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Prevail[®]

by **First Quality[®]**



“The Impact of Quality Incontinent Products on Incontinence Associated Dermatitis and Operational Costs in Skilled Nursing Facilities”

*in market share by both units sold and dollars spent, based on data from GHX covering the 4 quarters reported (Q1'17-Q4'17), wherein Healthcare is defined as Home Healthcare and Long Term Care combined and protective hygiene is defined as absorbent products for the management of incontinence in adults.



RISK FACTORS ASSOCIATED WITH INCONTINENCE & INCONTINENCE ASSOCIATED DERMATITIS (IAD)

INCONTINENCE IN THE U.S.

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- Estimated 25 million Americans
- One of the 10 leading diagnoses among homebound Seniors
- One of the top reasons for nursing home admission
- Need for toileting and/or urgency increases the risk of falls by 26%, fractures by 34%

(1) NAFC.org
(2) AMDA Clinical Practice Guidelines 2012
(3) Senior Living: <http://alinthenews.wordpress.com/2013/06/10/pbs-newshour-to-examine-long-term-care-challenges-in-ongoing-series/>

INCONTINENCE IN Skilled Nursing Facility

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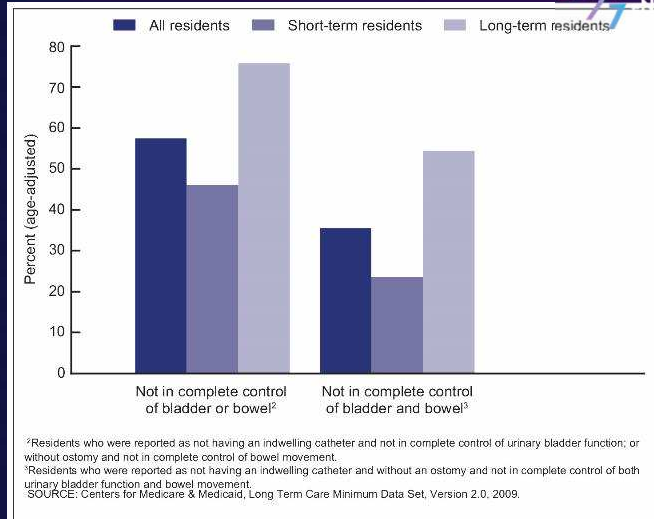


Figure 10. Age-adjusted incontinence among nursing home residents aged 65 and over, by type of incontinence and length of stay: Long Term Care Minimum Data Set, 2009

IMPACT OF SKIN ALTERATION

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- Quality of Life-
 - Isolation, depression
- Pain management
 - IAD and Pressure ulcers can be very painful
- Limited mobility
 - Decline in function
 - Created dependence
- Cascade of health issues
 - Secondary Infections
 - Additional skin breakdown



INCONTINENCE ASSOCIATED DERMATITIS:

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“Skin damage associated with exposure to urine or stool that causes considerable discomfort and can be difficult, time consuming and expensive to treat”

Also referred to as:

- Diaper dermatitis
- Irritant dermatitis
- Moisture lesions
- Perineal dermatitis
- Perineal rash



Beckman, et al, Proceedings of the Global IAD Expert Panel, 2015 www.woundsinternational.com

WHAT HAPPENS TO THE SKIN WITH IAD?

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Exposure to urine on the innermost skin cells:

- Cells absorb urine
- Swell
- No longer provide a barrier (over hydration of the skin)

Ammonia in urine raises skin's pH, harming acid mantle, decreasing skin's resistance to external forces

- This increase in pH allow micro-organisms to thrive and increase the risk of skin infection



Exposure to stool: digestive enzymes denude

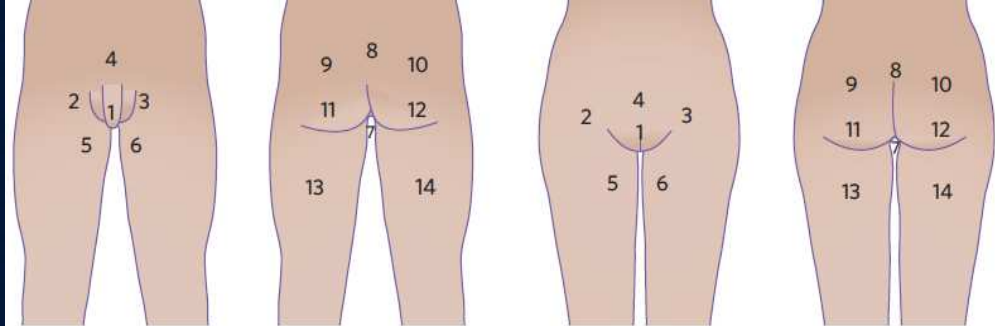
Increased friction as skin moves against absorptive devices, clothing, or bedding

Junkin J, Selekof JL. Prevalence of incontinence and associated skin injury in the acute care inpatient. *J WOCN* 2007; 34(3): 260-69.

AREAS AFFECTED BY IAD

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- | | | |
|---|--|---------------------------|
| 1. Genitalia (labia/scrotum) | 4. Lower abdomen/suprapubic | 9. Left upper buttock |
| 2. Right groin fold (crease)
between genitalia and thigh | 5. Right inner thigh | 10. Right upper buttock |
| 3. Left groin fold (crease
between genitalia and thigh) | 6. Left inner thigh | 11. Left lower buttock |
| | 7. Perianal skin | 12. Right lower buttock |
| | 8. Gluteal fold (crease between
buttocks) | 13. Left posterior thigh |
| | | 14. Right posterior thigh |

www.woundsinternational.com/media/other-resources/_/1154/files/iad_web.pdf



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MANAGING MICROCLIMATE

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- Limited mobility of person
- Previous skin condition
- **Increased skin moisture**
- **Increased skin temperature**
- **Skin shear or friction**
- Bacterial/enzymatic attack on compromised skin

Microclimate Management:

- Moisture, perspiration, and heat are the catalysts for skin breakdown and overall discomfort.
- Managing these 3 elements are key for a favorable skin microclimate



The National Pressure Ulcer Advisory Panel (NPUAP), (2014) "Risk Factors for Skin Breakdown":

IAD Severity

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Mild



Moderate



Severe

IAD & PRESSURE INJURY

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- Can be difficult to diagnosis IAD
- Stage 1 or 2 P. I. sometimes misdiagnosed as IAD
- No true assessment instrument specific for IAD
- Contact dermatitis, infections, perspiration do mimic
- IAD adds additional risk to pressure injury



Beekman D et al. Proceedings of the Global IAD Expert panel Wounds International 2015

IAD

VS

PRESSURE INJURY/ULCER

- Incontinence
- Pain/burning/itching
- Perineum, perigenital area, buttocks; gluteal fold, thighs, back
- Poorly defined edges
- Secondary skin infection may be present (candidiasis)

- Exposure to pressure/shear
- Pain
- Bony Prominence
- Distinct edges or margins
- Secondary soft tissue infection may be present

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MDS SECTION M - US

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M1040. Other Ulcers, Wounds and Skin Problems	
↓ Check all that apply	
Foot Problems	
<input type="checkbox"/>	A. Infection of the foot (e.g., cellulitis, purulent drainage)
<input type="checkbox"/>	B. Diabetic foot ulcer(s)
<input type="checkbox"/>	C. Other open lesion(s) on the foot
Other Problems	
<input type="checkbox"/>	D. Open lesion(s) other than ulcers, rashes, cuts (e.g., cancer lesion)
<input type="checkbox"/>	E. Surgical wound(s)
<input type="checkbox"/>	F. Burn(s) (second or third degree)
<input type="checkbox"/>	G. Skin tear(s)
<input type="checkbox"/>	H. Moisture Associated Skin Damage (MASD) (e.g., incontinence-associated dermatitis [IAD], perspiration, drainage)
None of the Above	
<input type="checkbox"/>	Z. None of the above were present

COST ASSOCIATED WITH IAD

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• IAD is associated with direct costs

- Provider visits, Home Health visits, Hospital/SNF stays
- Equipment/supplies

• Complications:

- Pressure injury
- Secondary infections
- Increased length of hospital stay or re-hospitalization
- Additional resources (appointments, wound consultant) ⁽¹⁾

• Skin conditions associated with Incontinence

- 136 million additional costs ⁽²⁾
- Difficult to isolate just IAD

1. Obst GYN 2001 Sep;98(3):398-406. Annual direct cost of urinary incontinence. Wilson, Brown JS, Shin GP, Luc KO, Subak, LL.

2. Doughty D, Junkin J, Kurz P et al. Incontinence-associated dermatitis. Consensus statements, evidence-based guidelines for prevention and treatment, current challenges. J WOCN 2012; 39(3): 303-15.

- United States cost of bladder incontinence in adults (2000) estimated at 19.5 billion
 - 14.2 billion incurred by community residents\$
 - 5.3 billion by institutional residents

[www.cdc.gov/nchs/data/series/sr_03/sr\)3/pdf](http://www.cdc.gov/nchs/data/series/sr_03/sr)3/pdf)



INCONTINENCE MANAGEMENT IS KEY

Incontinence Is A Risk Factor for IAD



IAD Is A Risk Factor for Pressure Injury/Ulcer



- PI/PU care in the U.S. is estimated: \$11 Billion Annually
- Range of **\$500 - \$70,000** per individual pressure injury

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

PREVENTION AND TREATMENT



- Prevention is key with Incontinence Associated Dermatitis
 - Skin Inspections during routine care by caregivers
 - Proper Perineal Care after each episode or excess moisture
- Addition of anti-fungal products, steroidal based topical anti-inflammatory products, and topical antibiotics recommended only in specific situations
- Use of absorptive or containment products and/or indwelling devices recommended in specific situations to support prevention and treatment IAD

The National Pressure Ulcer Advisory Panel (NPUAP), April 2016 npuap.org



3rd Party Clinical Study

PROOF

PURPOSE OF STUDY

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“Do quality incontinence products along with education affect clinical and operational outcomes?”

- Incontinence Associated Dermatitis
- Incontinent Product costs
- Laundry costs

Study Elements

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3 Facilities

Traditional LTC Resident Population

90 day pre-during-post data collection
Conducted by nurses

30 day Prevail product integration

Briefs

Protective Underwear

Bladder Control Pads

Pre moistened Wipes

Staff Training

Skin and Wound Care

Turning and Repositioning

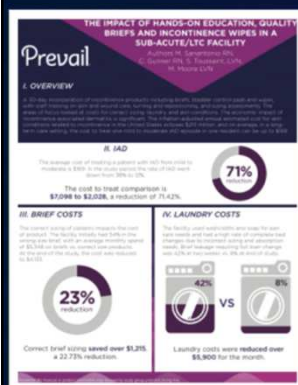
Sizing Assessments

3 FACILITIES



- Facility A – No Intervention (control)
- Facility B – Used studied product, no additional education
- Facility C - Used studied product plus additional education

Study Outcomes



Facility C:

71% reduction in **IAD** treatment costs

34% decrease in facility **LAUNDRY** costs

23% reduction in **DIRECT PRODUCT COSTS**

71% reduction in IAD treatment costs

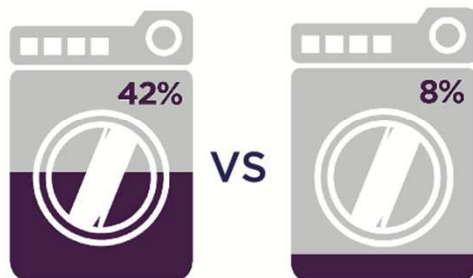
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- The average cost of treating a patient with IAD from mild to moderate is \$169
- In the study period the rate of IAD went down from 38% to 12%
- The cost to treat comparison is \$7,098 to \$2,028, a reduction of 71%

IV. LAUNDRY COSTS

The facility used washcloths and soap for peri care needs and had a high rate of complete bed changes due to incorrect sizing and absorption needs. Brief leakage requiring full linen change was 42% at two weeks vs. 8% at end of study.



Laundry costs were **reduced over \$5,900** for the month.

III. BRIEF COSTS

The correct sizing of patients impacts the cost of product. The facility initially had 54% in the wrong size brief, with an average monthly spend of \$5,348 on briefs vs. correct size products. At the end of the study, the cost was reduced to \$4,133.



Correct brief sizing **saved over \$1,215**, a 22.73% reduction.

34% decrease in facility **LAUNDRY** costs

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- Laundry Service
- Laundry costs down \$5,900 a month
- Full Bed linen change from 42% to 8%

23% reduction in Incontinent Product costs

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- Correct sizing of residents impacted cost
- 54% in the wrong size brief
- Average monthly spend = \$5,348
- Correct size products = reduction to \$4,133
- Correct brief sizing saved over \$1,215/month
- 22.73% reduction.

Education implemented in Facility C

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- Incorrect size, application and fit of briefs widespread in facility
- The negative outcome of this was discussed with staff.
- Correct sizing, action of polymer, the added work they were making for themselves, and the financial impact.
- Proper turning and positioning, cleansing properly using moistened wipes.
- Skin health and preventative measures
- Cloth Underpads utilization and alternatives

FACILITY C

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- **Continence Product Screening Tool**
- **Guideline for product selection**

SECTION H0300: Urinary Continence

SECTION G0110:

Functional Status /Toilet Use

- Independent
- Supervision
- Limited Assistance

- Extensive Assistance from staff

- Weight bearing support from staff

- Total Dependence (does not use commode, bathroom or bedpan)
- Non Ambulatory
- Full Staff Performance

0	1	2	3
Always Continent Continence of urine without any episodes of incontinence.	Occasionally Incontinent Incontinent less than 7 episodes. Any amount of urine sufficient to dampen undergarments, linens or pad.	Frequently Incontinent Incontinent of urine during 7 or more episodes but had at least one continent void includes incontinence of any amount of urine.	Always Incontinent No continent voids.
No Product Necessary	Bladder Control Pad Male Guard Protective Underwear Pant Liner	Protective Underwear Adult Brief	Adult Brief
No Product Necessary	Protective Underwear Adult Brief Pant Liner	Adult Brief Pant Liner	Adult Brief Pant Liner
No Product Necessary	Adult Brief	Adult Brief	Adult Brief Night Time Brief Pant Liner

Section H0400: Bowel Continence

0	1	2	3
Always Continent No Product Necessary	Occasionally Incontinent Occasional Bowel Training/Paper or GMA Brief	Frequently Incontinent Occasional Bowel Training/Paper or GMA Brief	Always Incontinent Adult Brief

Product Selection:

Day ☐ Night ☐ BC Pad/Male Guard
 Day ☐ Night ☐ Pant Liner
 Day ☐ Night ☐ Protective Underwear
 Day ☐ Night ☐ Adult Briefs

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HAVING AN EFFECTIVE INCONTINENCE MANAGEMENT PROGRAM

KEY COMPONENTS FOR INCONTINENCE MANAGEMENT PROGRAM



- Products Are One Component
- Clear policy & guidelines
- Engaged Clinical presence
- Multi Staff Approach
- Individualized Resident Centered
- Ongoing Education
- Peri Care procedure

CLEANSE

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DO:

- Use gentle technique with minimal friction—avoid rubbing
- Gentle no-rinse liquid skin cleanser or pre-moistened wipe (designed and indicated for incontinence care)
- Gently dry skin if needed after cleansing



DON'T:

- Cleanse- soap & water/washcloth not recommended
- Soap is alkaline and changes the pH of the skin, damaging the skin barrier function
- Washcloths are a rough/nubby material that can cause skin damage on fragile skin with the friction/rubbing
- Infection control issues- wash basins



LIGHT BLADDER LEAKAGE

Stress Incontinence

Stress Incontinence

- Leakage when laughing, coughing, lifting, sneezing or exercising
- Involuntary loss of a few drops

Recommended Products





MODERATE BLADDER LEAKAGE

Urge & Mixed Incontinence

Urge Incontinence

- Associated with an overactive bladder (OAB)
- Rushing to the bathroom
- Awareness of the need to go
- Frequent, strong and sudden urges, but cannot make it to the bathroom

Mixed Incontinence

- A combination of two or more types, most commonly of Stress and Urge

Recommended Products



Underwear for Women Underwear for Men Protective Underwear



HEAVY BLADDER LEAKAGE

Reflex, Overflow & Functional Incontinence

Reflex Incontinence

- Urine loss with no warning or urge
- Cannot tell the need to go

Overflow Incontinence

- Full bladder and it feels like it's never empty
- Often constant dribbling of urine
- Frequency and urgency of urination increase

Functional Incontinence

- occurs when the urinary system may work well, but factors outside the urinary tract, such as immobility or cognitive impairment, can prevent a person from getting to a bathroom in time

Recommended Products



Adult Briefs Extended Use Briefs Bariatric Briefs

OTHER RECOMMENDATIONS



- Education of caregivers focusing on accurate assessment of IAD
- Creation of clearly defined protocols that are evidence based and cost effective
- Continued research to enhance the understanding of IAD, its prevention and treatment

The National Pressure Ulcer Advisory Panel (NPUAP), April 2016 npuap.org

GETTING HELP FOR INCONTINENCE



Use Your Resources:

- CWS or other wound specialist to consult
- Manufacturer support clinically
- Dietitian to review diet, fluids, effect on bowel/bladder
- Restorative nursing to evaluate for toileting program
- Therapy to evaluate function, strength, toileting ability
- Physician or NP involvement
- Web resources: www.npuap.org



QUESTIONS

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THANK YOU

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