

PRESSURE ULCER RISK PROFILE: **THE ELECTIVE HIP REPLACEMENT SURGERY PATIENT**

Problem	Early mobilization may not eliminate pressure ulcer risk Sacral and heel ulcers common Heel ulcer prevalence after elective hip replacement 13% ⁸
Consequences	Increased length of stay and costs ^{8,9} Limitation of rehabilitation (heel ulcer) and quality of life ⁸
Contributing factors	Age ⁸ Respiratory disease, low hemoglobin, decreased pulse ⁸ Altered mental status ⁸ Decreased movement due to pain increases skin temperature and moisture
Conclusion	Microclimate management may benefit joint replacement population
Solution	Use Skin IQ™ MCM over a pressure redistribution mattress to provide enhanced benefits compared with LAL therapy ⁴ in a cost-effective manner* <ul style="list-style-type: none">• NAT reduces skin temperature and moisture⁴• Low-friction surface reduces friction and shear⁴• Pressure redistribution mattress relieves pressure⁴ Support calf to reduce risk of heel pressure ulcers Manage other modifiable risk factors

^fProfile height of LAL surface may make it difficult for joint replacement patients to mobilize



kin IQ™ MCM, intelligent and cost-effective microclimate control

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|---------------------------------|---|
| friction surface | Helps reduce shear |
| immediate availability | In-hospital stock allows rapid intervention |
| tile | Compatible with a variety of pressure redistribution mattresses on the market to streamline surface selection* |
| and easy to use | As simple to use as a fitted bed sheet |
| otes patient and
iver safety | Minimizes the need to transfer patient |
| profile design | Skin IQ™ MCM is engineered using a low-profile design that raises the patient surface only $\frac{1}{4}$ " higher than the top of the base mattress |
| e-patient-use | Disposable to minimize patient-to-patient cross-contamination |
| omical | 30-day life; no impact on capital budget |

⁴ Mattress Replacement System: Stryker® Isoflex® Mattress, Impression Support Surface: Hill-Rom® Accumax Quantum™ Mattress

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- y MG, Houghton PE. Prevalence of pressure ulcers in Canadian health-care settings. *Ostomy Wound Manage* 2004;50:22-38.

Wells G, Harrison MB. Factors associated with pressure ulcers in adults in acute care hospitals. *Adv Skin Wound Care*. 2004 Mar;17(2):80-90.

onal review. Pressure ulcer prevention: pressure, shear, friction and microclimate in context. A consensus document. London: Wounds International, 2010.

on file.

Meneses KD. Pressure ulcers and other chronic wounds in patients with and patients without cancer: a retrospective, comparative analysis of healing patterns. *Ostomy Wound Manage* 70-8.

Riko K, Seiji H, et al. Evaluation of pressure ulcers in 202 patients with cancer. *Wounds* 2007;19:13-9.

Management of pressure ulcers. *Oncology* 2001;15:1499-1516.

KE, Woodbury MG, Houghton PE. Heel pressure ulcers in orthopedic patients: a prospective study of incidence and risk factors in an acute care hospital. *Ostomy Wound Manage* 14-54.

M, Vogels R. Cost and prevention of pressure ulcers in an acute teaching hospital. *Int J Qual Health Care* 1996;8:61-6.

Abrahams E, MacMillan C, et al. Insult after injury: pressure ulcers in trauma patients. *Orthop Nurs* 1998;17:84-91.

Heinert G, Parker MJ. Pressure sores and hip fractures. *Injury* 2008;39:219-23.

M, Ziegler SM. Pressure ulcer risk following critical traumatic injury. *Adv Wound Care* 1998;11:168-73.

en M, Margolis DJ, Localio AR, et al. Extrinsic risk factors for pressure ulcers early in the hospital stay: a nested case-control study. *J Gerontol A Biol Sci Med Sci* 2008;63:408-13.

ariatric care: pressure ulcer prevention. *Wound Essentials* 2009;4:68-74.

lcer prevention and management guideline. Specialty fact sheet for practical considerations for the severely obese patient with a BMI>40 kg/m² (or BMI >35 kg/m² with significant comorbidities). Pressure Ulcer Prevention Collaborative, Queensland Health. Available at <http://www.health.qld.gov.au/>. Accessed December 29, 2010.

In IQ™ Microclimate Manager has specific indications, contraindications, safety information and
instructions for use. Please consult product labelling and instructions before use. For instructions, compatibility
and safety information specific to the bed mattress/frame, consult product labelling provided by the manufacturer.

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MEET THE CHALLENGE OF **PRESSURE ULCER PREVENTION** **& MANAGEMENT IN HOSPITALIZED PATIENTS**

Prevalence: Canadian study finds 25.1% pressure ulcer prevalence in acute care hospitals¹

Risk factors: Identified in Canadian acute-care hospitalized adult population using Braden scale²

- Age
 - Chronic health conditions
 - Sensory perception
 - Moisture
 - Mobility
 - Nutrition
 - Friction/shear



PRESSURE ULCER RISK PROFILE:

THE HOSPITALIZED ONCOLOGY PATIENT

Problem	High risk of pressure ulcer development is associated with some hospitalized cancer patients Normal wound healing process may be impaired
Consequences	Reduced quality of life Increased mortality ⁵
Contributing factors	Age ^{5,7} Anorexia, cachexia, and malnutrition ⁶ Anemia, circulatory problems reducing tissue oxygenation ^{6,7} Comorbidities impairing wound healing ⁵ Dermatotoxic treatments: ^{5,6} Chemotherapy Epidermal growth factor receptor inhibitors Radiation Impaired spontaneous movement and mobility ^{5,6} Pain, opiates, sedatives Spinal cord compression, brain metastases Pathologic fractures, weakness, debility
Conclusion	Enhanced preventive strategies are desirable ⁶ Microclimate management may increase patient comfort ⁴
Solution	Use Skin IQ™ MCM over a pressure redistribution mattress to provide enhanced benefits compared with LAL therapy in a cost-effective manner ⁴ <ul style="list-style-type: none"> • NAT reduces skin temperature and moisture⁴ • Low-friction surface reduces friction and shear⁴ • Pressure redistribution mattress relieves pressure⁴ Manage other modifiable risk factors

PRESSURE ULCER RISK PROFILE:

THE ACUTE TRAUMA PATIENT

Problem	Skin breakdown a significant problem in trauma patients hospitalized >2 days ¹⁰ ICU admission doubles pressure ulcer risk ¹¹
Consequences	LAL surfaces may be contraindicated in many types of unstable fractures
Contributing factors	Positional pressure responsible for half of skin breakdown cases ¹⁰ Immobility predicts skin breakdown ¹⁰ Mobility and moisture Braden Pressure Ulcer Risk Assessment scores linked to pressure ulcers ¹² Risk factors in hip fracture patients ¹³
Conclusion	High degree of immobility creates microclimate challenges Preventive interventions needed in ICU population ¹¹ Microclimate management can provide a simple preventive therapy
Solution	Use Skin IQ™ MCM over a pressure redistribution mattress to provide enhanced benefits compared with LAL therapy ⁴ in a cost-effective manner <ul style="list-style-type: none"> • NAT reduces skin temperature and moisture⁴ • Low-friction surface reduces friction and shear⁴ • Pressure redistribution mattress relieves pressure⁴ Manage other modifiable pressure ulcer risk factors

PRESSURE ULCER RISK PROFILE:

THE HOSPITALIZED BARIATRIC PATIENT*

Problem	Anatomic changes in adipose tissue including increased skin weight and reduced vascularity and perfusion result in poor wound healing Altered skin physiology due to anatomic changes increases risk of pressure ulcers and delays wound healing ¹⁴
Consequences	Significant challenges in effective inpatient management
Contributing factors	Impaired temperature regulation promotes profuse sweating ^{14,15} Reduced mobility due to body size ¹⁴ Repositioning challenges can cause friction and shear ¹⁴ Reduced and impaired perfusion ¹⁴
Conclusion	Tissue breakdown, infection, delayed healing Chronic skin and wound problems Urinary incontinence compromises skin integrity ¹⁴
Solution	Prevention a challenging but critical component of care ¹⁴ Microclimate management integral to prevention LAL therapy recommended to maintain skin integrity ¹⁴
Conclusion	Use Skin IQ™ MCM over a pressure redistribution mattress to provide enhanced benefits compared with LAL therapy ⁴ in a cost-effective manner <ul style="list-style-type: none"> • NAT reduces skin temperature and moisture⁴ • Low-friction surface reduces friction and shear⁴ • Pressure redistribution mattress relieves pressure⁴ Implement specialized management to maintain skin integrity

*Skin IQ™ MCM maximum weight limit 227kg (500 lbs)



SKIN IQ™
Microclimate Manager