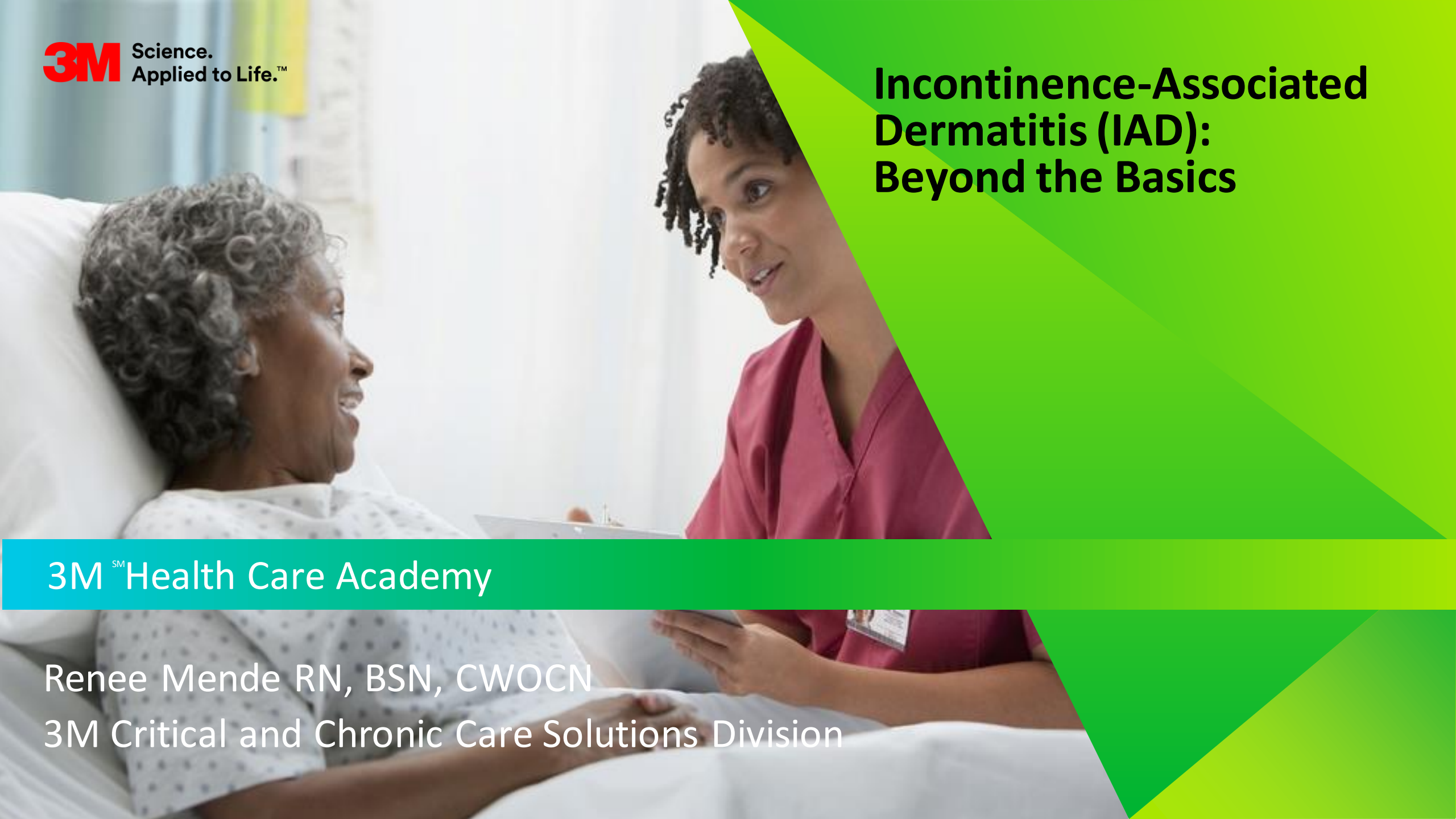


3M Science. Applied to Life.™

Incontinence-Associated Dermatitis (IAD): Beyond the Basics

3M SM Health Care Academy

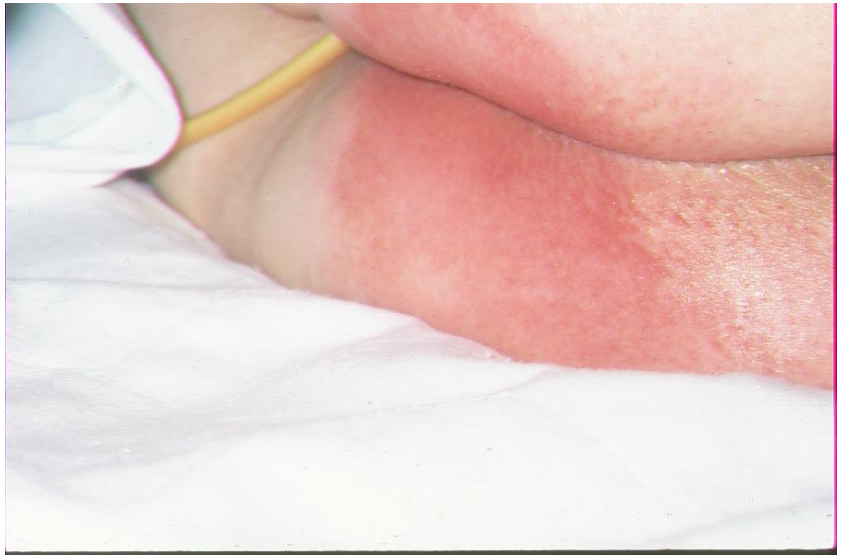
Renee Mende RN, BSN, CWOCN
3M Critical and Chronic Care Solutions Division

Renee Mende RN, BSN, CWOCN

Is an Employee of 3M.

What is IAD?

- Results from exposure to urine/feces
  - **overhydrates skin** → swelling and disruption of stratum corneum
  - increases **skin pH**
  - creates **inflammation**
- Net effect: d*isruption of normal epidermal barrier structure and function*



Thayer, Rozenboom, Baranoski. "Top-down" Injuries. Wound Management. Core Curriculum. WOCN Society. 2016

Not really talked about until the 90s

1992:
Lyder C

1993, 95, 96-
Storer-Brown

1996:Fi
ers

2000: Fiers &
Thayer

2007:
Gray
“IAD” appears

Older terminology

- Perineal dermatitis
- Perineal skin injury
- “Excoriation”-still used by a lot of clinicians
- Moisture lesion
- IAD is now preferred term

Why focus on IAD?

- It's a common and significant problem!
  - Incidence 3.4%[1] to 93%[2]!
    - 42%[3] (acute care); 36%[4] -93%[2] (ICU)
    - 30% (LTC)[4]
- Associated with negative outcomes:
  - Pain *and suffering*
  - Secondary infection
  - Pressure ulcer development
  - Patient and family dissatisfaction

1 Bliss D JWOCN 2007. 2 Peterson KJ Amer J of Crit Care. (Abstract.) 2006; 15(3): 325;
3 Campbell J et al. Intl Wound J. 2014; 1-19; 4 Bliss DZ et al. J WOCN. 2011; 38(4): 433–45; 4 Van Damme N et al Intl Wound J. 2016; 801-809; 4

Why focus on IAD? The IAD-PI (PU) relationship

Patients with IAD are at a significantly higher risk of superficial sacral pressure ulcers[1]

44%

Superficial sacral pressure ulcers developed in 44.4% of patients who had IAD versus 12.2% of patients who did not have IAD (n=610)[1]

2.99

odds ratio

Patients with IAD are at an increased risk of superficial sacral pressure ulcers with an odds ratio of 2.99 (CI: 1.20-7.52, p=0.19)[1]

The risk of developing pressure ulcers has been found to increase as the severity score for IAD increases[2]

1.9

odds ratio

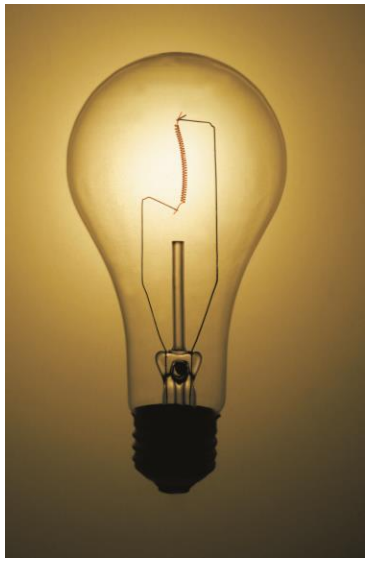
The likelihood of developing a pressure ulcer increases by a ratio of **1.9 for every 1-point increase in IAD severity score** (odds ratio = 1.9, 95% CI = 1.237-2.917)[2]

[1]Demarre, J Adv Nurs 2014;Aug 19; [2]Park KH, J WOCN 2014;41(5):424-29; [3]Beeckman, Wounds International 2015

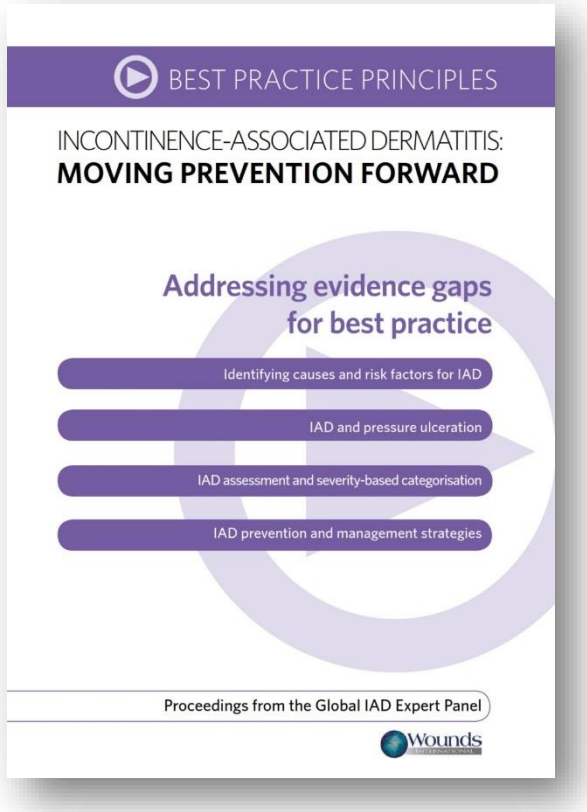
SM

Why do we need to think differently about IAD?

Current incidence data suggests what we are doing now is not working for many patients!

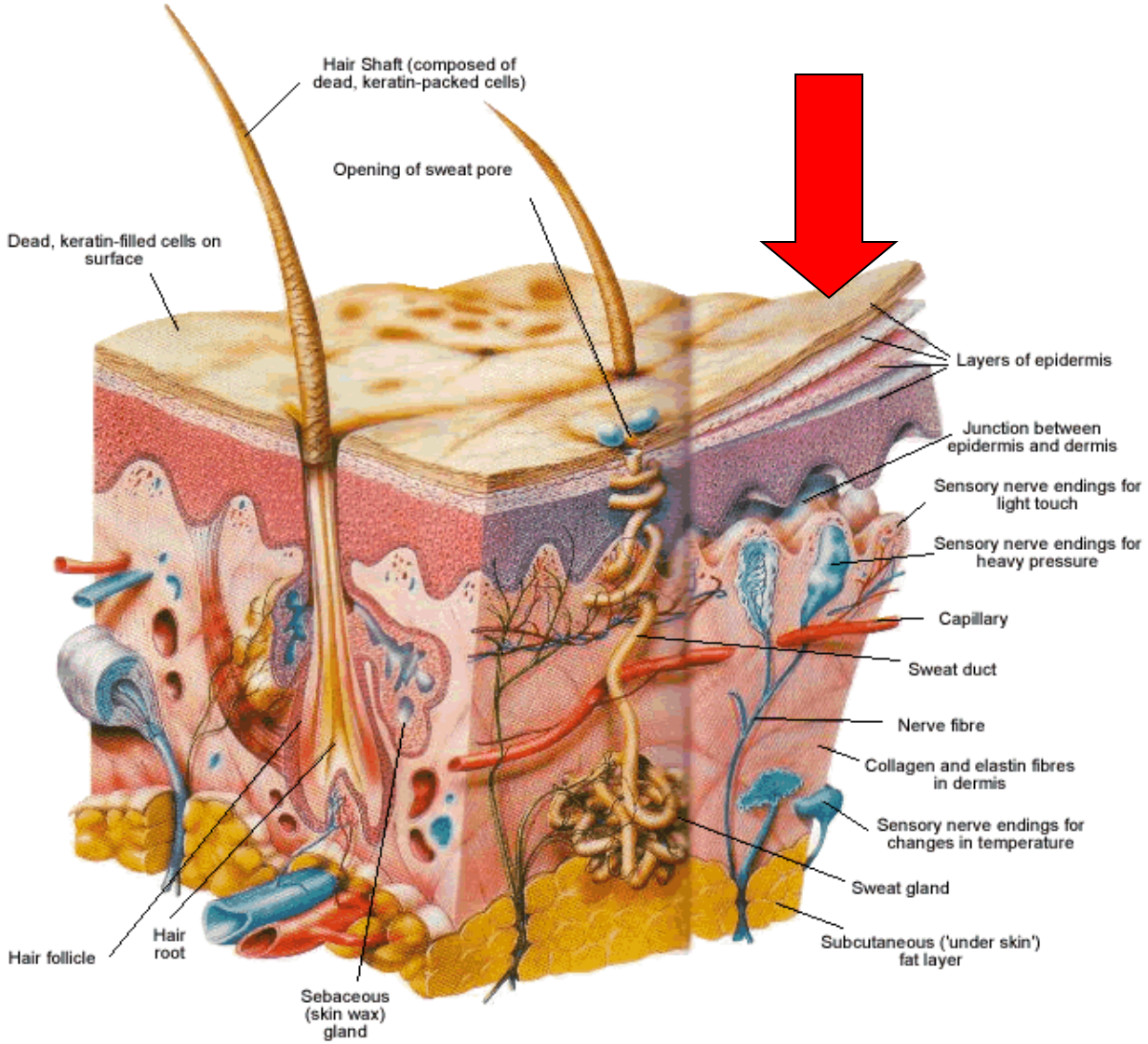


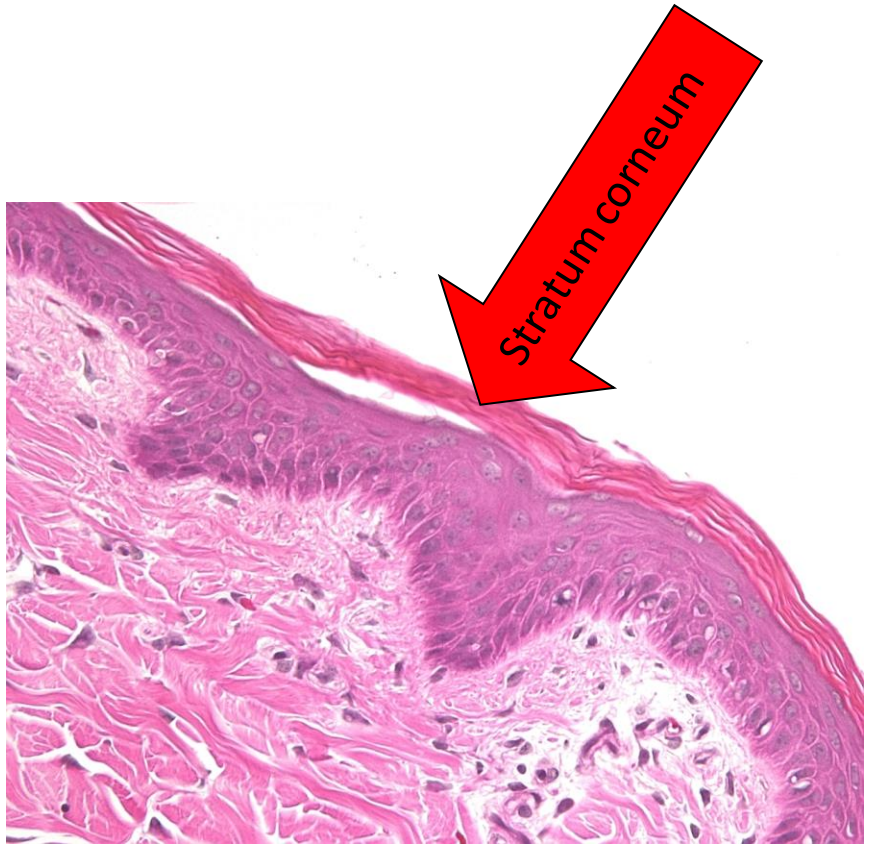
2015-first truly global panel on IAD: addressing gaps in evidence



How does IAD develop?

What structures are affected?

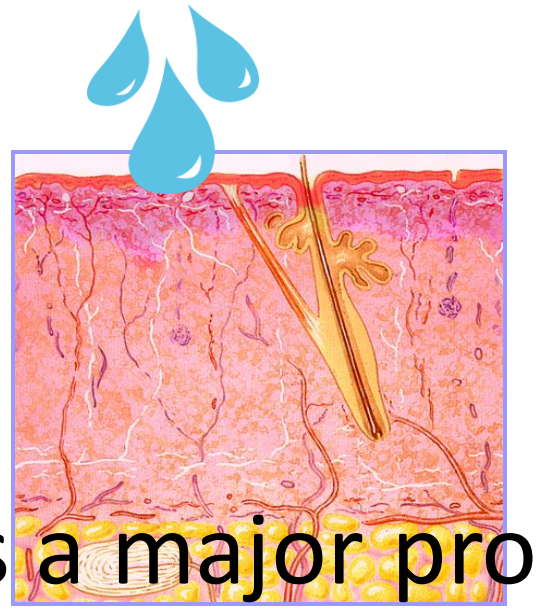




Cross-section of epidermis

Learnings from Diaper Dermatitis:

- **Berg (1988):** "Etiology and Pathophysiology of Diaper Dermatitis"[1]
- **Zimmerer (1986):** "The effects of wearing diapers on skin"[2]
- **Leyden (1977):** "Urinary ammonia and ammonia producing organisms in infants with and without diaper dermatitis"[3]



Moisture is a major problem!

1 Berg RW. Adv Dermatol 1988; 3:75-98; 2 Leyden JJ, Katz S, Stewart R, Kligman AM. Arch Dermatol 1977; 113(12):1678-80; 3 Zimmerer RE et al: Pediatr Dermatol 1986; 3: 95-101.

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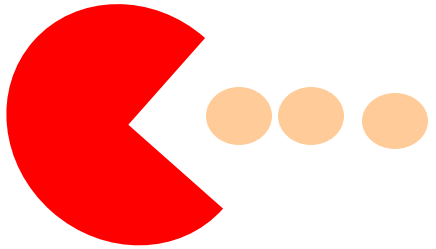
IAD-key mechanisms of skin damage

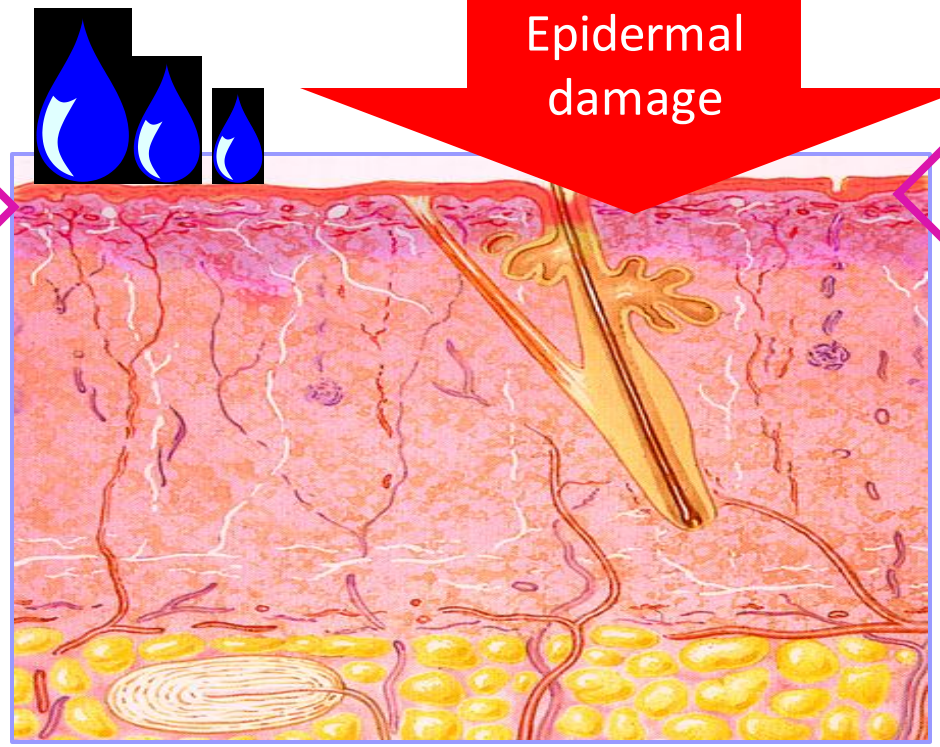
Fecal enzymes



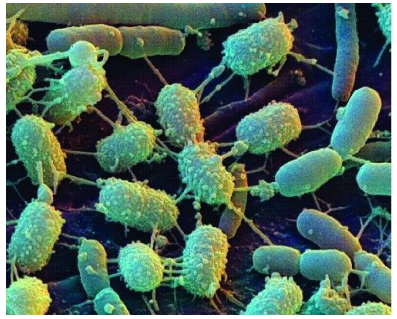
Skin cells

Epidermal damage

Moisture →
↑ permeability
↑ skin pH
inflammation

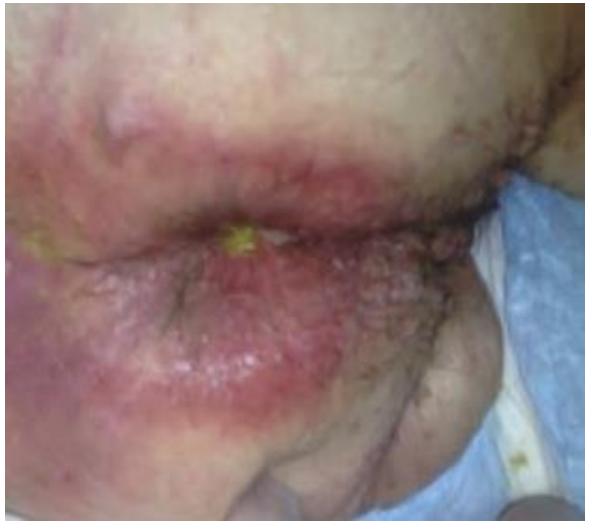


Friction
↑ when skin is wet

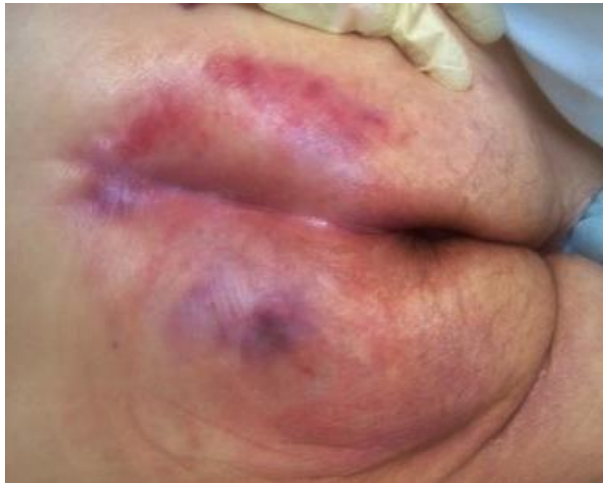


Assessment of IAD

Differential assessment is important but challenging!



IAD



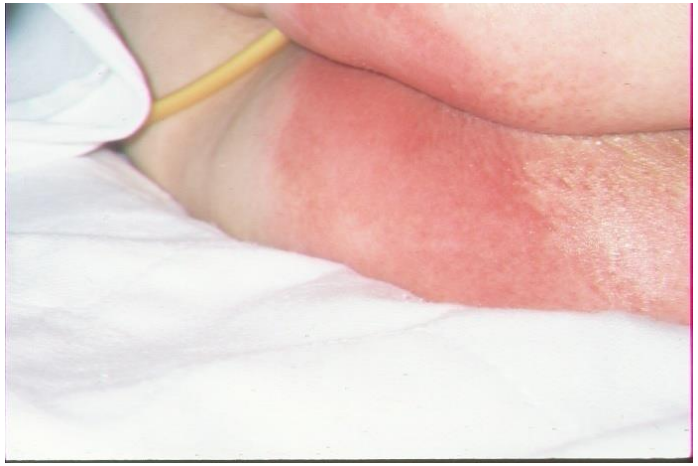
Pressure Injury (Ulcer)

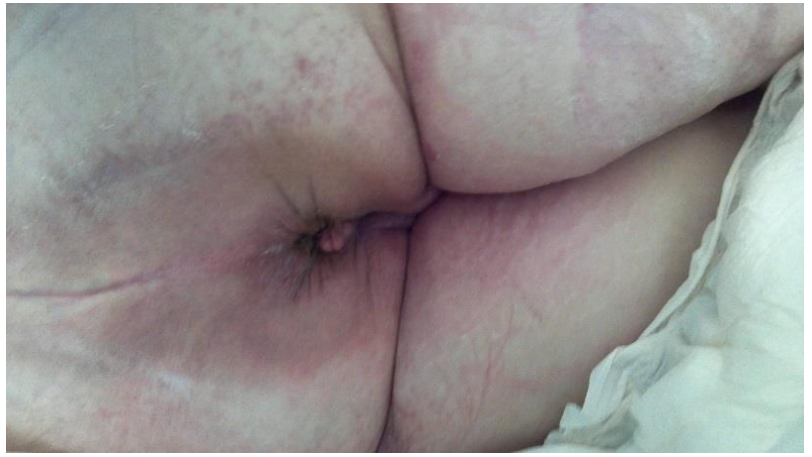
TABLE 2 | Distinguishing IAD from pressure ulcers (adapted from[3,16])

Parameter	IAD	Pressure ulcer
History	Urinary and/or faecal incontinence	Exposure to pressure/shear
Symptoms	Pain, burning, itching, tingling	Pain
Location	Affects perineum, perigenital area; buttocks; gluteal fold; medial and posterior aspects of upper thighs; lower back; may extend over bony prominence	Usually over a bony prominence or associated with location of a medical device
Shape/edges	Affected area is diffuse with poorly-defined edges/may be blotchy	Distinct edges or margins
Presentation/depth	Intact skin with erythema (blanchable or non-blanchable), with/without superficial, partial-thickness skin loss	Presentation varies from intact skin with non-blanchable erythema to full-thickness skin loss Base of wound may contain non-viable tissue
Other	Secondary superficial skin infection (e.g. candidiasis) may be present	Secondary soft tissue infection may be present

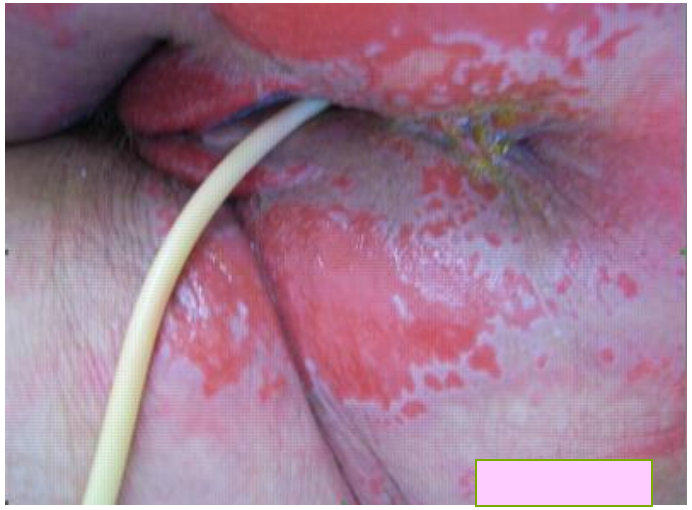
What are you looking *for?*

Erythema?

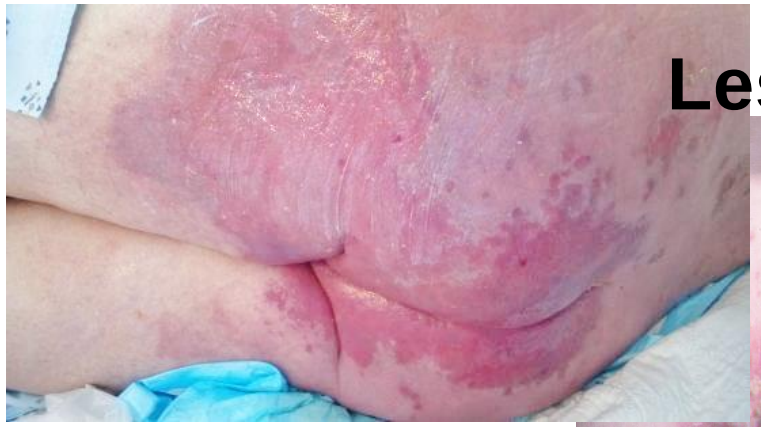


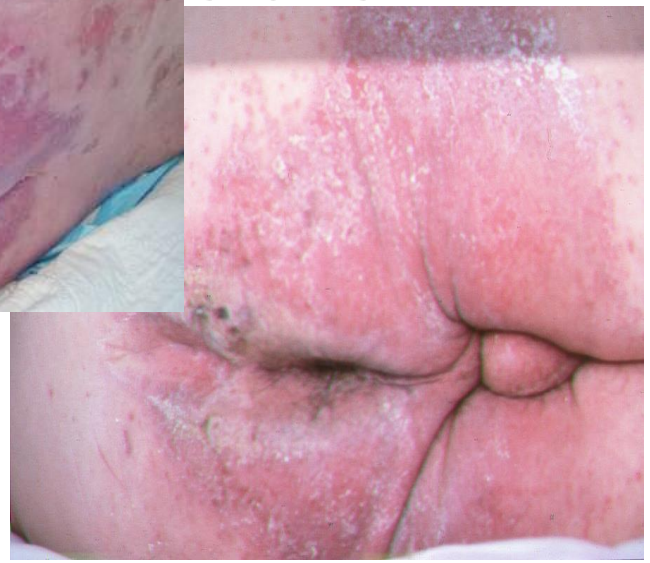


Erosion/Denudation?

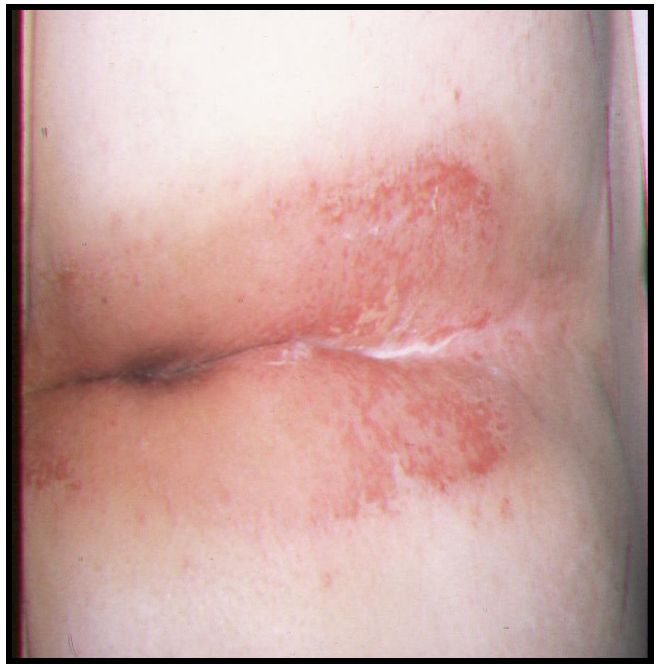


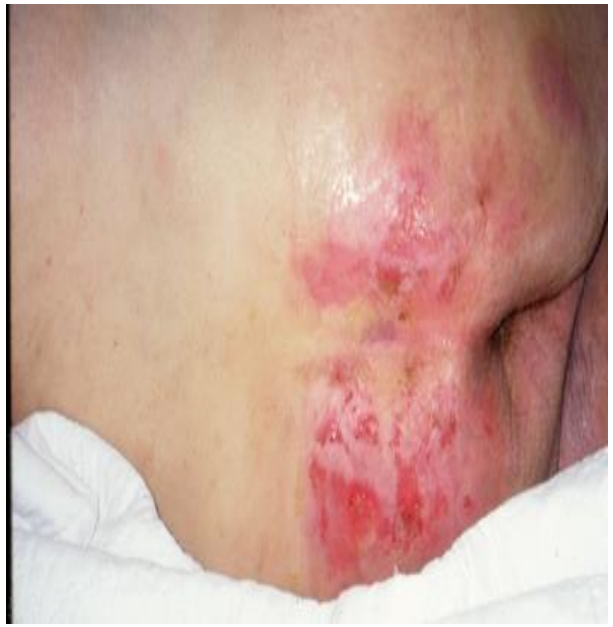
Lesions?





Even experts do not agree!



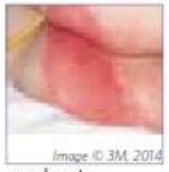


- 100 wound care nurses asked to classify etiology of 9 wounds within gluteal cleft or on buttocks
- Results-significant lack of consensus on etiology of lesions (Fleiss κ= 0.17)

Mahoney, M et al. Issues Related to Accurate Classification of Buttocks Wounds. J WOCN. 2011; 38(6): 635-642.

The expert panel developed a simple tool for IAD assessment

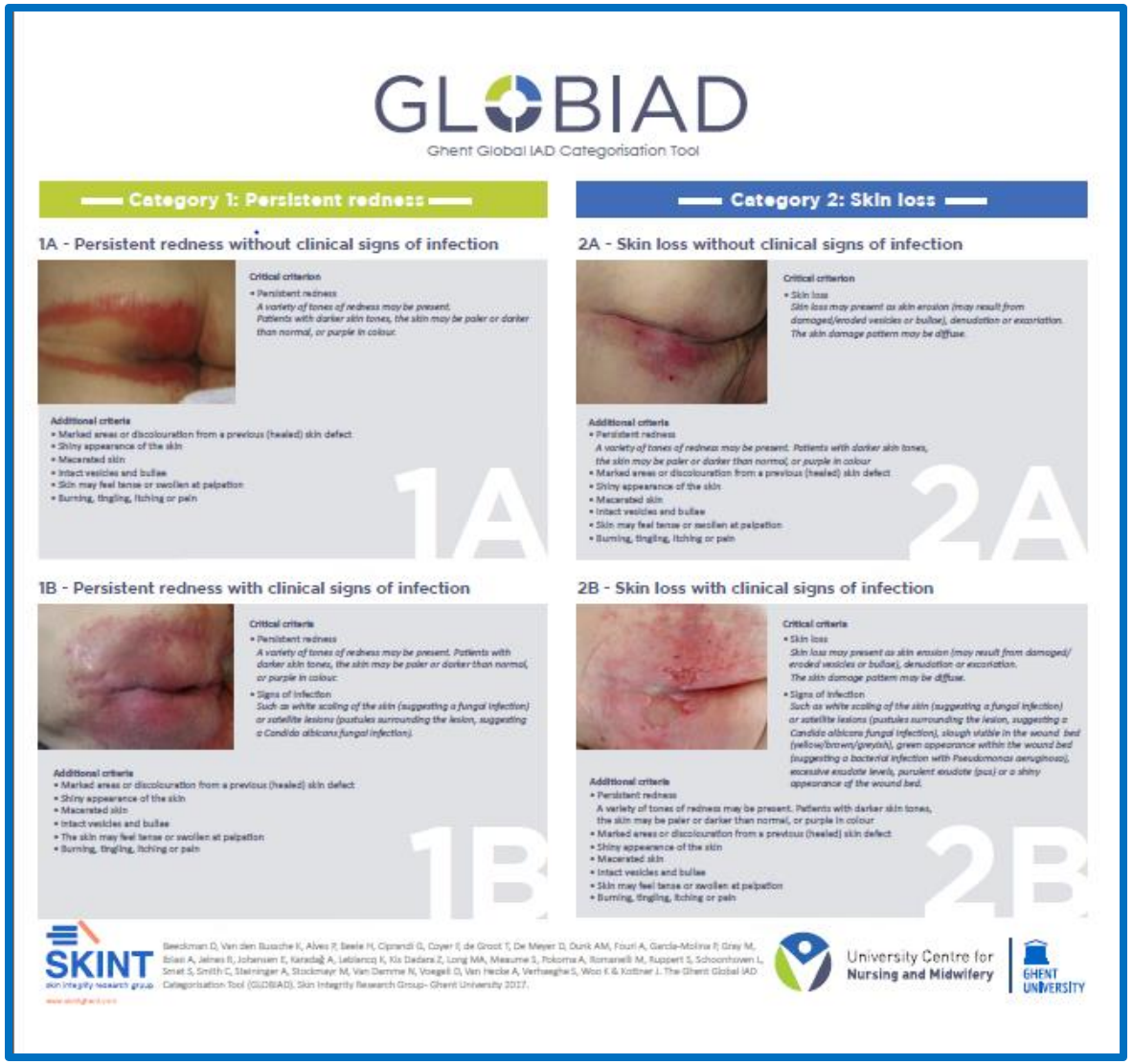
TABLE 1 | IAD Severity Categorisation Tool

Clinical presentation	Severity of IAD	Signs**
	No redness and skin intact (at risk)	Skin is normal as compared to rest of body (no signs of IAD)
	Category 1 – Red* but skin intact (mild)	Erythema +/-oedema
 moderate  severe	Category 2 – Red* with skin breakdown (moderate-severe)	As above for Category 1 +/-vesicles/bullae/skin erosion +/- denudation of skin +/- skin infection

* Or paler, darker, purple, dark red or yellow in patients with darker skin tones
**If the patient is not incontinent, the condition is not IAD

The IAD Severity Categorization Tool can help guide assessment and documentation

Recent work

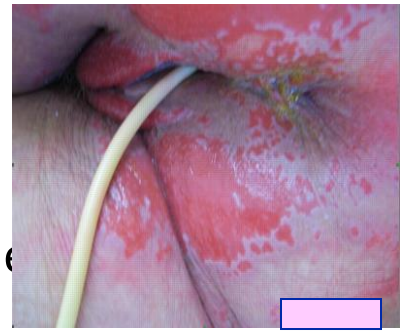


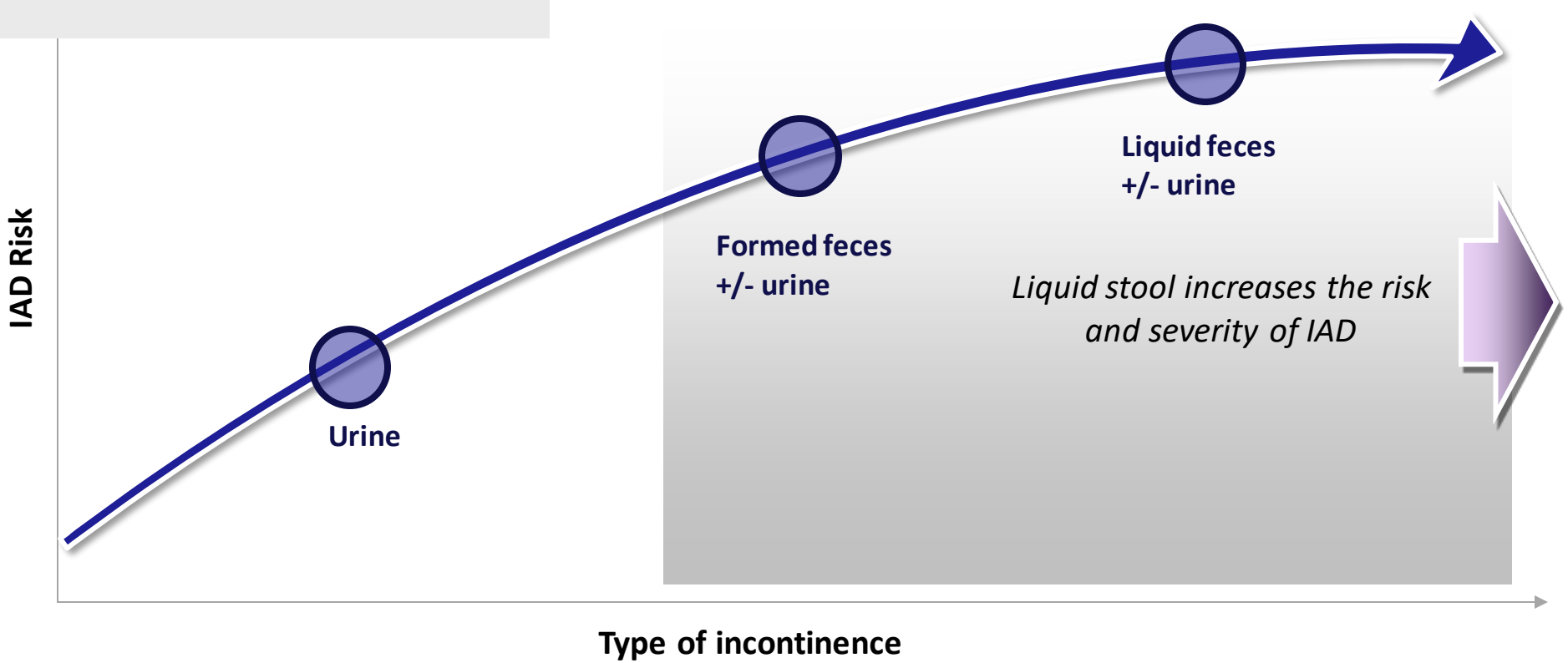
Beeckman D, et al.. The Ghent Global IAD Categorisation Tool (GLOBIAD). Skin Integrity Research Group - Ghent University 2017.

We need to recognize and manage risk!

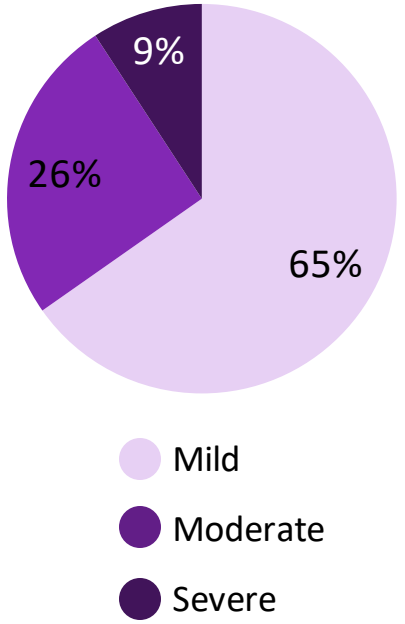
High-risk population

All patients/residents with incontinence are at risk but those with mixed incontine
are the most vulnerable especially when stools are liquid or diarrhea is present[1]





Mod-severe IAD occurs in ~35% of cases[2]



[1]Beekman et al, Wounds international 2015; [2]Gray M and Baros S. Presented at the 23rd Annual Meeting of the Wound Healing Society; SAWC Spring/WHS Joint Meeting, Denver, CO May 1-5, 2013.

Does the Braden Scale predict IAD risk? It's not clear.

Patient's Name _____ Evaluator's Name_____ Date of Assessment _____

SENSORY PERCEPTION Ability to respond meaningfully to pressure-related discomfort	1. Completely Limited Unresponsive (does not moan, flinch, or grasp) to painful stimuli, owing to diminished level of consciousness or sedation OR Limited ability to feel pain over most of body.	2. Very Limited Responds only to painful stimuli. Cannot communicate discomfort except by moaning or restlessness. OR Has sensory impairment that limits the ability to feel pain or discomfort over half of body.	3. Slightly Limited Responds to verbal commands but cannot always communicate discomfort or the need to be turned. OR Has some sensory impairment which limits ability to feel pain or discomfort in 1 or 2 extremities.	4. No Impairment Responds to verbal commands. Has no sensory deficit that would limit ability to feel or voice pain or discomfort.				
MOISTURE Degree to which skin is exposed to moisture	1. Constantly Moist Skin is kept moist almost constantly by perspiration, urine, etc. Dampness is detected every time patient is moved or turned.	2. Very Moist Skin is often, but not always, moist. Linen must be changed at least once per shift.	3. Occasionally Moist Skin is occasionally moist, requiring an extra linen change approximately once daily.	4. Rarely Moist Skin is usually dry. Linen requires changing only at routine intervals.				
ACTIVITY Degree of physical activity	1. Bedfast Confined to bed.	2. Chairfast Ability to walk severely limited or nonexistent. Cannot bear own weight and/or must be assisted into chair or wheelchair.	3. Walks Occasionally Walks occasionally during day, but only for very short distances, with or without assistance. Spends majority of each shift in bed or chair.	4. Walks Frequently Walks outside room at least twice a day and inside room at least once every 2 hours during waking hours.				
MOBILITY Ability to change and control body position	1. Completely Immobile Does not make even slight changes in body or extremity position without assistance.	2. Very Limited Makes occasional slight changes in body or extremity position but unable to make frequent or significant changes independently.	3. Slightly Limited Makes frequent though slight changes in body or extremity position independently.	4. No Limitation Makes major and frequent changes in position without assistance.				
NUTRITION *Usual* food intake pattern	1. Very Poor Never eats a complete meal. Rarely eats more than _ of any food offered. Eats 2 servings or less of protein (meat or dairy products) per day. Takes fluids poorly. Does not take a liquid dietary supplement. OR Has no oral intake and/or has been maintained on clear liquids or IV nutrition for more than 5 days.	2. Probably Inadequate Rarely eats a complete meal and generally eats only about half of any food offered. Protein intake includes only 3 servings of meat or dairy products per day. Occasionally will take a dietary supplement. OR Receives less than optimum amount of liquid diet or tube feeding.	3. Adequate Eats more than half of most meals. Eats 4 servings of protein (meat or dairy products) per day. Occasionally will refuse a meal, but will usually take a supplement when offered. OR Is receiving tube feeding or total parenteral nutrition that probably meets most of nutritional needs.	4. Excellent Eats most of every meal. Never refuses a meal. Usually eats 4 or more servings of meat and dairy products. Occasionally eats between meals. Does not require supplementation.				
FRICTION AND SHEAR	1. Problem Requires moderate to maximum assistance in moving. Complete lifting without sliding against sheets is impossible. Frequently slides down in bed or chair, requiring frequent repositioning with maximum assistance. Spasticity, contractures, or agitation leads to almost constant friction.	2. Potential Problem Moves feebly or requires minimum assistance. During a move, skin probably slides to some extent against sheets, chair, restraints, or other devices. Maintains relatively good position in chair or bed most of the time, but occasionally slides down.	3. No Apparent Problem Moves in bed and in chair independently and has sufficient muscle strength to lift up completely during move. Maintains good position in bed or chair.					
				Total Score				

http://www.bradenscale.com/images/bradenscale.pdf

Kottner J. Int J of Nursing Studies. 2014; 51: 1373-80; Zhen-Zhi MaInt J Clin Exp Med. 2017; 10(5): 7443-7449; Van Damme N et al Intl Wound J. 2016; 801-809

Presence of urinary +/- fecal incontinence, even in the absence of risk factors, should trigger implementation of an IAD *prevention* protocol

Figure: www.epuap.org

Prevention and Management of IAD

The interventions for prevention are not complex, so why does IAD develop?

Lack of protocol

Protocols are incomplete*

- No skin protectant identified
- No bowel/bladder program

Nurses are unaware/uncertain re: protocol

Nurses lack product knowledge

- Choose *moisturizer* vs. moisture barrier

Products not available at bedside

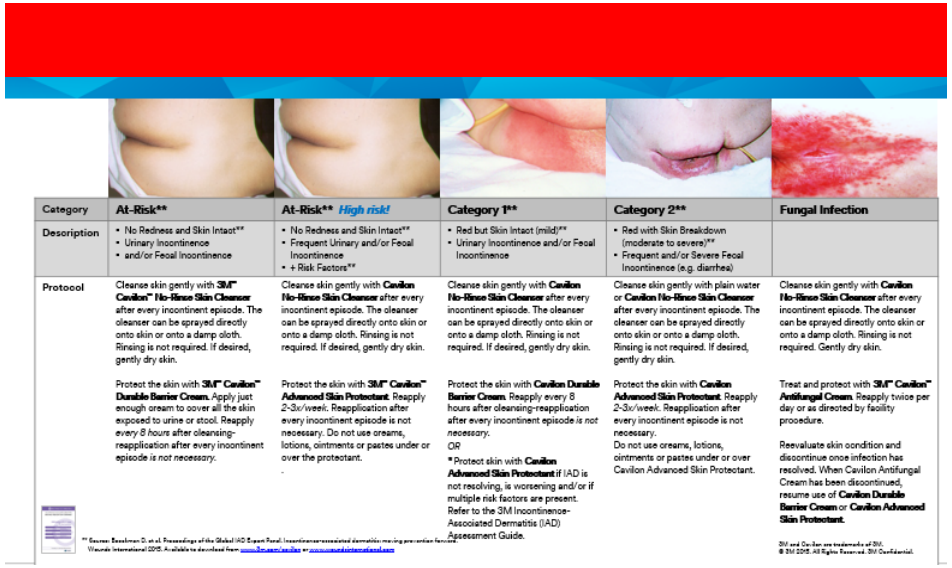
*Nix,D and Ermer-Seltun J. A review of perineal skin care protocols and skin barrier product use. Ostomy Wound Manage. 2004; 50(12): 59-67.

Prevention and management of IAD

Involves **2** critical interventions:

1) Manage incontinence

2) Implement structured skin care regimen



Category	At-Risk**	At-Risk** *High risk!*	Category 1**	Category 2**	Fungal Infection
Description	• No Redness and Skin Intact** • Urinary Incontinence • and/or Fecal Incontinence	• No Redness and Skin Intact** • Frequent Urinary and/or Fecal Incontinence • + Risk Factors**	• Red but Skin Intact (mild)** • Urinary Incontinence and/or Fecal Incontinence	• Red with Skin Breakdown (moderate to severe)** • Frequent and/or Severe Fecal Incontinence (e.g. diarrhea)	
Protocol	Cleanse skin gently with **3M™ Cavilon™ No-Rinse Skin Cleanser** after every incontinent episode. The cleanser can be sprayed directly onto skin or onto a damp cloth. Rinsing is not required. If desired, gently dry skin. Protect the skin with **3M™ Cavilon™ Durable Barrier Cream.** Apply just enough cream to cover all the skin exposed to urine or stool. Reapply *every 8 hours* after cleansing-reapplication after every incontinent episode *is not necessary.*	Cleanse skin gently with **Cavilon No-Rinse Skin Cleanser** after every incontinent episode. The cleanser can be sprayed directly onto skin or onto a damp cloth. Rinsing is not required. If desired, gently dry skin. Protect the skin with **3M™ Cavilon™ Advanced Skin Protectant.** Reapply *2-3x/week.* Reapplication after every incontinent episode is not necessary. Do not use creams, lotions, ointments or pastes under or over the protectant.	Cleanse skin gently with **Cavilon No-Rinse Skin Cleanser** after every incontinent episode. The cleanser can be sprayed directly onto skin or onto a damp cloth. Rinsing is not required. If desired, gently dry skin. Protect the skin with **Cavilon Durable Barrier Cream.** Reapply every 8 hours after cleansing-reapplication after every incontinent episode *is not necessary.* *OR* * Protect skin with **Cavilon Advanced Skin Protectant** if IAD is not resolving, is worsening and/or if multiple risk factors are present. Refer to the 3M Incontinence-Associated Dermatitis (IAD) Assessment Guide.	Cleanse skin gently with plain water or **Cavilon No-Rinse Skin Cleanser** after every incontinent episode. The cleanser can be sprayed directly onto skin or onto a damp cloth. Rinsing is not required. If desired, gently dry skin. Protect the skin with **Cavilon Advanced Skin Protectant.** Reapply *2-3x/week.* Reapplication after every incontinent episode is not necessary. Do not use creams, lotions, ointments or pastes under or over Cavilon Advanced Skin Protectant.	Cleanse skin gently with **Cavilon No-Rinse Skin Cleanser** after every incontinent episode. The cleanser can be sprayed directly onto skin or onto a damp cloth. Rinsing is not required. Gently dry skin. Treat and protect with **3M™ Cavilon™ Antifungal Cream.** Reapply twice per day or as directed by facility procedure. Reevaluate skin condition and discontinue once infection has resolved. When Cavilon Antifungal Cream has been discontinued, resume use of **Cavilon Durable Barrier Cream** or **Cavilon Advanced Skin Protectant.**

** Source: Beeckman D, et al. Proceedings of the Global IAD Expert Panel. Incontinence-associated dermatitis: moving prevention forward. Wounds International 2015. Available to download from www.woundsinternational.com

Incontinence: identify and treat reversible causes

Dementia/Delirium

Infection

Atrophy

Pharmaceuticals/Psychological

Excessive urine output

Restricted mobility

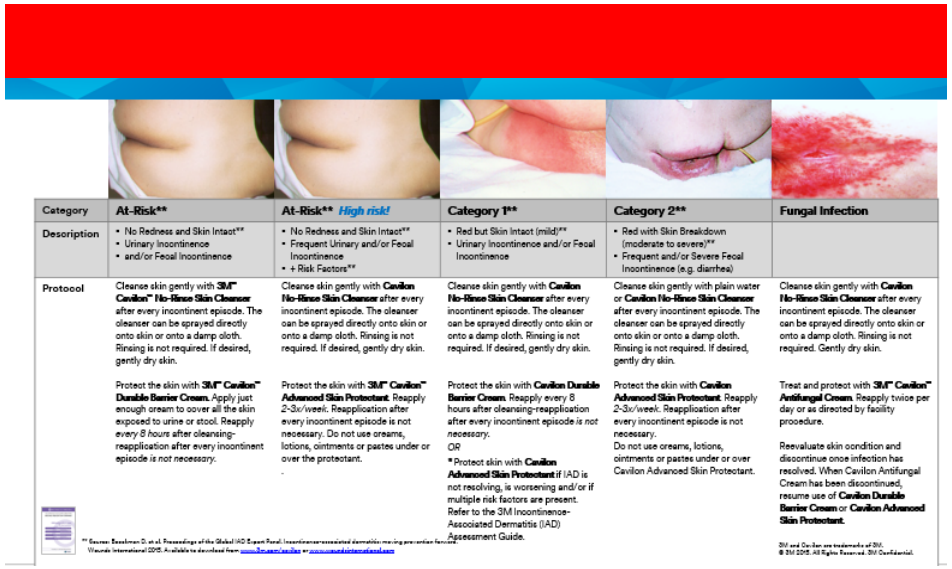
Stool impaction

Resnick, NM: "Urinary incontinence in the elderly." Medical Grand Rounds 3:281-290, 1984

Prevention and management of IAD: 2nd step

Manage incontinence

2) Implement structured skin care regimen

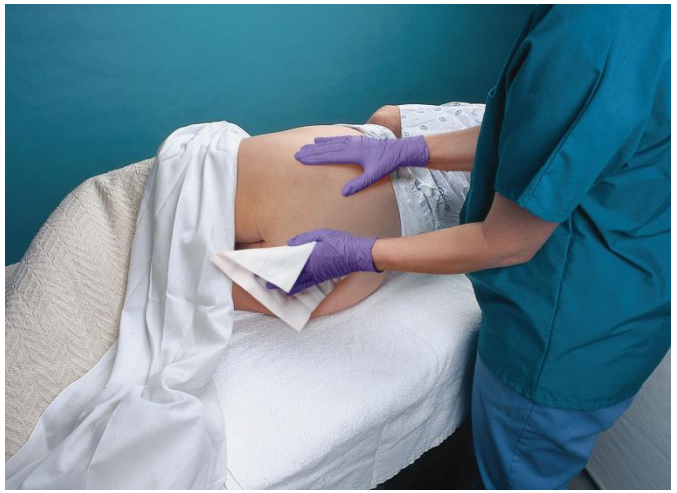


Category	At-Risk**	At-Risk** *High risk!*	Category 1**	Category 2**	Fungal Infection
Description	• No Redness and Skin Intact** • Urinary Incontinence • and/or Fecal Incontinence	• No Redness and Skin Intact** • Frequent Urinary and/or Fecal Incontinence • + Risk Factors**	• Red but Skin Intact (mild)** • Urinary Incontinence and/or Fecal Incontinence	• Red with Skin Breakdown (moderate to severe)** • Frequent and/or Severe Fecal Incontinence (e.g. diarrhea)	
Protocol	Cleanse skin gently with **3M™ Cavilon™ No-Rinse Skin Cleanser** after every incontinent episode. The cleanser can be sprayed directly onto skin or onto a damp cloth. Rinsing is not required. If desired, gently dry skin. Protect the skin with **3M™ Cavilon™ Durable Barrier Cream.** Apply just enough cream to cover all the skin exposed to urine or stool. Reapply *every 8 hours* after cleansing-reapplication after every incontinent episode *is not necessary.*	Cleanse skin gently with **Cavilon No-Rinse Skin Cleanser** after every incontinent episode. The cleanser can be sprayed directly onto skin or onto a damp cloth. Rinsing is not required. If desired, gently dry skin. Protect the skin with **3M™ Cavilon™ Advanced Skin Protectant.** Reapply *2-3x/week.* Reapplication after every incontinent episode is not necessary. Do not use creams, lotions, ointments or pastes under or over the protectant.	Cleanse skin gently with **Cavilon No-Rinse Skin Cleanser** after every incontinent episode. The cleanser can be sprayed directly onto skin or onto a damp cloth. Rinsing is not required. If desired, gently dry skin. Protect the skin with **Cavilon Durable Barrier Cream.** Reapply every 8 hours after cleansing-reapplication after every incontinent episode *is not necessary.* *OR* * Protect skin with **Cavilon Advanced Skin Protectant** if IAD is not resolving, is worsening and/or if multiple risk factors are present. Refer to the 3M Incontinence-Associated Dermatitis (IAD) Assessment Guide.	Cleanse skin gently with plain water or **Cavilon No-Rinse Skin Cleanser** after every incontinent episode. The cleanser can be sprayed directly onto skin or onto a damp cloth. Rinsing is not required. If desired, gently dry skin. Protect the skin with **Cavilon Advanced Skin Protectant.** Reapply *2-3x/week.* Reapplication after every incontinent episode is not necessary. Do not use creams, lotions, ointments or pastes under or over Cavilon Advanced Skin Protectant.	Cleanse skin gently with **Cavilon No-Rinse Skin Cleanser** after every incontinent episode. The cleanser can be sprayed directly onto skin or onto a damp cloth. Rinsing is not required. Gently dry skin. Treat and protect with **3M™ Cavilon™ Antifungal Cream.** Reapply twice per day or as directed by facility procedure. Reevaluate skin condition and discontinue once infection has resolved. When Cavilon Antifungal Cream has been discontinued, resume use of **Cavilon Durable Barrier Cream** or **Cavilon Advanced Skin Protectant.**

** Source: Beeckman D, et al. Proceedings of the Global IAD Expert Panel. Incontinence-associated dermatitis: moving prevention forward. Wounds International 2015. Available to download from www.woundsinternational.com

When does "cleanse-*moisturize*-protect make sense?

Moisturizers make sense when the *epidermis is intact* and can benefit from moisturization and a protection



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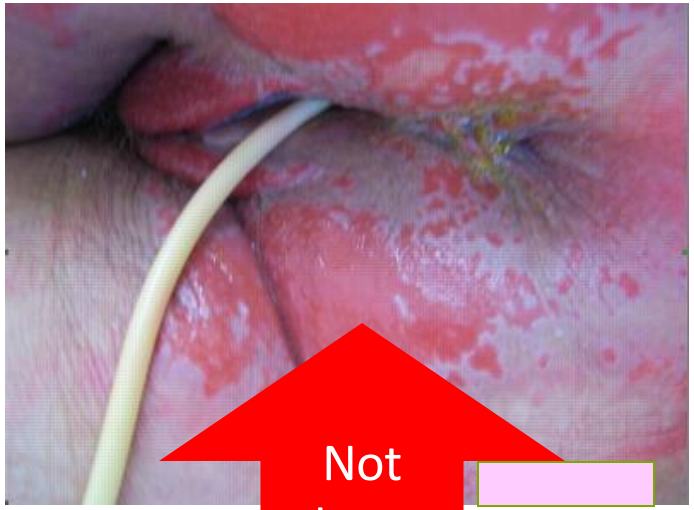


Not here

“3 in 1” products-do they work?

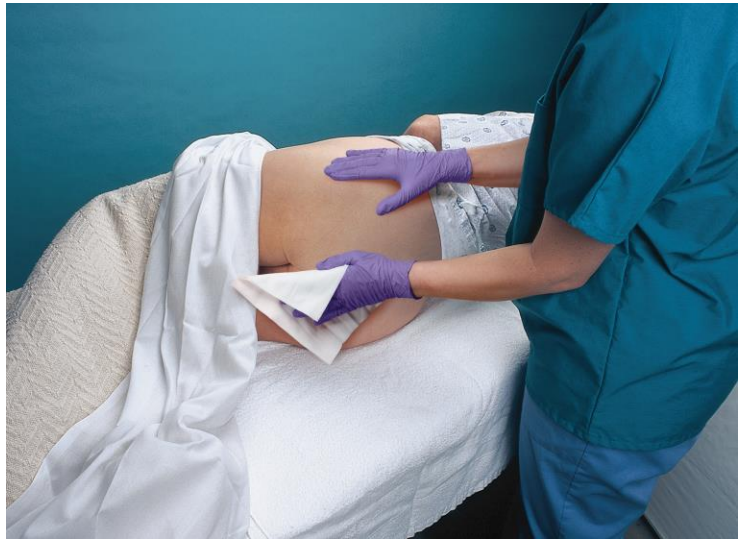
No one knows, probably better than cleanser alone

- “3 in 1” wipes
  - Effectiveness dependent on how much Dimethicone gets out of wipe and is left behind
  - Can vary-should ask for barrier data!
- Remember!
  - Moisturizing component is ineffective/unnecessary when epidermis is severely damaged or absent
  - Consider efficacy of preservative system if unused product retained

Does cleansing make sense?

Yes! Goal: remove irritants, excess moisture

- Gentle, pH balanced, no-rinse liquid skin cleanser and soft cloth or
- Pre-moistened bathing/cleansing wipe
  - *Typically solutions or lotions*
    - *Contain surfactants*



Water is acceptable alternative

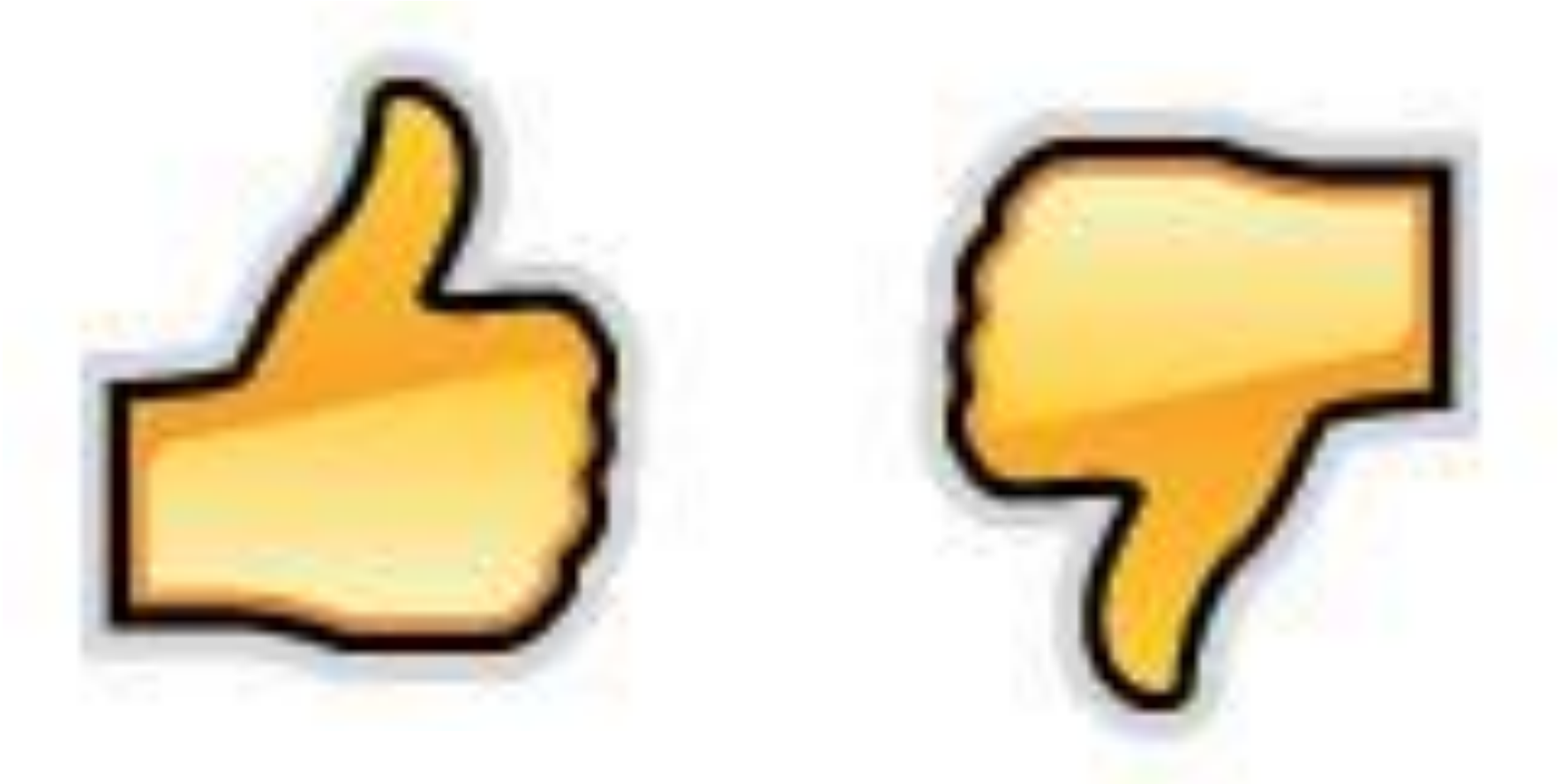
Van Damme N et al Intl Wound J. 2016; 801-809

Does protection make sense?

Absolutely! Need to repel irritants, moisture and *ideally friction too!*

- Traditional products
  - Creams (petrolatum; zn oxide; Dimethicone)
    - Emulsions of oil in water or water in oil;
  - Ointments (petrolatum, zn oxide, mineral oil)
    - Semi-solids, anhydrous
  - Pastes Semi-solids

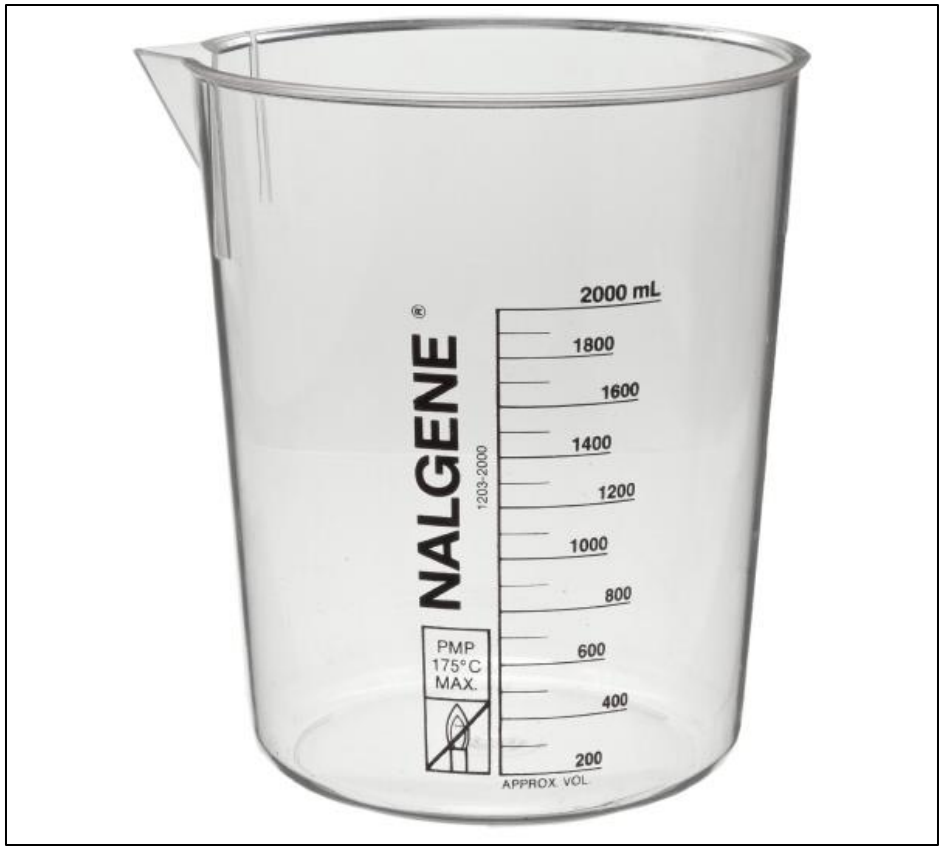
Do these products work? How do moisture barriers measure up?



No “SPF” for barrier function

A simple test you can do

1. Fill clear plastic beaker with warm water
2. If testing only one product, apply product(to hand(s
3. If testing a 2nd barrier, have colleague apply to other hand
4. Immerse hand(s) and gently move fingers
5. Water-soluble products will make water cloudy



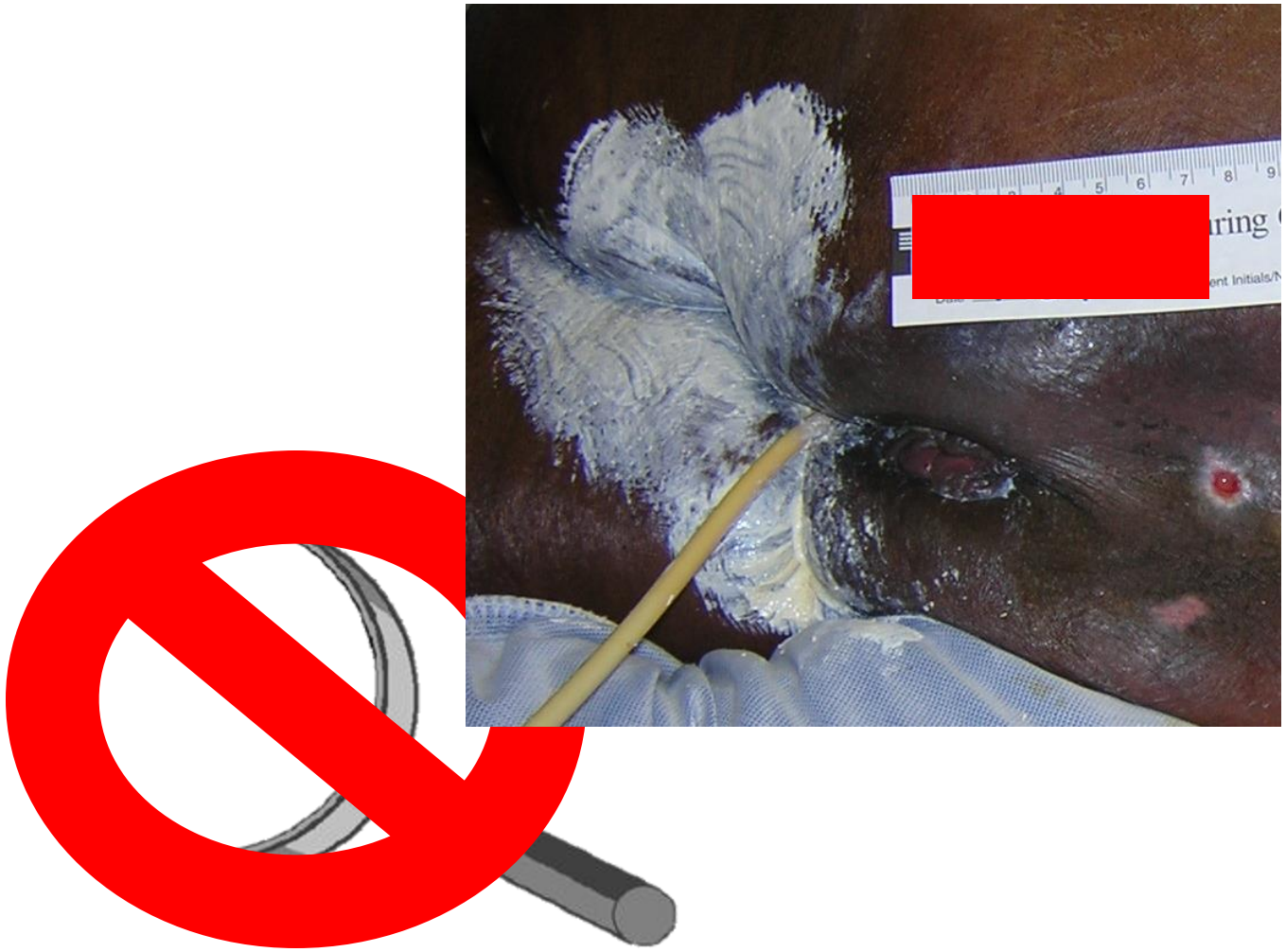
http://www.capitolscientific.com/

Limitations of semi-solid moisture barriers

- Gritty texture
  - discomfort with application and wear
- Mobile
  - Don’t attach to underlying surface
- Viscosity
  - Can adhere skin to brief/linens → ↑ shear force

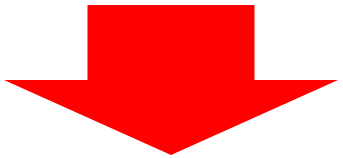
Limitations of semi-solid moisture barriers

- Occlusive
  - Prevents TEWL
  - ↑ risk of MASD
- Opaque
  - Cannot visualize skin



Limitations of semi-solid moisture barriers

- Dehydrate over time
  - Clump and cake on skin *and* hair



- Removal and cleansing
  - Painful
  - Time consuming

AFI with diarrhea (AFI-d) is a big problem!

- $\bar{X}$ time to manage one episode = 17 min. 33 sec[1]

  Required avg. 1.4 nurses and 0.8 nrsg assts!

  Managing liquid stools in ICU more complex than in other units

  Cause of overtime

  Caregiver response: apathy, fatigue, resignation, anger, embarrassment

- One AFI-d episode required 2-3 healthcare staff and took 10-20 minutes[2]

*Heidegger C-P. Intl J of Nrsg Studies. 2016; 59:163-168; **Bayon-Garcia C Intensive and Crit Care Nurs. 2012; 1-9.

So, what do nurses do?

Work-arounds of course

- Too occlusive?
  - Use less than optimal amount
  - Don’t use in folds
- Wont adhere to wet surfaces?
  - Powder underlying surface or “crust”
- Adheres skin to skin or underpads?
  - Coat surface with petrolatum
- Too difficult to get off?
  - “Only remove soiled layer”

And another consideration!

- Are *we* spreading pathogens during incontinence care?
  - *Multi-use* products handled by *multiple* caregivers and left at bedside
    - No guidelines for:
      - large volume F.I. episode clean up
      - management (cleaning?) of incontinence skin care supplies

Nurse do not change gloves as often as they should


IMPOSSIBLE

Desirable product characteristics

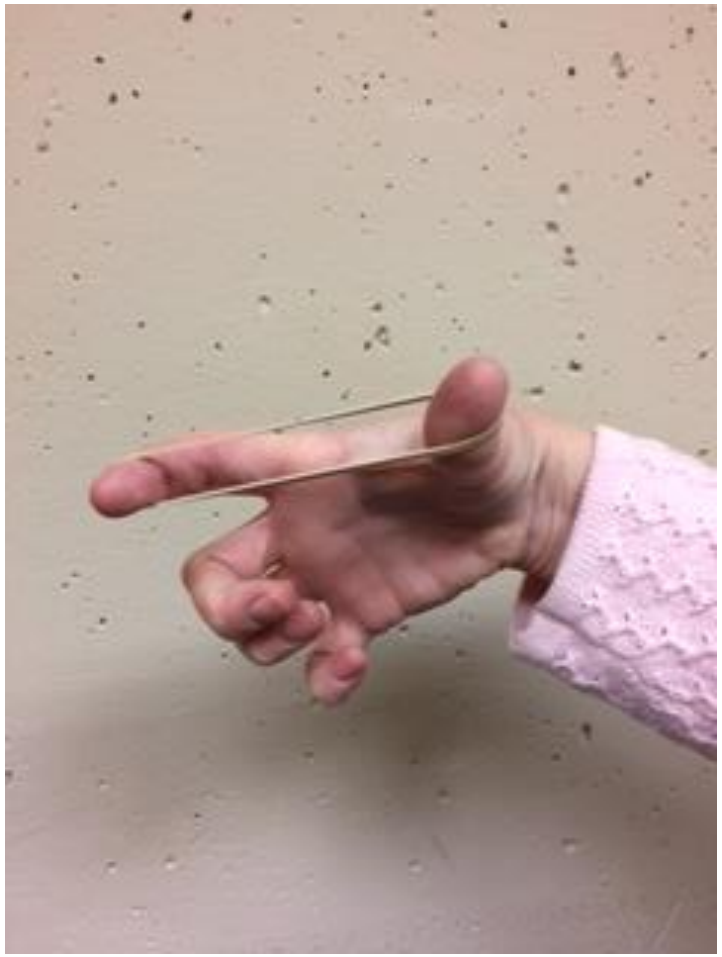
Consider breathability and friction

General characteristics of ideal product for prevention and management
Clinically proven to prevent and/or treat IAD
Close to skin pH
Low irritant potential/hypoallergenic
Does not sting on application
Transparent or can be easily removed for skin inspection
Removal/cleansing considers caregiver time and patient comfort
Does not increase skin damage
Does not interfere with the absorption or function of incontinence management products
Compatible with other products used (e.g. adhesive dressings)
Acceptable to patients, clinicians and caregivers
Minimizes number of products, resources and time required to complete skin care regimen
Cost-effective

Beekman D et al. Proceedings of the Global IAD Expert Panel. Incontinence-associated dermatitis: moving prevention forward. Wounds International 2015.

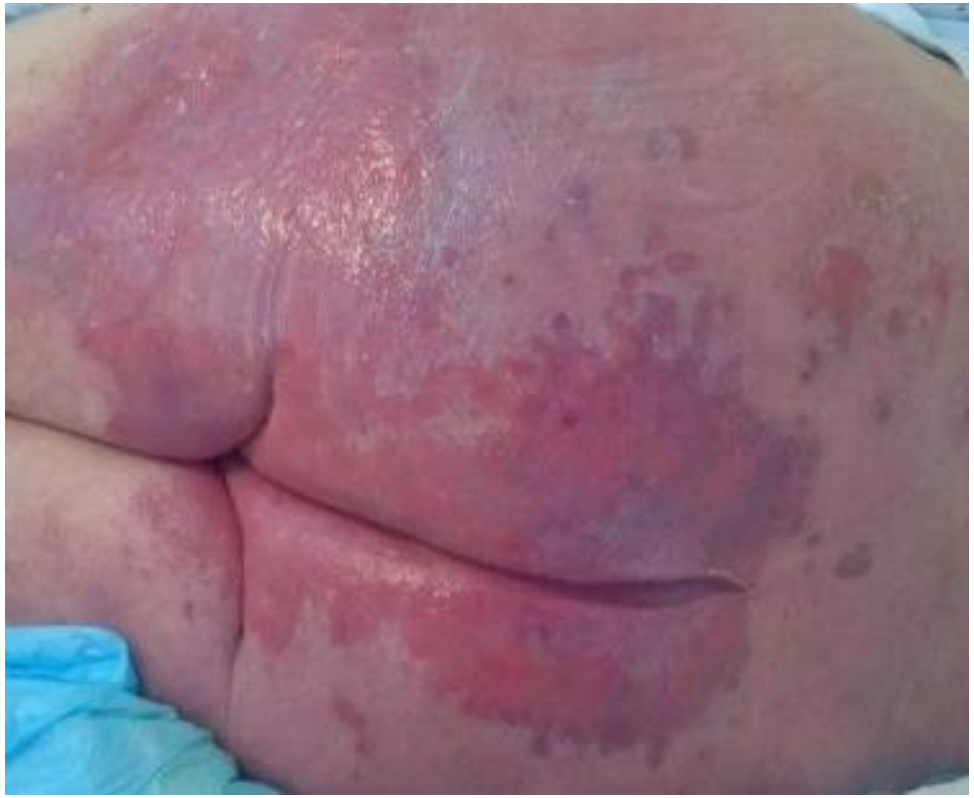
A modern, simple approach to moderate-severe IAD

- "High endurance skin protectant"
  - Liquid
    - Unique *elastomeric* polymer formulation
    - Able to *attach* to wet surfaces
- *Dries to form thin, breathable highly protective coating on skin*
- *Creates an environment for healing*



Other options for protection

- If a high endurance skin protectant is not available, protect skin
  1. Crusting technique with ostomy powder and alcohol-free barrier film
     - Anecdotal evidence only
     - Time consuming
  2. Apply paste after every cleansing episode



Treating infection associated with IAD

- Objectives-treat infection *and* protect skin
- **Candidiasis**-options for topical care
  - prescription antifungal covered with moisture barrier
  - "OTC" antifungal moisture barrier
    - remember, creams contain water-may be too wet
    - "Sealing" in antifungal powder under films
      - no evidence but common practice
- **Bacterial**-incidence unknown
  - no established best practice guidance
- **Viral (Herpes)-**incidence unknown
  - no established best practice guidance

Evans E and Gray M. What Interventions Are Effective for the Prevention and Treatment of Cutaneous Candidiasis. JWOCN. 2003;30: 11-16

If no improvement?

- Is the protocol being followed?
- Is/are the right product(s) being used?
- Could there be infection present?
- Is cleansing adequate and frequent enough?
- Do you need a more protective barrier?
- Is absorbent product being changed often enough?

New thinking about IAD-final thoughts

- For effective *prevention*, must recognize and assess **risk**
- For effective *treatment*, must consider **severity** of damage
  - Basic moisture barriers inadequate for protection from *caustic* irritants and ongoing exposure-more durable protection is required
  - Barriers that do not stay in place cannot provide protection

So we know that IAD is a problem

Published and anecdotal evidence provide reason to believe that these are also common problems!

- Peristomal skin damage incidence of 77%[1]
- Periwound skin damage-62%[2]
- Intertriginous dermatitis-unknown

1 Colwell JC, , McNichol L, Boarini J. J WOCN 2017; 44(3): 257-261; 2 Viamontes L, Jones AM. Br Journal of Nurs. 2003 Jun 12;12(Sup2):S43-9.

Why broaden our focus to other types of healthcare acquired skin damage (HASD)?

- Also, associated with negative outcomes:
  - Pain *and suffering*
  - Secondary infection
  - Patient and family dissatisfaction
  - Pressure injury/ulcer development (IAD, moisture-friction injuries)
  - Cost
- Also are preventable

The Skin Safety Model: Reconceptualizing Skin Vulnerability in Older Patients[1]

Premise: Multiple types of HA skin injury *share root causal/contributing factors*

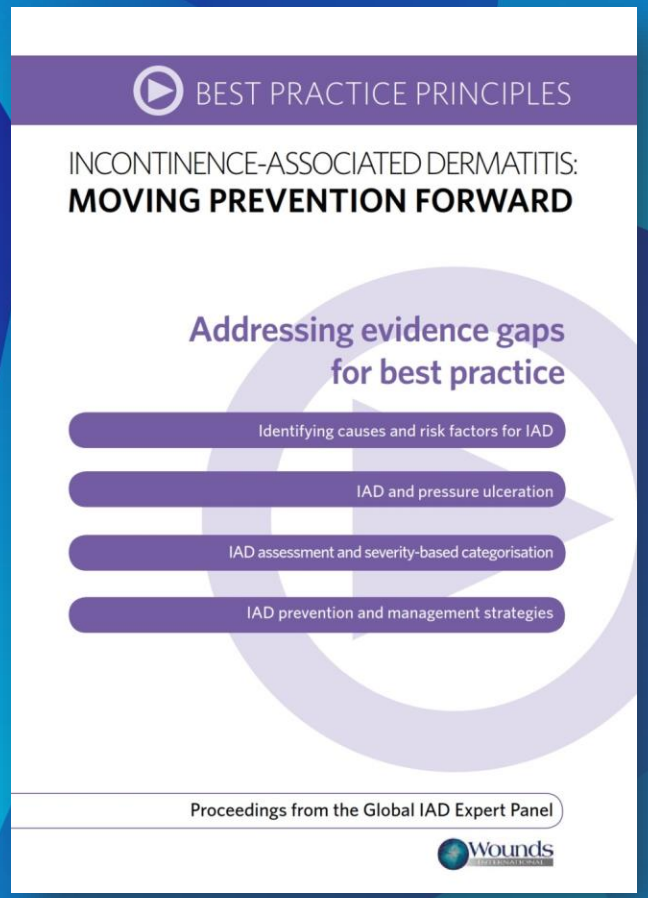
- ***Potential Contributing Factors***: patient factors, situational stressors, system factors, process **plus**
- ***Exacerbating Elements***: Skin irritants, friction, pressure, shear

Should approach prevention holistically vs. "silo'd" care and thinking

Could and should also drive product selection

Products should be versatile and able to "multitask"

Campbell J The Skin Safety Model: Reconceptualizing Skin Vulnerability in Older Patients[1] Journal of Nursing Scholarship Volume 48, Issue 1, pages 14-22, 18 NOV 2015 DOI: 10.1111/jnu.12176
http://onlinelibrary.wiley.com/doi/10.1111/jnu.12176/full#jnu12176-fig-0001



Thank you!

Download free from:

www.woundsinternational.com