Objectives:

1) Describe key gaps in current IAD knowledge
2) Explain the two most important risk factors for development of IAD
3) Describe the relationship between IAD and pressure ulcer development
4) Describe the categories in the IAD severity assessment tool
5) Articulate how the IAD severity assessment tool and intervention tool work together to guide skin care
Why focus on IAD?

It's a common and significant problem!

Existing data (primarily US and WE) suggest:

- Prevalence 5.6% to 50%
- Incidence 3.4% to 43%* (36% in the ICU**)

Associated with negative outcomes:

- Pain
- Secondary infection
- Risk factor for pressure ulcer development
- Patient and family dissatisfaction

*Gray M, Bartos S. Incontinence-Associated Dermatitis in the Acute Care Setting: A Prospective Multi-Site Epidemiological Study. Presented at the Symposium on Advanced Wound Care. May 2013


Why do we need to think differently about IAD?

We don’t always know it when we see it!

- Assessment challenges
- We don’t know what to call it
- Use of inconsistent terminology/terminology confusion
- We aren’t sure how it happens
- Lack of knowledge of causative and risk factors
- We don’t always know what to do about it
- Lack of evidence based-guidelines and protocols
- We don’t understand the relationship between IAD and pressure ulcers

The First Truly Global Panel on IAD: Addressing Gaps in Evidence
Meeting topics

Why is IAD important?
- Why should clinicians and payers/reimbursement authorities care?

How should we identify, classify and describe IAD?

What are the risk factors for IAD development?

What is the link between pressure ulcers and IAD?

What are appropriate prevention and treatment strategies?
- Should treatment be severity-based?

Let’s look at the content

How can the Best Practice Principles help you?

For bedside (hands-on) clinicians:
- Provides practical guidance
  - Promote effective interventions for prevention and treatment

For clinical leaders:
- Provides step-by-step guide to develop or improve an IAD prevention program
What is IAD?

IAD = abbreviation for Incontinence-Associated Dermatitis

- Exposure to urine/faeces
  - overhydrates skin swelling and disruption of stratum corneum
  - increases skin pH
  - creates inflammation
- Disruption of normal barrier structure and function

Clarifying terminology

Incontinence-associated dermatitis (IAD)

- Preferred term to describe skin damage associated with exposure to urine or stool
- IAD distinguishes skin problems due to incontinence vs. other conditions
- If the patient is not incontinent, it’s not IAD!

Key risk factors for IAD

1. Type of incontinence
2. Frequent episodes of incontinence
**Key risk factors for IAD**

- Increased age does not appear to be an independent risk factor for IAD.

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

![Improve Care - STOP IAD](http://www.epuap.org)
Inspect skin...at least daily

Incorporate into your general skin assessment (part of pressure ulcer prevention program)

What are you looking for?

- Erythema?
- Erosion/Denudation?
- Lesions?

Areas of skin affected

IAD may affect large areas, not just the perineum
Are there tools to guide IAD assessment?

Some tools are available, but their use in day-to-day practice remains limited

- IAD Assessment and Intervention Tool (IADITIT) (Junkin)
- Incontinence-associated dermatitis and its severity (IASDS) (Borohert)
- Skin Assessment Tool (Lutz and Kennedy)
- PuCLAs (EPUAP)

Clearly there is a need!

To address this, the panel developed a simple tool!

The IAD Severity Categorization Tool can help guide assessment and documentation

Is there a relationship between IAD and pressure injury?

IAD is a top down injury: damage initiated on the surface of the skin. When combined with pressure and shear may lead to superficial pressure ulcer

Pressure ulcers are bottom up injuries: damage initiated in changes within underlying soft tissues and skin
IAD is a risk factor for PU development


Pressure Ulcer Prevention: Key Interventions
1. Skin Inspection and Assessment
2. Risk Assessment
3. Repositioning/Early Mobilization/Support Surfaces
4. Optimize Nutrition
5. Preventive Skin Care
6. Patient education

Differential assessment is important!

<table>
<thead>
<tr>
<th>Parameter</th>
<th>IAD</th>
<th>Pressure ulcer</th>
</tr>
</thead>
<tbody>
<tr>
<td>History</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Symptoms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Location</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shape/depth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presentation/depth</td>
<td>Intact skin with erythema, edema, or bullae is not present</td>
<td>Intact skin with erythema or bullae is not present</td>
</tr>
<tr>
<td></td>
<td>Intact skin with erythema and superficial partial thickness skin loss</td>
<td>Full-thickness skin loss, base of wound may contain non-viable tissue</td>
</tr>
<tr>
<td>Other</td>
<td>Secondary superficial skin erosion (e.g., cadavere) may be present</td>
<td>Secondary soft tissue infection may be present</td>
</tr>
</tbody>
</table>
If the patient is not incontinent, the condition is not IAD

- Patients with faecal incontinence +/- urinary incontinence are at higher risk of developing IAD than those with urinary incontinence alone
Principles of CLEANSE

Cleanse daily and after every episode of faecal incontinence

- Gentle technique
  - Soft, disposable non-woven cloth (avoid regular washcloths)
  - Gentle, pH balanced, no-rinse liquid skin cleanser or pre-moistened wipe (preferred and recommended)
  - No bar soaps
  - Gently dry skin if needed

If gentle soap is not available, cleansing with plain water is preferred (minimum standard)

What do I use to protect the skin?

Moisture barriers are waterproof formulations that protect skin from moisture and irritants
**Principles of PROTECT**

- Apply skin protectant at a frequency consistent with its ability to protect the skin and according to manufacturer’s instructions.
- Skin protectant should be compatible with other products (e.g., skin cleansers).
- Apply skin protectant to all skin that comes into contact with or potentially will contact urine and/or feces.

**Principles of PROTECT**

- The performance of a skin protectant is determined by the total formulation and not just the main barrier ingredient (e.g., petrolatum, zinc oxide, dimethicone).
- Not all products provide equal protection!
- If the skin is getting worse or not improving, you need a more protective barrier.

**When to RESTORE the skin barrier**

Moisturizers can be used to support and maintain integrity of the skin barrier (i.e., "restore").
When to RESTORE the skin barrier

- Moisturizers typically contain:
  - Emollients: ingredients that smooth and soften skin (e.g. oils and synthetics)
  - Humectants: ingredients that draw in and hold water in the stratum corneum (e.g. urea and glycerine)
- Some are formulated with lipids similar to those found in healthy stratum corneum (e.g. ceramides)
- But! Not all moisturizers are capable of skin barrier repair

A moisturizer is NOT indicated when skin is overhydrated/macerated nor when there is erosion (denudation) of epidermis

A severity-based approach to treatment

Prevention

Management
### General characteristics of ideal product for IAD prevention and management

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

### Assessing patient response

3-5 Days

- Could there be infection present?
- Is cleansing adequate and frequent enough?
- Is barrier/protectant insufficient to protect from irritant/moisture challenge? Do you need a more protective barrier?
- Is absorbent product being changed often enough?

If specialist available, REFER!
Why is prevention important?

- All patients with incontinence are at risk of IAD!!
- Create positive outcomes
  - Structured skin care regimens can
    - reduce the incidence of IAD
    - IAD IS A PREVENTABLE EVENT!
    - speed resolution of IAD
    - improve patient and family satisfaction
  - Preventing and effectively treating IAD is likely to be cost-effective!
  - Reduced nursing time and product usage

Why is prevention important?

IAD is likely to be a significant cost to healthcare systems
- Cost of skin conditions associated with incontinence estimated at US $163.3 million (1995)
- IAD contributes to pressure ulcer development
- A full thickness PU costs $43,180 USD*

Decreasing hospital-acquired IAD could potentially decrease pressure ulcers and associated costs


5 Steps to Help Make the Case for IAD Prevention
Questions?