



**OANHSS**

**LTCHA Implementation**  
MEMBER SUPPORT PROJECT

# **Appendix G: Skin and Wound Care Program Training Presentation**

**Educational Resource for Clinical Staff**

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**Ontario Association of Non-Profit Homes & Services for Seniors**

7050 Weston Road, Suite 700, Woodbridge, Ontario L4L 8G7 (P) 905-851-8821 (F) 905-851-0744 [www.oanhss.org](http://www.oanhss.org)

# Outline

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- Shearing
- Damaging Moisture
- Nutrition and Fluids
- Pressure Ulcer Assessment Staging
- Pressure Ulcer and Wound Management
- Ongoing Evaluation of Pressure Ulcers
- Documentation and Wound Assessment
- Evaluation of Pressure Ulcers Awareness and Prevention Program

# Training Objectives

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- Explain the role of a skin care coordinator in long term care
- Define Pressure Ulcers
- Summarize the etiology of pressure ulcers
- Identify factors that contribute to pressure ulcers
- Differentiate between a stage 1, 2, 3 and 4 pressure ulcers
- Describe the role of tissue tolerance, intensity of pressure and duration of pressure in the development of pressure ulcers
- Formulate prevention strategies for pressure ulcers
- Describe a pressure ulcer risk assessment score
- Describe ways to support the resident during pressure ulcer treatment
- Explain the principles of wound management

# Skin Care Management

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## Role of a skin care coordinator:

- Provide support and education to staff
- Coordinate interdisciplinary meetings
- Establish a process for residents at risk for altered skin integrity
- Conduct regular skin and wound care rounds
- Monitor wound care treatments
- Assist with tracking of wound quality indicators

# Skin Care

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- Skin care is a vital component of wound care prevention
- Age-related changes put the elderly at high risk for skin tears, pressure ulcers, arterial ulcers, venous ulcers and skin cancer
- Aging skin is often dry, and susceptible to trauma
- Keep skin away from damaging moisture (fecal, urine and wound drainage)

# Skin Assessment

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## Skin Assessment

The skin assessment can be completed while assisting the resident with other care such as bathing or dressing and should be done:

- On admission
- Upon any return of the resident from hospital
- Upon any return of the resident from an absence of greater than 24 hours
- Quarterly as per the RAI-MDS 2.0 schedule
- When there is a change in health status

# Pressure Ulcers

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## What is a Pressure Ulcer?

- Pressure ulcers; clinical manifestation of cellular death
- Develop when external pressure (the amount of force on the given area) is greater than the capillary perfusion pressure
- This results in tissue that does not receive perfusion (ischemia), becomes necrotic and dies
- Usually over a boney prominence (but can occur anywhere tissue is exposed to pressure)

# Pressure Ulcers...cont'd

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## Etiology of Pressure Ulcers

- $>32$  mmHg of capillary closing pressure can cause tissue necrosis
- May be lower in debilitated residents
- High risk residents can develop pressure ulcers within 2 hours or less
- Hospital mattresses and basic chair seating can exert pressure from 90-150mmHg

# Pressure Ulcers...cont'd

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## Risk Factors

- Age
- Immobility
- Comorbidities: renal disease, diabetes
- Drugs, steroids
- Impaired blood flow, arteriosclerosis or lower extremity arterial insufficiency
- Unprotected from incontinence
- Previously healed ulcer
- Neuropathies

# Pressure Ulcers...cont'd

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## Risk Factors...cont'd

- Admission to a long term care home
- Pain causing immobility
- Serious infection (pneumonia)
- Surgery
- Poor nutritional status
- Restraints

# Pressure Ulcers...cont'd

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## Goal of Pressure Ulcer Management and Prevention

Consistent evidenced based care, resident specific care for each resident to:

- ✓ Prevent pressure ulcers from development
- ✓ Promote healing of pressure ulcers
- ✓ Prevent infection and complications of pressure ulcers
- ✓ Prevent development of additional pressure ulcers

# Pressure Ulcers...cont'd

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## Success in Prevention

- Identify residents at risk
- Maintain and improve tissue tolerance
- Protect against pressure intensity/mechanical forces
- Reduce the incidence (pressure ulcers acquired in the facility) through educational programs

# Pressure Ulcers...cont'd

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## Screening

Registered staff assess the resident's skin and pressure ulcer risk.

The skin assessment must be done:

- ✓ On admission
- ✓ Upon any return of the resident from hospital
- ✓ Upon any return of the resident from an absence of greater than 24 hours
- ✓ Quarterly as per the RAI-MDS 2.0 schedule
- ✓ When there is a change in health status

# Pressure Ulcers...cont'd

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## Screening...cont'd

### Assessing the Resident's Risk Factors

- Concentrate on individual resident's risk factors not just a risk scale
- Identify TROUBLE

RAI-MDS 2.0 will generate an outcome score for residents called Pressure Ulcer Risk Score (PURS).

PURS score includes bed mobility, walk in room, bowel incontinence, weight loss, daily pain, shortness of breath and history of resolved pressure ulcers. A score of 6, 7, or 8 indicates high/very high risk of altered skin integrity.

# Pressure Ulcers...cont'd

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## Prevention

- Identify, modify and remove factors when possible
- Implement individualized interventions
- Evaluate the impact of the interventions and modify where appropriate

# Pressure Ulcers...cont'd

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## Tolerance

- Condition and integrity of skin
- Supporting structures influence the skin's ability to redistribute applied pressure

## Intensity

- Measurement of interface pressures
- Sensation
- Exposure to high pressures

## Duration of exposure to pressure

- High risk residents can develop pressure ulcers within 2 hours or less

# Pressure Ulcers...cont'd

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## Protect against Pressure Intensity Mechanical Forces

- Reposition at least every two hours or more dependent on tissue load, tolerance and condition
  - 30 degree rule
- Reduction of shearing and friction
  - Use of sheepskin, pillows, foam wedges, heel and elbow protectors to promote comfort and reduce shear and friction

# Pressure Ulcers...cont'd

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## Protect against Pressure Intensity Mechanical Forces

### Reduction and redistribution of pressure

- Support devices
- Supportive surfaces
  - Match product carefully therapeutic benefit and residents specific situation
  - Assess resident's response as well as characteristics and condition of the product
  - Use manufacture's instructions to prevent over inflation and or bottoming out

# Shearing

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## What is Shearing?

- Tearing and separation of tissues
- Tissues and bone move in opposite directions resulting in a disruption of angulations of blood vessels
- Pressure and shear can cause extensive damage to deep tissues

# Shearing...cont'd

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## Shearing Prevention

- ✓ Avoid dragging the resident across the bed sheets.
- ✓ Keep the bed free from crumbs and other small particles that can rub and irritate the skin.
- ✓ Discourage the bed or chair bound resident from sitting with head elevated more than 30 degrees except for short periods of time (unless medically contraindicated).
- ✓ Bony prominences should not be massaged.
- ✓ Use protection and padding as needed to prevent tissue abrasion.
- ✓ Sheepskin boots and elbow pads can be used to reduce friction on heels and elbows.
- ✓ Cleanse gently when washing the resident. Avoid rubbing or scrubbing the skin.

# Shearing...cont'd

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## Pressure Relief

- ✓ Changing position every few hours while lying in bed, or every 15 minutes while seated, significantly reduces the risk
- ✓ Providing an overhead trapeze can help residents be more mobile and reduce shearing
- ✓ Pressure-relieving and pressure-reducing devices have been developed for preventing pressure injury
- ✓ Pillows and other foams should be used to prevent bone on bone

# Damaging Moisture

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- ✓ Very important with incontinent residents
- ✓ Incontinent residents are five times more likely to develop skin breakdown
- ✓ Prolonged exposure to moisture results in maceration
- ✓ Skin becomes soft and wrinkled
- ✓ Epidermis becomes more susceptible to friction and infection

# Nutrition and Fluids

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- ✓ Healthy skin depends on a healthy, positive intake of nutrition and fluids
- ✓ Minimum of 1500 mL of fluid a day, as a maintainer of wound healing, and for prevention of wounds
- ✓ 1.5-2.0 grams of protein per kilogram of body weight to maintain wound healing
- ✓ Minerals and vitamin supplements
- ✓ Residents must be assessed, by a Registered Dietitian, on an individual basis before a nutritional program begins

# Pressure Ulcer Assessment

## STAGING

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- Staged from I-IV depending on tissue damage
- Assessment system that classifies pressure ulcers based on anatomic depth of soft tissue damage
- Closed pressure ulcers are not included in the staging
- The National Pressure Ulcer Advisory Panel (NPUAP) staging system is cited more frequently than others & is as follows:

# Pressure Ulcer Assessment

## STAGING...cont'd

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### STAGE 1

- The ulcer appears as a defined area of persistent redness in lightly pigmented skin
- In darker skin tones, the ulcer may appear with persistent red, blue, or purple hues

# Pressure Ulcer Assessment

## STAGING...cont'd

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### STAGE 2

- Partial thickness skin loss involving epidermis, dermis, or both
- The ulcer is superficial and presents clinically as an abrasion, blister, or shallow crater

# Pressure Ulcer Assessment

## STAGING...cont'd

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### STAGE 3

- Full thickness skin loss involving damage to, or necrosis of, subcutaneous tissue that may extend down to, but not through, underlying fascia
- The ulcer presents clinically as a deep crater with or without undermining of adjacent tissue
- Deeper and very difficult to heal. Primary site for a serious infection to occur

# Pressure Ulcer Assessment

## STAGING...cont'd

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### STAGE 4

- Full thickness skin loss with extensive destruction, tissue necrosis, or damage to muscle, bone, or supporting structures (e.g. tendon, joint, capsule)
- Undermining and sinus tracts may be associated with Stage IV pressure ulcers

# Pressure Ulcer Assessment

## STAGING...cont'd

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### Unstageable

- Pressure ulcers with eschar or necrotic tissue covering wound bed
- Prevents proper staging - code as Stage 4 in RAI-MDS 2.0
- May be referred to deep tissue or unstageable or Stage X

# Pressure Ulcer Assessment

## STAGING...cont'd

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### Reverse Staging-used in RAI-MDS 2.0 coding

- Pressure ulcers heal to a more shallow depth, they do not replace lost muscle, subcutaneous fat, or dermis before they re-epithelialize
- The ulcer is filled with granulation (scar) tissue composed primarily of endothelial cells, fibroblasts, collagen and extra cellular matrix
- Reverse staging does not accurately characterize what is physiologically occurring in the ulcer

# Pressure Ulcer and Wound Management

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## Principles of Pressure Ulcer Management:

- ✓ *Treat the Cause*
- ✓ *Treat or Support the Resident*
- ✓ *Treat Localized Wound*

# Pressure Ulcer and Wound Management ...cont'd

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## Treat / Remove the Cause

### Appropriate interventions include:

- ✓ Remove the pressure/pressure redistribution
  - ✓ appropriate selection of support surfaces
- ✓ Reduce shearing and friction
  - ✓ heel pressure relief
  - ✓ turning sheets
- ✓ Turning and repositioning schedules; individualized to specific residents
- ✓ Incontinence management
  - ✓ keeping resident dry and clean
- ✓ Promotion of blood flow
  - ✓ Hydration
  - ✓ avoidance of cold and injury

# Pressure Ulcer and Wound Management ...cont'd

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## Treat the Resident

### Appropriate support measures include:

- ✓ Adequate oxygen perfusion
  - ✓ elevation of edematous extremities
  - ✓ oxygen administration
  - ✓ blood pressure
  - ✓ stress management
- ✓ Nutritional and fluid status
  - ✓ identifying and implementing nutritional plan of care
- ✓ Review and control of medications known to impede wound healing
  - ✓ E.g. steroids and immunosuppressant drugs
- ✓ Glucose control for the diabetic resident
- ✓ Pain control

# Pressure Ulcer and Wound Management ...cont'd

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## Treat the Wound

### Appropriate interventions include:

- ✓ Moist Wound Healing
  - Maintaining a moist wound environment to promote healing
- ✓ Debridement
- ✓ Bioburden/Infection Control

# Pressure Ulcer and Wound Management ...cont'd

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## Clean Wound Bed

- Combatting bacteria locally:
  - Continued debridement
  - Wound irrigating and cleansing
  - Advanced dressings and moisture control
- Dressings such as silver, in combination with advanced dressings, further combat high bioburden or infection in the wound
- Research has documented that antiseptics are toxic to granulation tissue
- Antiseptics such as providine, iodine, chlorhexidine and acetic acid, should be reserved for a wound that has been established as non-healing.



# Ongoing Evaluation of Pressure Ulcers

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- A clean pressure ulcer with adequate blood supply should show evidence of stabilizing or some healing within 2-4 weeks
- If resident fails to display in this time frame reevaluate treatment plan

# Documentation and Wound Assessment

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- Documentation of wound assessment once weekly (for residents with pressure ulcers)
- Assessment should include:
  - ✓ Classification of the wound
  - ✓ Anatomical location
  - ✓ Size (length X width X depth)
  - ✓ Periwound area (status of surrounding ulcer)
  - ✓ Exudate amount and type
  - ✓ Depth of wound
  - ✓ Undermining and tunneling
  - ✓ Evidence of infection
  - ✓ Necrotic tissue amount and type
  - ✓ Pain

# Evaluation of Skin and Wound Care Program

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- Annually
- Indicators/measures
  - Prevalence of internally acquired pressure ulcers
  - Prevalence of externally acquired pressure ulcers
  - Prevalence of stage 1-4 pressure ulcers (from RAI-MDS 2.0 CIHI report)
  - Prevalence of worsening pressure ulcers