# Wound Care Education Program / Orientation

Shared by:

Glenna Fanning, RN, BSN, WCC Elizabeth Rush, RN, BSN, WCC Revised: March 28, 2019



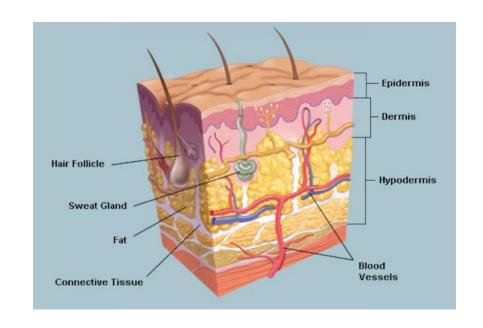
# Objectives: Upon completion of this program the nurses at St. Rose Dominican Hospitals should be able to:

- Understand and explain SRDH commitment to the prevention and the appropriate treatment of pressure injuries and other wounds
- Accurately identify wound type and stage correctly if a pressure injury is noted utilizing the staging system developed by the National Pressure Ulcer Advisory Panel (NPUAP)
- Accurately assess a patient's risk for developing a pressure injury
- Implement preventative measures according the pressure injury prevention guidelines
- Correctly measure, take the picture and complete the photographic documentation form
- Implement wound treatments per MD order &/or Dignity Health Guidelines
- Appropriately document skin/wound assessment, preventative measures and treatments in the Cerner Powerchart
- Appropriately document pressure injuries in the Event Reporting System (EVS)



#### Quick Facts and Review: Our Skin

- Largest Organ of body
- Holds body fluids in, prevents dehydration.
- Prevents harmful microbes entry into the body
- Regulates body temperature
- Involved in the synthesis of Vitamin D





#### Quick Facts and Review: Pressure Injury vs Pressure Ulcer

- "Pressure injury" is a more accurate label than "pressure ulcer" because some presentations of the phenomena are not open ulcers
- Pressure injury simply means the tissue is injured by pressure (and/or shear)
- Documenting pressure injury does not imply or assign blame. The word "injury" occurs frequently in the medical literature (e.g., kidney injury, spinal cord injury)
- Pressure Ulcer and Pressure injury verbiage are used interchangeably during this presentation





### Quick Facts and Review: Pressure Injuries – Incidence & Cost

Research detailed in the 12/15/17 issue of Ostomy Wound Management discusses pressure injuries. The verbiage pressure ulcers was used since that was the 1CD-9 coding at the time of the study.



- Pressure ulcers occur in up to 23% of patients in SNFs and IRFs.
- In ICUs the incidence of Hospital Acquired Pressure Ulcers is 10% to 41%.
- More than 60,000 patients in the US die each year as a direct result of pressure ulcers.
- Medicaid estimated each pressure ulcer adds \$43,180 in costs to an individual's hospital stay.
- Pressure ulcers also have a significant impact on patient quality of life.



Our Commitment to the Prevention and Proper Treatment of Pressure Injuries and Other Wounds



## Policy: Adult Prevention, Assessment, Treatment & Documentation of Skin & Wounds

 Purpose: Maintain or restore skin integrity. Identify and manage complications properly

- Policy:
- Skin assessments upon admit, every shift, First/Last turn skin check during bedside report and as needed
- b) Braden completion upon admit, every shift and as needed
- c) Braden score part of SBAR during shift change / transfer units
- d) Nutritional service assessment for all at risk patients



## Policy: Adult Prevention, Assessment, Treatment & Documentation of Skin & Wounds

#### Procedure:

- a) Implementation of preventative measures for at risk patients
- b) Inform MD of any wounds identified and obtain treatment orders or initiate wound management standing orders
- c) Photograph each wound utilizing the SRDH Photographic Wound Documentation form upon identification, if there are significant changes in wound, once a week, and at discharge
- d) Document in the EHR (electronic health record) and the ERS (event reporting system)



#### Best Practices Comprehensive Skin Assessment

- The process by which the entire skin of an individual is examined for abnormalities
- Requires looking at and touching the skin from head to toe,
   with emphasis on bony prominences
- Not a one time event that is limited to the patient's admission should be integrated into routine care such as any time a patient is cleaned or turned
- During an assessment or reassessment pay careful attention to the skin beneath a medical device



# Best Practices Reporting & Documenting

- Skin assessment results must be documented in the medical record
- Staff must be aware of the assessment and findings
- Failure of clear admission documentation can lead to an increase in the documentation of hospital-acquired skin integrity issues or hospital-acquires pressure injuries known as HAPU(s) or HAPI(s).
- The Braden Scale is part of the assessment and documentation process



# Best Practices Implementation of Treatment Prevention Measures

- Initiate the appropriate treatment for any existing lesions, wounds, pressure injuries, rashes etc.
- a) Contact the MD to discuss and obtain order
- b) Utilize the <u>Wound Care Guidelines</u> order if appropriate after order obtained from LIP
- c) Reach out to your resources: preceptors, Nurse Shift Managers, Clinical Educators, Wound and Ostomy nurses, Wound care physicians
- Initiate interventions for patients at risk to develop pressure / device related injuries, moisture associated skin damage or other
- a) Utilize the Skin Care Protocol order is appropriate
- b) Perform **frequent assessments, frequent repositioning**, use special equipment, ensure immaculate skin hygiene, etc.

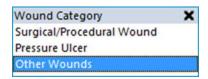


**Identifying Wound Types** 



#### **Wound Assessment**

#### Type of Wound:

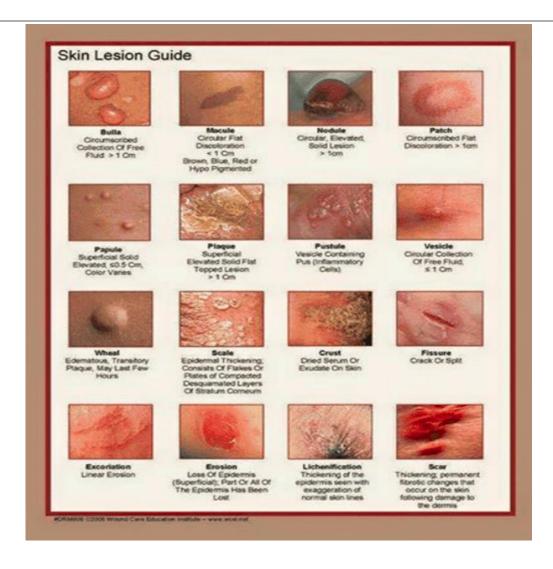




- Surgical
- Pressure Injury: Stage I, Stage 2, Stage 3, Stage 4, Unstageable & Deep Tissue Pressure Injury
- Lesion
- Abrasion
- Laceration
- Skin Tear
- Avulsion (due to trauma or surgery)
- Ulcer: Diabetic, Arterial, Venous
- MASD: Incontinence Associated Dermatitis, Intertrigo
- Rashes/Skin Conditions: Bulla, flat red rash, pustules, eczema, psoriasis



#### Lesions





### **Abrasions**









### Lacerations







### **Skin Tears**







### **Avulsions**









#### Diabetic Ulcer: Often at the pad of foot or bottom of big toe with a callus, can develop due to poor fitting shoes.









# Arterial Ulcers: Tend to be tip toes, mid tibia, and areas subject to trauma. Often necrotic or pale and dry.









# Venous Ulcers: Tend to be at medial lower leg, usually shallow and ruddy red although slough may be present

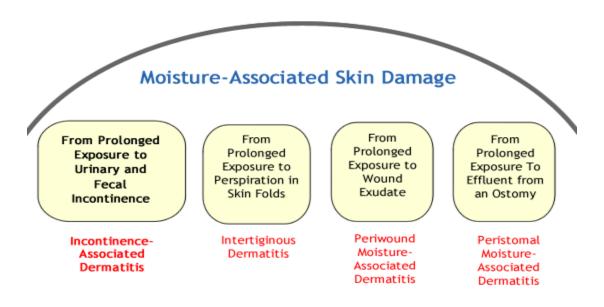






#### Moisture Associated Skin Damage (MASD)

 MASD is a generic term referring to skin damage in any location on the body due to exposure to moisture and associated irritants





#### Incontinence Associated Dermatitis (IAD)

- A reactive response of the skin as a result of chronic exposure to urine or feces
- Often observed as inflammation and erythema with or without erosion or denudation (Bryant, 2012)
- Identifying Clues: Moist skin,
   Widespread throughout perineum,
   butterfly effect





#### Intertrigo



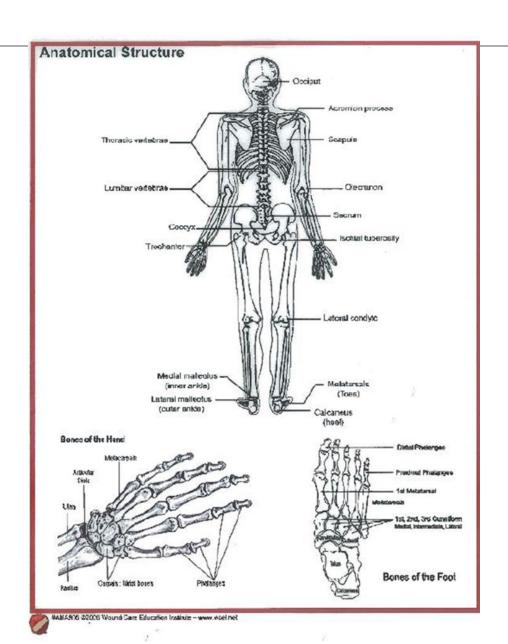




- The appearance is dependent on skin area involved and duration of inflammation.
- Erythema & weeping may progress to maceration, crusting, fissures, erosion to pustules or vesicles.
- Located under any skin fold; in patients who are obese



### **Proper Anatomical Locations**

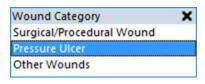


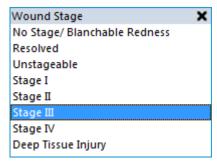


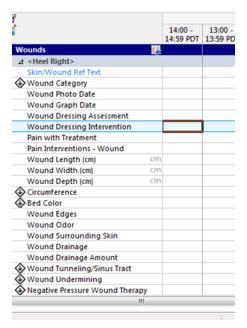
# Pressure Injuries and Correct Staging



#### Documentation of Pressure Injuries



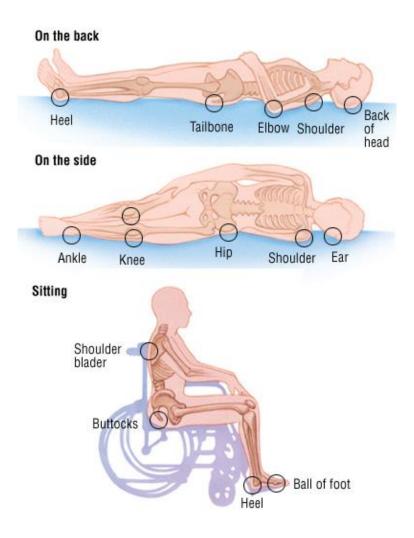




- discovery date
- Present on admission
- Wound photo date
- Wound dressing assessment/intervention
- Pain during wound care
- Dimensions: length, width, depth
- Wound bed
- Drainage
- Tunneling
- Undermining
- Summary
- Additional information



### **Common Pressure Injury Sites**





# Pressure Injury Definitions Classification of Tissue Destruction in Pressure Injury

- A pressure injury is localized damage to the skin and/or underlying soft tissue usually over a boney prominence or related to a medical (or other) device. The injury can present as intact skin or an open ulcer and may be painful. The injury occurs as a result of intense and/or prolonged pressure or pressure in combination with shear. The tolerance of soft tissue for pressure and shear may also be affected by microclimate, nutrition, perfusion, co-morbidities and condition of the soft tissue. (NPUAP, 2016)
- Stages 1-4, Unstageable, Deep tissue injury and Device related pressure ulcers (NPUAP, 2016)



### Stage 1 Pressure Injury Definition

#### STAGE 1



Stage 1 Pressure Injury: Nonblanchable erythema of intact skin Intact skin with a localized area of non-blanchable erythema, which may appear differently in darkly pigmented skin.

Presence of blanchable erythema or changes in sensation, temperature, or firmness may precede visual changes. Color changes do not include purple or maroon discoloration; these may indicate deep tissue pressure injury.



#### Stage 2 Pressure Injury Definition

#### **STAGE 2**



Stage 2 Pressure Injury: Partialthickness skin loss with exposed dermis The wound bed is viable, pink or red, moist, and may also present as an intact or ruptured serum-filled blister. Adipose

(fat) is not visible and deeper tissues are not visible. Granulation tissue, slough and eschar are not present. These injuries commonly result from adverse microclimate and shear in the skin over the pelvis and shear in the heel. This stage should not be used to describe moisture associated skin damage (MASD) including incontinence associated dermatitis (IAD), intertriginous dermatitis (ITD), medical adhesive related skin injury (MARSI), or traumatic wounds (skin tears, burns, abrasions).



### Stage 3 Pressure Injury Definition

#### STAGE 3



Stage 3 Pressure Injury:
Full-thickness skin loss Fullthickness loss of skin, in which
adipose (fat) is visible in the
ulcer and granulation tissue
and epibole (rolled wound

edges) are often present. Slough and/or eschar may be visible. The depth of tissue damage varies by anatomical location; areas of significant adiposity can develop deep wounds. Undermining and tunneling may occur. Fascia, muscle, tendon, ligament, cartilage and/or bone are not exposed. If slough or eschar obscures the extent of tissue loss this is an Unstageable Pressure Injury.



### Stage 4 Pressure Injury Definition

#### **STAGE 4**



Stage 4 Pressure Injury: Fullthickness skin and tissue loss Full-thickness skin and tissue loss with exposed or directly palpable fascia, muscle, tendon, ligament, cartilage or bone in the ulcer.

Slough and/or eschar may be visible. Epibole (rolled edges), undermining and/or tunneling often occur. Depth varies by anatomical location. If slough or eschar obscures the extent of tissue loss this is an Unstageable Pressure Injury.



#### Unstageable Pressure Injury Definition

#### **UNSTAGEABLE**



Unstageable Pressure Injury:
Obscured full-thickness skin
and tissue loss Full-thickness
skin and tissue loss in which
the extent of tissue damage
within the ulcer cannot be

confirmed because it is obscured by slough or eschar. If slough or eschar is removed, a Stage 3 or Stage 4 pressure injury will be revealed. Stable eschar (i.e. dry, adherent, intact without erythema or fluctuance) on an ischemic limb or the heel(s) should not be removed.



#### Deep Tissue Pressure Injury (DTP) Definition

#### **DEEP TISSUE PRESSURE INJURY (DTPI)**



Deep Tissue Pressure Injury:
Persistent non-blanchable deep
red, maroon or purple discoloration
Intact or non-intact skin with
localized area of persistent nonblanchable deep red, maroon,

purple discoloration or epidermal separation revealing a dark wound bed or blood-filled blister. Pain and temperature change often precede skin color changes. Discoloration may appear differently in darkly pigmented skin. This injury results from intense and/or prolonged pressure and shear forces at the bone-muscle interface. The wound may evolve rapidly to reveal the actual extent of tissue injury, or may resolve without tissue loss. If necrotic tissue, subcutaneous tissue, granulation tissue, fascia, muscle or other underlying structures are visible, this indicates a full-thickness pressure injury (Unstageable, Stage 3 or Stage 4). Do not use DTPI to describe vascular, traumatic, neuropathic, or dermatologic conditions.



### **Device Related Pressure Injury Definition**

 Medical Device Related Pressure Ulcers. (MDRPU): Localized injury to the skin or underlying tissue. as a result of sustained pressure from a device.







## Moisture Lesions vs Pressure Injuries Differentiation Between Pressure Injuries and Moisture Lesions

#### Location



A combination of moisture and friction may cause moisture lesions in skin folds, but most commonly they are present in the anal cleft.



A pressure injury is most likely to occur over a bony prominence.

#### Necrosis



There is no necrosis in a moisture lesion.



A black necrotic scab on a bony prominence is a pressure injuries classification 3 or 4.

3M acknowledges the classification in Necrosis-Pressure Injuries has since changed with recent publication of International Pressure Injury Guidelines. This literature piece is purely demonstrating the difference between moisture lesions and pressure injuries.



## Moisture Lesions vs Pressure Injuries Differentiation Between Pressure Injuries and Moisture Lesions

#### Shape



Diffuse, different superficial spots are more likely to be moisture lesions. In a kissing ulcer (copy lesion) at least one of the wounds is most likely caused by moisture.



Circular wounds or wounds with a regular shape are most likely Pressure Injuries, however, the possibility of friction injury has to be excluded.

### Edges



Moisture lesions often have diffuse or irregular edges.



If the edges are distinct, the lesion is most likely to be a pressure injury.



## Moisture Lesions vs Pressure Injuries Differentiation Between Pressure Injuries and Moisture Lesions

#### Depth



Moisture lesions are superficial (partial thickness skin loss). In cases where the moisture lesion gets infected, the depth and extent of the lesion can be enlarged.



Pressure Injuries vary in depth depending on classification.

#### Colour



If redness is not uniformly distributed, the lesion is likely to be a moisture lesion.



If redness is non-blanchable, this is most likely a pressure injuries. For people with darkly pigmented skin, persistent redness may manifest as blue or purple.

www.epuap.org







# Assessing the Risk to Develop Pressure Injury



### Assessing the Risk for Pressure Injury Development

Braden Scale: commonly used in the United States, consists of six items: sensory perception, moisture, activity, mobility, nutrition, and friction and shearing

Norton Scale: developed in the United Kingdom, consists of five items: physical condition, mental condition, activity, mobility, and incontinence

Waterlow Scale: consists of nine items, build/weight for height, visual assessment of the skin in the area at risk, sex and age, continence, mobility, Malnutrition Screening Tool score, and special risk factors including tissue malnutrition, neurological deficit, and major surgery or trauma



### Assessing the Risk for Pressure Injury Development

- Current risk assessment scales for development of pressure ulcers may not include risk factors common in critically ill adults.
- The following factors can be predictive of pressure injuries in critical care patients: advanced age, low arteriolar pressure, prolonged ICU stay, severity of illness, comorbid conditions including diabetes mellitus, sepsis, and vascular disease and the use of vasopressor agents
- What makes a patient too unstable to turn? Cardiac Arrhythmias, Oxygenation, Blood pressure, Hemorrhage, Hemodynamic status does not stabilize, unstable fracture

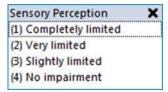


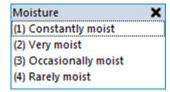
### Risk Identification / Braden Scale

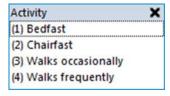
BRADEN SCALE FOR PREDICTING PRESSURE SORE RISK								
Patient's Name	atient's Name Date of Assessment							
SENSORY PERCEPTION ability to respond meaning- fully to pressure-related discomfort	Completely Limited     Unresponsive (does not moan, flinch, or grasp) to painful stimuli, due to diminished level of con-scioueness 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 restleseness OR has a sensory impairment which limits the ability to feel pain or discomfort over ½ of body.	3. Slightly Limited Responds to verbal com- mands, 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.	No Impairment Responds to verbal commands. Has no sensory deficit which would limit ability to feel or voice pain or discomfort				
MOISTURE degree to which skin is exposed to moisture	Constantly Moist Skin is kept moist almost constantly by perspiration, urine, etc. Dampnese is detected every time patient is moved or turned.	Very Moist     Skin is often, but not always moist.     Linen must be changed at least once a shift.	Occasionally Moist: Skin is occasionally moist, requiring an extra linen change approximately once a day.	Rarely Moist     Skin is usually dry, linen     only requires changing at     routine intervals.				
ACTIVITY degree of physical activity	Bedfast Confined to bed.	Chairfast     Ability to walk severely limited or non-existent. Cannot bear own weight and/or must be assisted into chair or wheelchair.	Walks Occasionally Walks occasionally during day, but for very short distances, with or without assistance. Spends majority of each shift in bed or chair	Walks Frequently     Walks outside room at least     twice a day and inside room     at least once every two     hours during waking hours				
MOBILITY ability to change and control body position	Completely Immobile     Does not make even slight     changes in body or extremity     position without assistance	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.	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 ½ 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 is NPO and/or maintained on clear liquids or IV's for more than 5 days.	2. Probably Inadequate Rarely eats a complete meal and generally eats only about ½ of any food offered. Protein intake includes only 3 servings of meat or dairy products per day. Occasionally will take a diotary supplement. OR receives less than optimum amount of liquid diet or tube feeding	3. Adequate Eats over half of most meals. Eats a total of 4 servings of protein (meat, dairy products per day. Occasionally will refuse a meal, but will usually take a supplement when offored OR is on a tubo fooding or TPN regimen which probably mosts most of nutritional needs	Excellent     Eats most of every meal.     Never refuses a meal.     Usually eats a total of 4 or more servings of meat and dairy products.     Occasionally eats between meals. Does not require supplementation.				
FRICTION & SHEAR	Problem Requires moderate to maximum assistance in moving. Complete litting 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	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 bad most of the time but occasionally slides down.	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.					
Gopyright Barbara Braden	Copyright Barbara Braden and Nancy Bergstrom, 1988. All rights reserved.  Total Score.			Total Score				

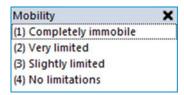


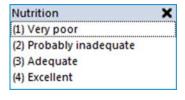
### Documentation of Risk/Braden Scale

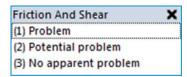












Severe Risk: Score 6-9

High Risk: Score 10-12

Moderate Risk: Score 13-14

Mild Risk: Score 15-18

Our facilities initiate interventions for all patients who score 18 or less



Implementation of Care to Reduce the Risk of Developing Pressure Injuries



## Examples of Electronic Health Record Automatic Orders, Reminders & Activates

- Low Braden: Skin care protocol order will automatically populate in EHR
- Low Braden: Reminder to document skin interventions automatically populate in EHR
- Documented Pressure Injury or nutritional subset score of 1 or 2: A Nutritional Screen Alert will automatically populate in EHR and a Nutritional consult with auto-order.
- Braden mobility score of 1 or 2: Turn patient will automatically populate under activities section (you need to implement and document)



### Implementation of Preventative Measures Skin Care Protocol





Dignity Health has chosen Medline products for their skin protocol



### Implementation of Preventative Measures Skin Care Protocol

- Medline's Ingredients: Phytoplex
- a) Mildest Surfactants (cleansing agents) utilize phospholipids that gently cleanse the skin, reducing drying and breakdown of skin
- Natural Oils non-occlusive moisturizers that let the skin breathe
- c) Oleosome Technology contains micro particles of emollient oils and vitamins that collapse and release their contents over time
- d) Silicone Based Barriers studies show our silicone based barrier has a 3-5 wash off resistance and breathability vs petrolatum
- e) Micronized Zinc highest quality zinc that is not gritty and spreads easily



### Implementation of Preventative Measures Skin Care Protocol

**GREEN IS FOR CLEAN** 

PURPLE IS FOR PROPER MOISTURIZATION

BLUE IS FOR BARRIER BEFORE BREAKDOWN

ORANGE IS FOR OPEN SKIN

**RED IS FOR RASH** 





## Implementation of Preventative Measures Pressure Relieving Bed Surfaces

- Static Air Overlay: Known as the <u>Waffle</u> mattress. Used for prevention. May be used for pressure injuries up through and including Stage 3. Deep tissue injury protection.
- Low Air Loss-Overlay: The <u>First Step Select</u> is available as a special order bed through vendor Arjo. The <u>Enterprise</u> frame must also be ordered in some cases (the overlay does not fit some of the current bedframes). Also used for prevention and pressure injuries up through and including Stage 2
- Pressure Redistribution: The <u>Citadel</u>, the <u>Citadel Plus</u> and <u>TriaDyne</u> are available as special order beds. Used for full thickness and complicated wounds (Stage 3 & 4, unstageable) and for some at risk critically ill patients



## Implementation of Preventative Measures Static Air Overlays

- EHOB Waffle Mattress Overlay:
- a) Not appropriate for pressure redistribution mattresses
- b) Use a flat sheet on top of it
- c) Pillows and wedges are placed on top of overlay
- d) Also comes in seat cushion form





## Implementation of Preventative Measures Specialty Beds

- The Wound certified nurses, the Nurse Shift Managers and the House Supervisors can discuss with you which bed is appropriate for your patient and they can order it for you if it is a special rental bed.
- Dignity Health has a Bed Therapy Selection Guideline. It includes facility owned beds and rental beds
- The guideline is for wound therapy, pulmonary therapy and bariatric care
- The guideline includes criteria to help choose which bed is appropriate



#### Dignity Health Bed Therapy Selection Guideline

ightarrow Step 1 - Utilize Owned Therapy ightarrow Step 2 - Rent If No Owned Therapy Available **Rental Therapy Owned Therapy Wound Care** (Step 1) (Step 2) Prevention & Treatment First Step Cirrus Enterprise If identified pressure injury (300 lbs) Frame (500 lbs) risk, use the appropriate Criteria: Use as an overlay owned therapy: 1. Braden <18 on top of standard 2. Patient requires minimal assistance mattress Pressure Redistribution with turning and has awareness of Linet w/ Atmos Air Do not use on positioning limitations HillRom w/ AtmosAir Versacare frame 3. May have 1 pressure injury on one turning surface: • Coccyx/Sacrum/Hip- Use Pressure Redistribution surface Heel/Extremity- Use EHOB Pressure Redistribution overlay and/or heel boots with Skin IQ-Use with Microclimate Mgmt or wedges, if needed Low Air Loss with Atmos Air • Microclimate needs- Use Pressure Surface (500 lbs) Linet w/Atmos Air & SkinIQ Redistribution and Low Air Loss • Use on owned or Linet w/Symbioso(ICU only) with Skin IQ rented standard • Hill-Rom Total Care (ICU) surface Hill-Rom /AtmosAirSkin IQ Microclimate management



#### If multiple pressure Treatment Citadel C200 (500 lbs) injuries, use the > 84" extension Criteria: appropriate owned 1. Immobile therapy: 2. Weight < 500 lbs 3. May have 1(+) pressure injuries on Alternating Pressure, multiple turning surfaces Lateral Rotation and Skin IQ 4. Microclimate management needs Microclimate Mgmt Microclimate 5. Consult Wound Care Specialist management Linet w/ Symbioso (ICU) Hill-Rom Total Care (ICU)



54

<sup>\*</sup> Age, condition and functionality of facility-owned therapy can influence rental decision-making.

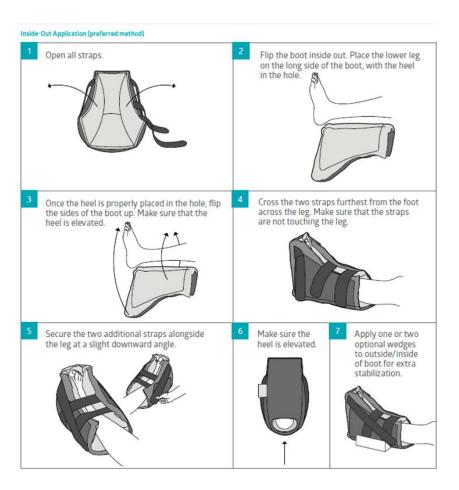
Bariatric Wound Care	Owned Therapy (Step 1)	Rental Therapy (Step 2)		
Post Op Flaps/Grafts and Burns  Criteria:  1. Patient requires technology for advanced pressure redistribution, microclimate management and pain relief  2. Exclusive therapy for burns, surgical flaps and grafts  3. Consult Wound Care Specialist	For flaps, grafts or burns, use:  Constant Low Pressure with Microclimate Mgmt  •	KinAir IV (SAC only) (300 lbs)  FluidAir (250 lbs)		
Prevention & Treatment- Mobile  Criteria:  1. Patient body mass width too great to allow for side-to-side turning and visualization of sacrum  2. Patient ambulatory or able to assist with turning and off-loading pressure injury  3. May have 1 pressure injury  4. Consult Wound Care Specialist	For mobile bariatric patient with pressure injury presence or risk, use:  Self-adjusting Technology without pump  San Martin Bariatric Bed	Citadel Plus with Atmos Air Plus (≤ 1000 lbs)		
Prevention & Treatment-Immobile  Criteria:  1. Braden score < 18  2. Patient non-ambulatory or limited assist with turning or off-loading pressure injury  3. May have 1(+) pressure injuries	For immobile bariatric patient with pressure injury presence or risk, use:  Low Air Loss (LAL) and Safe Patient Handling Support  San Martin Bariatric Bed  .	Citadel Plus with MaxxAir ETS (≤ 1000 lbs)		



Critical Care	Owne	d Therapy	Rental Therapy		
Pulmonary Therapy  1. Indications:  • Treats pulmonary complications associated with immobility  • Enhances mobilization of secretions  • Improves oxygenation of ARDS  • Reduces ventilator-associated pneumonia  2. Contraindications:  • Unstable cervical, thoracic, and lumbar fractures  • Cervical and/or skeletal traction  • Uncontrolled intracranial pressure (ICP)  3. Consult Wound Care Specialist	Owned Therapy  For pulmonary complication prevention and treatment, use:  Low Air Loss (LAL), Continuous Lateral Rotation (CLT), Percussion, Vibration and Microclimate Mgmt  • Linet w/ Symbioso (ICU) • Hill-Rom Total Care (ICU)  *Contraindications apply to Total Care Sport and Linet Symbioso		Rental Therapy  TriaDyne Proventa (350 lbs)  Order proning pack (if needed): 3-inflatable cushions (chest, hip and shin) and facial gel cushion  *See contraindications for use		
Pulmonary Therapy  1. Indication: Treats pulmonary complications associated with immobility	Owned Therapy For pulmonary complication prevention and treatment,		Rental Therapy RotoRest (Lateral rotation to 62°)		
2. Appropriate for unstable cervical, thoracic, lumbar, pelvic, skull or facial fractures and cervical and/or skeletal traction 3. Contraindications:  • Persistent intracranial hypertension  • Multiple rib fractures  • Bronchospasm  • Post-op cardiac surgery  4. Requires physician's order and advanced	Low Air Loss (LAL), Continuous Lateral Rotation (CLT), Percussion, Vibration and Microclimate Mgmt  Linet w/ Symbioso (ICU) Hill-Rom Total Care (ICU)		( ≤ 300 lbs)		
clinical inservicing <u>prior</u> to use  5. Consult Wound Care Specialist  Pulmonary Therapy		Renta	*See contraindications for use  I Therapy (ONLY)		
Indications:     Enhances mobilization of pulmonary secretices.     Optimizes effect of physiotherapy techniques.     Reduces iatrogenic lung injury from ventilatices.     Reduces ventilator-acquired pneumonia	RotoProne (Lateral rotation up to 62°) Weight 88 lbs-350 lbs Height range 4'6" to 6'6" Girth <60"				



## Implementation of Preventative Measures Heelmedix Boot



- To be used for patients who are bedbound.
- Once placed on the patient, the boot stays with them.
- Can be sent home with the patient.
- Remove boots once per shift to assess heels



### Implementation of Preventative Measures Comfort Glide Wedges

- Uniquely designed wedges can be used anywhere your patients need firm support
- Non-slip base material helps wedges stay in place where you need them most
- Flame-resistant covers can be easily cleaned according to facility guidelines
- Help to support a 30-degree tilt position





## Implementation of Preventative Measures Wedges

- Re-usable
- Cleaned by EVS between patients
- If not needed, stored in closet
- Not to leave patient room
- To be utilized under sheet for protection
- Can be cleansed with PDI or bleach wipes





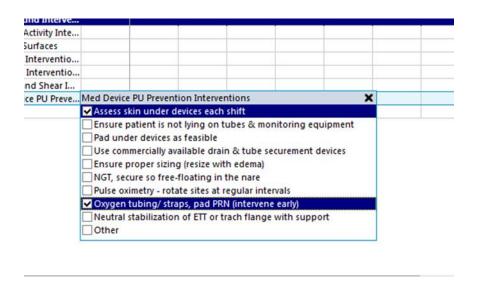
### Implementation of Preventative Measures Medical Devices

- Choose the correct size of medical device(s) to fit the individual
- Cushion and protect the skin with dressings in high-risk areas (e.g., nasal bridge)
- Inspect the skin in contact with device at least daily (if not medically contraindicated)
- Avoid placement of device(s) over sites of prior or existing pressure injury
- Be aware of edema under device(s) and potential for skin breakdown
- Confirm that devices are not placed directly under an individual who is bedridden or immobile



### Implementation of Preventative Measures Medical Devices

- Rotate devices when you turn your patients every 2 hours
- Oxygen delivery masks for CPAP/BIPAP should be alternated to prevent pressure (nasal mask for full face mask)
- Be sure to document device related prevention





### Implementation of Preventative Measures Documentation of Interventions

- Reposition every 2 hours utilizing wedges or pillows, float heels or boots
- Implement appropriate bed surface: non-friction sheets, waffle mattress, specialty bed
- Use absorbent underpads, barrier creams, internal or external containment devices, specialty beds or specialty sheets to reduce moisture exposure
- Address nutrition: nutrition consult, supplements, encourage, assist
- Check under all medical devices
- Educate patient and family

Skin Turgor	
Bony Prominence Assessed with	
✓ Skin/Wound Interventions	
Mobility/Activity Interventions	Frequently Repositioned, Heels off loaded
Support Surfaces	Low air loss beds do not substitute for turning schedules
Moisture Interventions	Moisture Barrier Applied
Nutrition Interventions-Skin Risk	Encouraged meal/supplement intake
Friction and Shear Interventions	HOB elevated 30 degrees, or less, Repositioned with pad /slip sh
Med Device PU Prevention Interventions	Assess skin under devices each shift
Position	Frequent repositioning, Left side, Turn Q2h

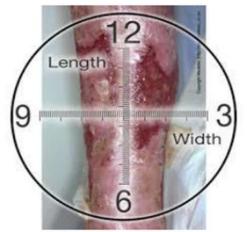


Measuring Wounds,
Wound Beds and
Photographic
Documentation



## Measuring the Wound Orient Wound to Patient

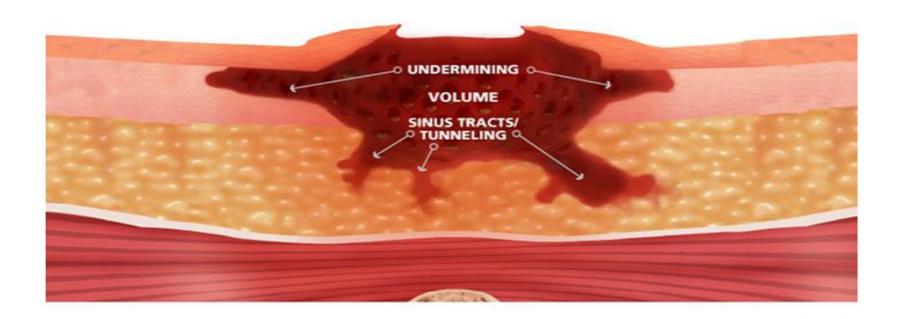
- Measuring length-Orient the wound to the patient's head (12 o'clock), length is measured head to toe (12 -6 o'clock) in cm
- Measuring Width- is measured by arm to arm (3-9 o'clock) in cm
- Measuring Depth- measure straight down to the deepest part of the wound with a cotton tipped applicator. Run your thumb and index finger to the area where the fingers meet the wound edge. Remove the applicator and place on measuring guide to measure the cm of depth.





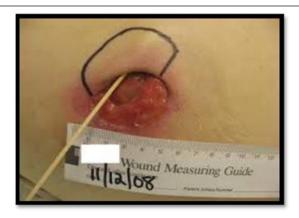


## Measuring the Wound Undermining & Tunneling

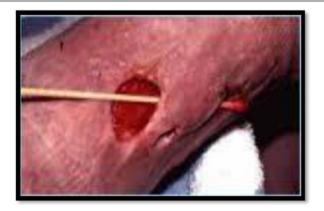




## Measuring the Wound Measuring Undermining and Tunneling



Undermining- when the edge of the wound detaches from the wound bed. Place a cotton tipped applicator in that space, measure the same as measuring depth. Document in cm and location by face of the clock.



Tunneling is measured when measuring depth.
Gently probe along the side of the wound at the base. If a sinus tract or path noted measure the same as depth. Document in cm and location by face of the clock



### Wound Bed Tissue Types







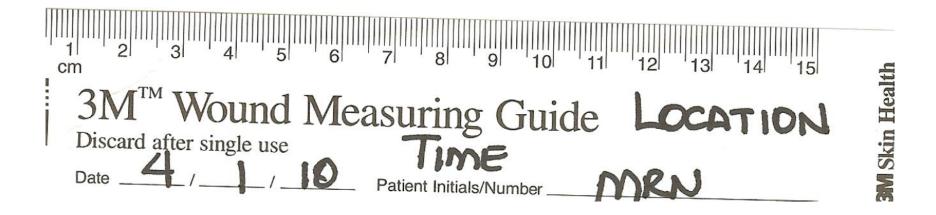


Granulation tissue- pink/red moist tissue comprised of new blood vessels and connective tissues. Fills an open wound when it starts to heal. Typically presents as deep red, surface is granular, berry-like or cobblestone

Necrotic tissue-tissue has died and lost biological activity Eschar- black or brown necrotic, devitalized tissue. Can be loose or firmly adherent; hard, soft, or boggy

Slough- soft, moist avascular necrotic tissue. May be white, yellow, tan, or green; may be loose or firmly adherent

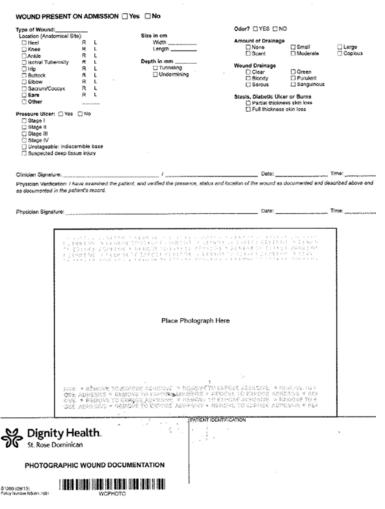
## Photographic Documentation Patient Identification within Photograph



Photographs are tied to the patient by date, Time, MRN & Location, which are to be written on the Measuring Guide



### Photographic Documentation Hard Copy in the Chart



- Pictures done at Admission
- Pictures done when patient discharged or transferred
- Pictures done every Wednesday



## Photographic Documentation Wound Photography Tips

- Turn off the flash, if you have sufficient ambient light
- Hold the camera about 6 inches away from the wound
- Have someone else hold the extremity, if necessary
- Re-take the picture, if the first picture did not turn out well
- Only one picture per photography mount page
- All pictures go in the progress note section of the chart
- DO NOT THIN the pictures out of the chart
- Erase/Delete picture on phone after it has been developed!



Implementation of Care to Treat Wounds and Pressure Injuries



## Implementation Of Wound Treatments DIMES: Approach to Wound Care

- Debridement (Is there any slough or eschar?)
- Infection/Inflammation (Am I worried about any Infection/inflammation?)
- Moisture Balance (Is it too dry and do I need to add moisture?)
   OR (Is it too wet and do I need to dry it?)
- Edge/Environment (Is the wound chronic or stalled?)
- Support with Products, Services and Education (Do I need anything else?)

Schultz, Falanga, Sibbald et al., Wound Repair Reg 11:S1-28, 2003 Woo KY, Ayello, EA and Sibbald RG Healthy Skin 5(1);22-27,2008



# Implementation of Wound Treatments Debridement/Products Commonly Used



Enzymatic

- Removal of nonviable tissue
- Methods: Sharp, Enzymatic, Autolytic, Biological, Mechanical



**Autolytic** 



Sharp



## Implementation of Wound Treatments Infection or Inflammation/Products Commonly Used

- Addressing bioburden and inflammation in the wound
- Ionic silver provides antimicrobial protection
- Choose your silver dressing according to wound drainage amount and location.







## Implementation of Wound Treatments Moisture Balance/Products Commonly Used

Achieving and maintaining moisture balance in and around the

wound

Foam



Hydrogel

Hydrocolloids





Alginate



### Implementation of Wound Treatments Edge or Environment/Products Commonly Used



- Treating stalled wounds where epithelium fails to migrate
- 100% native collagen
- Promotes a natural wound environment conducive to wound healing



## Implementation of Wound Treatments Support & Products

• Products:





- Services: Reach out to preceptors, Nurse Shift Managers, Clinical Educators, Wound and Ostomy nurses, Wound care physicians
- Education: Use the reference material on line (Cerner Powerchart) and other



### Implementation of Wound Treatments Reference Text

Dignity Health WOUND CARE GUIDELINES Guidelines based on accurate assessment and absence of infection. Relieve pressure, shear, friction and excessive moisture								
Skin Tear	Lower Extremity Ulcer	Arterial Ulcer	Miscellaneous	Infected	DTI	Checklist		
	Venous Ulcer (distal pulses are present) Shallow irregular edges. Edematous legs. Drainage is moderate to large.	(pale or necrotic wound bed) Distal puises are diminished or absent. Minimal drainage unless infected.	Maceration Over-hydrafed tissue turns white.	Surrounding erythema, odor, pain, increased drainage	Deep Tissue Injury Pulpie or marcon localized area of discolored Infact skin or blood-filled bilister due to damage of underlying soft tissue from pressure and/or sheer.	Obtain a wound consult MD/CWN for all stage III and stage IV wounds		
				(3)//		Obtain C&S on all draining wounds     Date, time and initial all dressings     Document presence of Pain and how patient tolerated the		
With Flap  Cleanse with wound cleanser Apply No Sting Barrier to peri – wound tissue and allow to dry.  Gently approximate flap with saline moistened Quity Apply silicone contact layer dressing followed by a teita dreg. Wrap with kerix Change every 7 days or pm solling or loosening.  Without Flap Cleanse with wound cleanser or saline. Apply No Sting Barrier Film to peri-wound tissue and allow to dry. Apply silicone contact layer dressing followed by a teita dreg. Wrap with kerix Change every 7 days and pm solling or loose dressing.	Cleanse with wound cleanser Apply No Sting Barrier Film to peri-wound tissue and allow to dry May apply silver alginate Cover with toam and wrap Kerlix. Change every days or pm solling or loose dressing. Check with MD for Vascular Consult  Neuropathic Ulcer Ulcer is a result of repetitive stress unrelieved pressure & trauma in an insensate foot. Cleanse with wound cleanser Apply No Sting Barrier Film to peri-wound tissue and allow to dry If dry, apply Hydrogel (wound gel) Cover with Afbesive Foam Change every 3 days or pm solling or loose dressing.	Moist Wound  ciceanse with wound ciceanser  Apply No Sting Barrier Film to perl-wound tissue and edges allow to dry.  May apply aiginate if moderate to heavy drainage  Cover with foam dressing. Change every days or pm soiling or loose dressing. Check with MD for Vascular Consult  Dry Wound  Ciceanse with wound ciceanser Apply No Sting Barrier Film to perl-wound tissue. Place Hydrogel on wound bed Cover with Foam dressing. Change every 3 days or pm soiled or loose dressing.	Cleanse with wound cleanser     Apply not Sting Barrier Film to peri-wound tissue and edges, allow to dry     Repeat process every 24 hours.  After treating maceration address remainder of the wound according to orders/guidelines	Infected  c Cleanse with wound cleanser  Swab for C& S  No-sting barrier film to periwound and edges  if moderate to heavy drainage use silver aliginate  Cover with Foam.  Notify physician to obtain orders for culture and treatment	DIII  c Clean with wound cleanser  if closed-Apply No Sting Barrier film and allow to dry  c Off load  if open, treat the pressure ulcer at the stage it is.	patent bleated the procedure  Event Report all wounds upon discovery  Implement Pressure Relief Measures  Relief Measures  Reposition frequently  Elevate heels off of bed  Keep HOB <30" urriess contraindicated  Specially bedidevice per hospital protocol  Obtain Nutritional consult  Document all wounds		

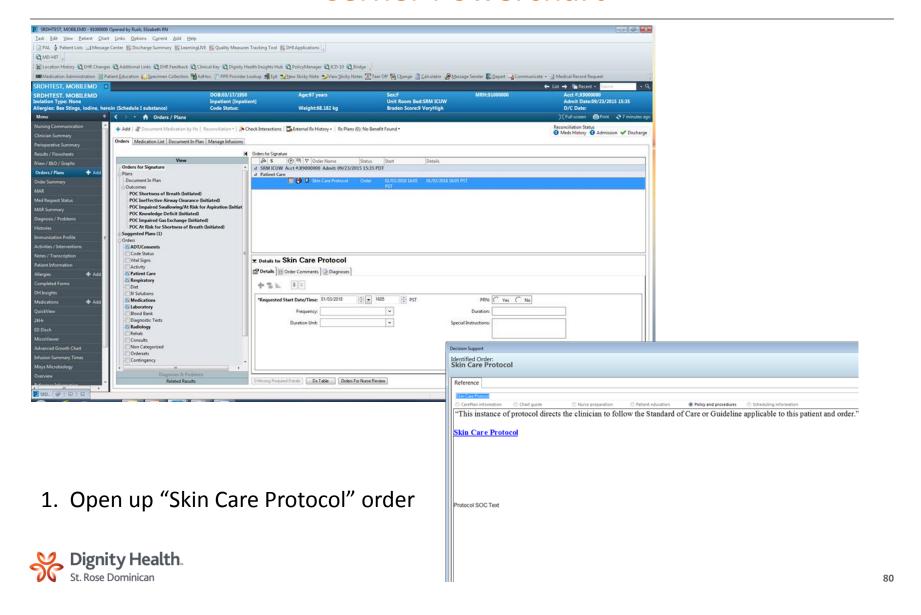


#### Implementation of Wound Treatments Reference Text

PRESSURE ULCER  Guidelines based on accurate assessment and absence of infection. Relieve pressure, shear, friction and excessive moisture.									
Stage I	Stage II		Stage III	Stage IV	Unstageable	Unstageable	Checklist		
Intact skin with non- blanchable redness of a localized area usually over a borry prominence Note: Stage I pressure ulcers should resolve with implementation of pressure redistribution strategies. —NPUAP * National Pressure Ulcer Advisory Panel	Partial thickness loss of dermis presenting as a shallow open ulicer with a red pink wound bed, without slough.  Note: This stage should not be used to describe skin tears, tape burns, perineal dermatitis, maceration, or excortation.  -NPUAP*	May be present as an intact or open/ruptured serum-filled blister - NPUAP*	Full thickness skin loss. Subcutaneous fat may be visible but bone, tendon or muscles are not exposed. Slough may be present but does not obscure the depth of tissue loss. May include undermining and tunneling. —NPUAP*	Full thickness tissue loss with exposed bone, tendon or muscle; or is directly palpable. Slough or eschar may be present on some parts of the wound bed. Often with undermining and tunneling.  —NPUAP*	Full thickness tissue loss in which the base of the ulcer is covered by slough (yellow, tan, gray, green, or brown) and/or eschar (tan, brown or black) in the wound bed.  -NPUAP*	Note: Stable (dry, adherent, and Intact without erytherna or fluctuance) eschar on the heels serves as "the body's natural biological cover" and should not be removed. -NPUAP	Obtain a wound consuit MDI/CWN for all stage III and Stage IV wounds		
		39		0		1	Obtain MD     orders to treat a wounds upon discovery.     Date, time and initial all dressings     Document presence of Pai		
Cleanse with wound Cleanser.     Apply No Sting Barrier Film or Barrier Cream.     Offload	Intact Blister-Extremity  In Cleanse with wound cleanser.  In Apply No Sting Barrier Film to blister and allow to dry.  In Cower with foam dressing.  In Change every 3 days and print excessive drainage or soiling.	Shallow Crater  c Cleanse with wound cleanser.  Apply No Sting Barrier Film to peri-wound.  Cover with foam or hydrocolloid dressing.  Change dressing every 3 days and pm soilling, saturation, or loosening.	Minimal Drainage  c Cleanse with wound cleanser.  d Apply No Sting Barrier Film to peri-wound tissue and allow to dry. Cover with foam. Change dressing every 3 days & pm solling or saturation. Heavy Drainage Cleanse with wound cleanser Apply No Sting Barrier	Cleanse with wound cleanser.     Apply No Sting Barrier Film to pertwound area and allow to dry.     Pack gently with silver alginate.     Cover with foam Change every day & prn soiling, saturation, or loose dressing.	Wet Necrotic  Cleanse with wound cleanser.  Apply No Sting Barrier Film to peri-wound area and allow to dry.  Cover with Adhesive Foam.  Contact physician for wound consult.	Drv Necrotic  c Cleanse with wound cleanser.  Apply No Sting Barrier Film allows to dry.  Officad  Contact WCN for consult	Implement Pressure Relief Measures  Reposition frequently Elevate heels off of bed  Keep HOB <30*		
EMERGENCY DEPARTMENT PROCEDURE  1. Identify Pressure Ulcer  2. Cleanse with wound deanser or normal saline  3. Obtain photograph of pressure ulcer in accordance with policy  4. \$1360  5. Measure length, width and depth and apply temporary wet to moist dressing  6. Complete Form \$1360- Photographic Wound Documentation Form			Film to peri-wound and allow to dry.  a Apply silver alginate Cover with Foam Change every 3 days & pm solling, saturation or loosening. Contact WCN	contact WCN for consult. On dry wounds apply hydrogel to gauze, place gauze in wound followed by a foam dressing.	Heavy Drainage Use Silver Alginate		unless contraindicated Specialty bed/device per hospital protoco Obtain Nutrition consuit Document all wounds		



## Implementation of Wound Treatments Cerner Powerchart

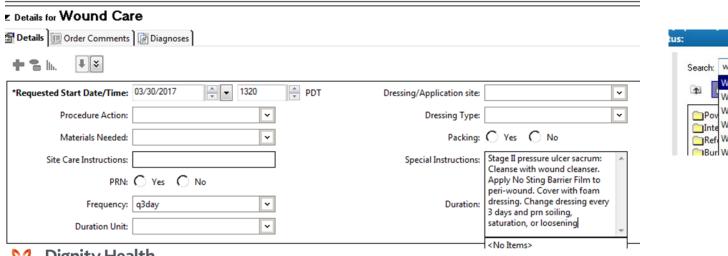


## Implementation of Wound Treatments Cerner Powerchart

2. Open up the Reference text and scroll to the "Wound Care Guidelines"



3. Open up the wound care order and enter the specific wound, location, instructions from guidelines and **must** complete frequency

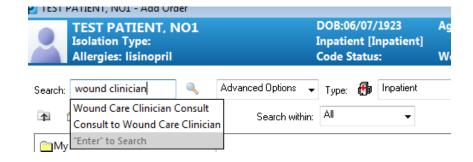






## Implementation of Wound Consult Order Cerner Powerchart

- This is the order to reach the Hospital employed woundenterostomal nurse
- Always ask the MD/hospitalist if you should initiate this order
- There are times that the physicians reach out to physicians who are wound specialists to consult and manage wound care, do not use this order for that circumstance
- Any consult should be physician to physician
- It is suggested that the physicians ask for a wound specialist MD for pressure injuries that are 3,4, and unstageable





Documenting Pressure Injuries in the Event Reporting System (ERS)



### Documenting pressure injuries The Event Reporting System (EVS)

 It's our policy: All newly identified wounds or skin breakdown are to be reported to Risk Management Services Department within 24 hours utilizing the Electronic Event Reporting System (Includes wounds/breakdown noted upon admission)

CT - In the second seco	
(-) (-) (-) (	
File Edit View Favorites Tools Help	
■ Save	♥ 🗆 🛨
General Information	
Medical Record#: "Harm:	
*Desc Of Events	
Patient First   Last Name: Age: Sex:	
Patient Type:     Describe DPHS Reportable Event	
*Event Date: "Event Reported Date: 12/14/2017 "Time:	
*Event Location & Hospital	
Event Location Descri	
Patient Location: 🚰 Reporting Location: 🚰	
Attenting	
Physician   Involved   Notified Date     Time:	
Priyscan: Witness/Other	
Involved	
Reporter First Reporter Last Name: Family Notification Dr. Notified	
Reporter Role:	
Outcome Of Event:	
Did EHR contribute to this event ?	
If yes, please explain :	
EHR Related	
Issues :-	
Policy Not Followed :	
Details on policy	
not followed :	
Results of Event	
Result1: VResult2: V	
Results	
Event Type Details	
"Event Group Type:	
*Event Type:	
	€ 100% ▼



## **Ostomy Care**

Review of products and task



### Ostomy Care at St. Rose Dominican Hospitals

- Please put in a wound consult order for all ostomy patients so the wound care/enterostomal nurse is aware they have been admitted.
- The wound/enterostomal nurse will do teaching for patient's who have a new ostomy if the nurse is available. There may be times that the nurses on the units will have to assume this responsibility.
- The wound/enterostomal nurse does have some different ostomy products in office so please contact this nurse if a patient is having ostomy leaking issues, skin issues under or around the stoma or if the patient has a fistula.
- Some fistulas are better managed with wound pouches



#### Ostomy appliance change/care

- Colostomy pouch and wafer may last 3-7 days
- Empty pouch before removing from skin
- Organize supplies before removal
  - Barrier, pouch, sizing guide, scissors, pencil, washcloths, powder and moldable rings. You may not use all of these products
- Barrier/flange should be cut prior to removal of old pouch if possible
- Remove old pouch starting at the top of the barrier/flange, do this by pushing the skin away from the wafer
- Wash the stoma and surrounding skin with warm water and gentle pressure. If you use soap, use a mild soap that contains NO oils or lotions
- Dry very well, and separate skin folds
  - If the skin is raw and moist apply a thin dusting of stoma powder to the irritation and dust off the extra or contact Wound Care Coordinator.
- · Remove protective film from barrier/flange
- Apply barrier/flange over stoma starting from the bottom. Run finger around edge to ensure adhesive in full contact with skin.
- If you are using a 2 piece system apply the pouch to the barrier/flange
- Apply firm pressure for 2-3 minutes with your hand (very important to improve adhesion and conformity)
- For a better wear time, have the patient take approx. 5 more minutes and place their warm hand over the pouch while sitting quietly. The warmth between their hand and belly will warm the barrier and improve conformity.

Revised 2018







Abbreviated instructions for use. Please refer to product labeling for complete product instructions for use, contraindications, warnings, precautions and adverse events.

#### Prepare - 1



Measure the stoma.

#### Prepare — 2



Trace measurement onto back of the barrier.

#### Prepare - 3



Cut opening in the barrier.

#### Prepare - 4



Remove protective backing by pulling the turquoise release tab away from the barrier.

#### Apply — 1



Center barrier around stoma. Secure to skin by applying gentle pressure.

#### Apply — 2



Remove the protective paper from the adhesive ring on the pouch.



For product support, call the Coloplast Consumer Care Team at 1-877-858-2656.



Place pouch by aligning the bottom edge of the adhesive ring with the turquoise line at the bottom of the floating baseplate.



Secure pouch by applying gentle pressure around the baseplate. When pouch is \( \frac{1}{3} \tau 0 \) full, proceed to either empty or remove.

#### For drainable pouches only

Empty - 1



Open the outlet by lifting both tabs off the Velcro® plate. Unfold outlet.

Empty - 2



Fold back lower plate to avoid soiling when emptying. Attach Velcro® dots to hold plate in place.

Empty - 3



Empty pouch by pinching outer edges of the outlet open.

#### Empty — 4



Clean the outlet.



## Mission Statement and Our Philosophy Dignity Health and Wounds

- Nearly every nurse will, at some point, deal with wounds, and some nurses tend to them on a daily basis. All nurses should know how to recognize, assess and effectively treat routine wounds, following hospital and physician protocols.
- Duty to promote wellness
- Obligated to the public to provide high quality care



• Dignity Health is committed to providing high-quality, affordable health care to the communities we serve. Above all else we value: Dignity - Respecting the inherent value and worth of each person. Collaboration - Working together with people who support common values and vision to achieve shared goals.



## Thank You

