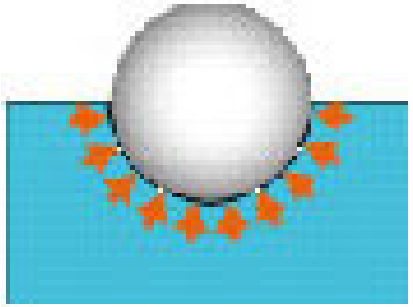
Surface

- **Envelopment:** **Capability of a support surface in deforming around and encompassing the contour of the human body.**
  - **“the ability to encompass and equalize pressure”**



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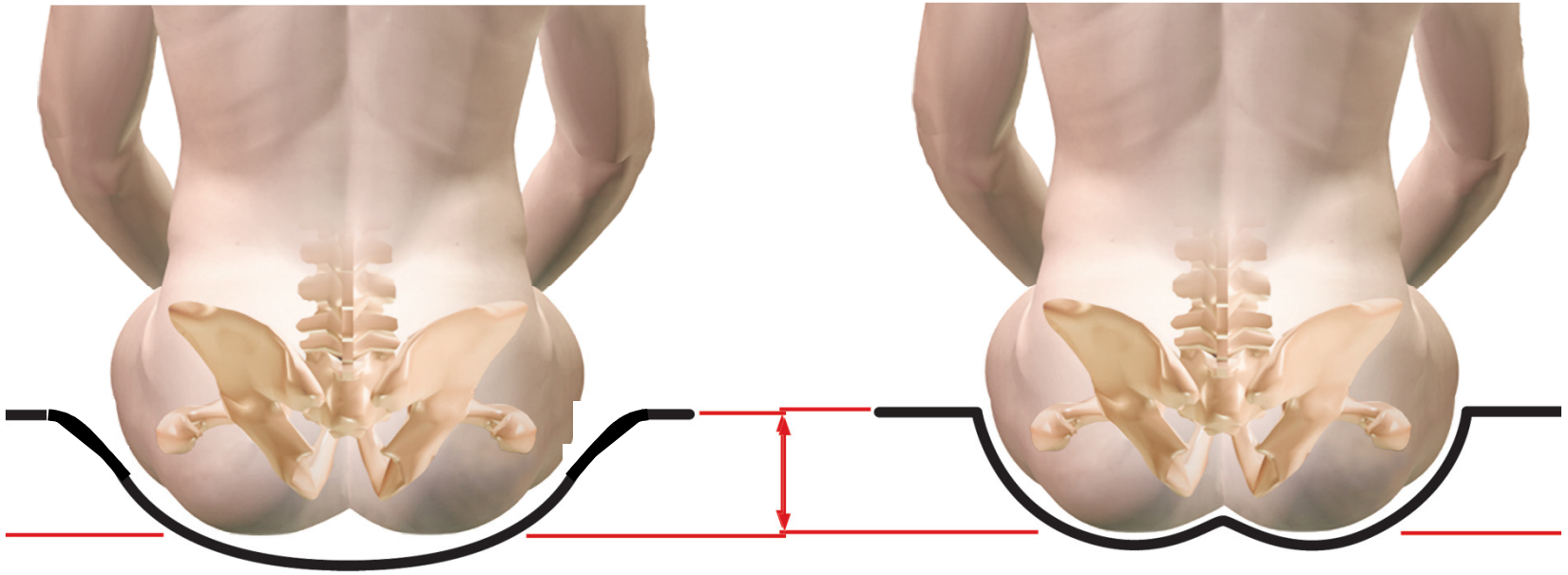
Surface

"The ability to encompass and equalize pressure"

Immersion **Envelopment**



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Keep Moving

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Keep Moving

Moore Z et al (2011) A randomised controlled clinical trial of repositioning, using the 30˚ tilt, for the prevention of pressure ulcers. Journal of Clinical Nursing; 20: 2633-2644.

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Keep Moving

In the experimental group 96.6% of participants remained free of pressure ulcers, compared with 88.1% in the control group (*p*=0.030)

The cost per patient free of ulcer was €213.9 (experimental) compared with €287.3 (control), the experimental intervention was a dominant option

Moore Z et al (2011) A randomised controlled clinical trial of repositioning, using the 30° tilt, for the prevention of pressure ulcers. Journal of Clinical Nursing; 20: 2633-2644.

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Positioning

- **Stability**
- **Comfort**
- **Security**

Van Etten M (2013) Re-positioning to prevent pressure ulcers; considerations on stability and shear forces; EPUAP Conference

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Incontinence

Overall, there is some evidence that moisture is a factor in pressure ulcer development with the measures relating to dual incontinence and skin moisture emerging more consistently compared to moisture risk assessment sub-scales, urinary and faecal incontinence

Coleman S, Gorecki G, Nelson EA, Closs SJ, Defloor T, Halfens R, Farrin A, Brown J, Schoonhoven L, Nixon J Patient risk factors for pressure ulcer development: Systematic review International Journal of Nursing Studies (2013) 50(7): 974-1003

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Incontinence

- A structured skin care regimen consists of two key interventions:
  - Cleansing the skin (CLEANSE)
    - To remove urine and/or faeces, i.e. the source of irritants that cause IAD. This should be done prior to the application of a skin protectant as part of a routine process to remove urine and faeces;
  - Protecting the skin (PROTECT)
    - To avoid or minimise exposure to urine and/or faeces and friction.

Beeckman D et al, Incontinence Associated Dermatitis: Moving Prevention Forward. Proceedings from the Global IAD Expert Panel. 2015 Wounds International. www.woundsinternational.com

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Nutrition

- Screen nutritional status for each individual at risk of or with a pressure ulcer
- Use a valid and reliable nutrition screening tool to determine nutritional risk
- Refer individuals screened to be at risk of malnutrition and individuals with an existing pressure ulcer to a registered dietitian or an interprofessional nutrition team for a comprehensive nutrition assessment

National Pressure Ulcer Advisory Panel, European Pressure Ulcer Advisory Panel and Pan Pacific Pressure Injury Alliance. Prevention and Treatment of Pressure Ulcers: Quick Reference Guide. Emily Haesler (Ed.). Cambridge Media: Osborne Park, Western Australia; 2014.

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Nutrition

- The focus of nutrition assessment should be on evaluating energy intake, unintended weight change and the effect of psychological stress or neuropsychological problems.
- Additionally, assessment should include a determination of the individual's caloric, protein and fluid requirements.
- Develop an individualised nutrition care plan for individuals with or at risk of a pressure ulcer
- Follow relevant and evidence-based guidelines on nutrition and hydration for individuals who exhibit nutritional risk and who are at risk of pressure ulcers or have an existing pressure ulcer.

National Pressure Ulcer Advisory Panel, European Pressure Ulcer Advisory Panel and Pan Pacific Pressure Injury Alliance. Prevention and Treatment of Pressure Ulcers: Quick Reference Guide. Emily Haesler (Ed.). Cambridge Media: Osborne Park, Western Australia; 2014.

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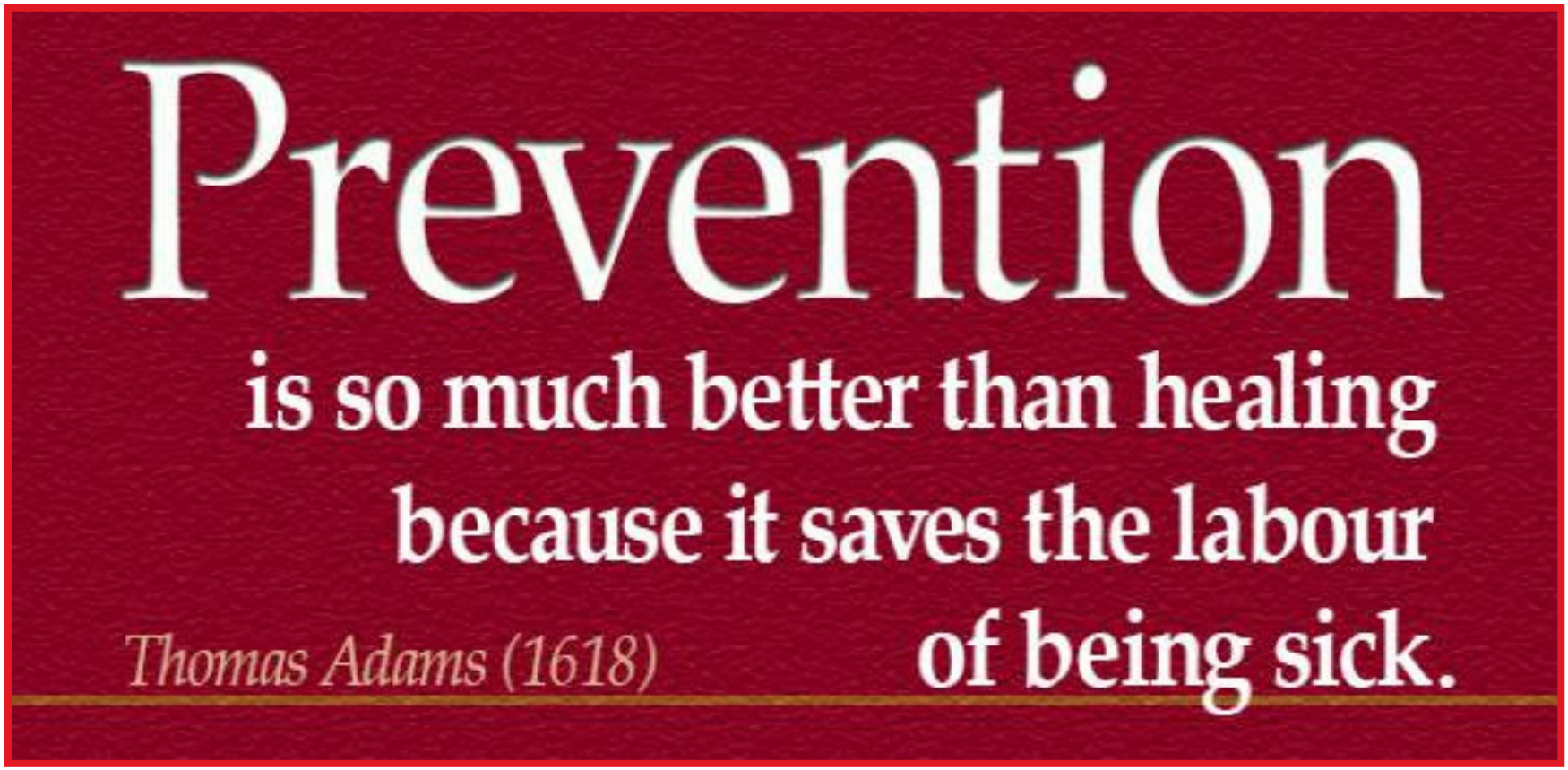
In the End……..



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PRESSURE ULCERS

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RCSI DEVELOPING HEALTHCARE LEADERS WHO MAKE A DIFFERENCE WORLDWIDE