

This practice algorithm has been specifically developed for MD Anderson using a multidisciplinary approach and taking into consideration circumstances particular to MD Anderson, including the following: MD Anderson’s specific patient population; MD Anderson’s services and structure; and MD Anderson’s clinical information. Moreover, this algorithm is not intended to replace the independent medical or professional judgment of physicians or other health care providers. This algorithm should not be used to treat pregnant women.

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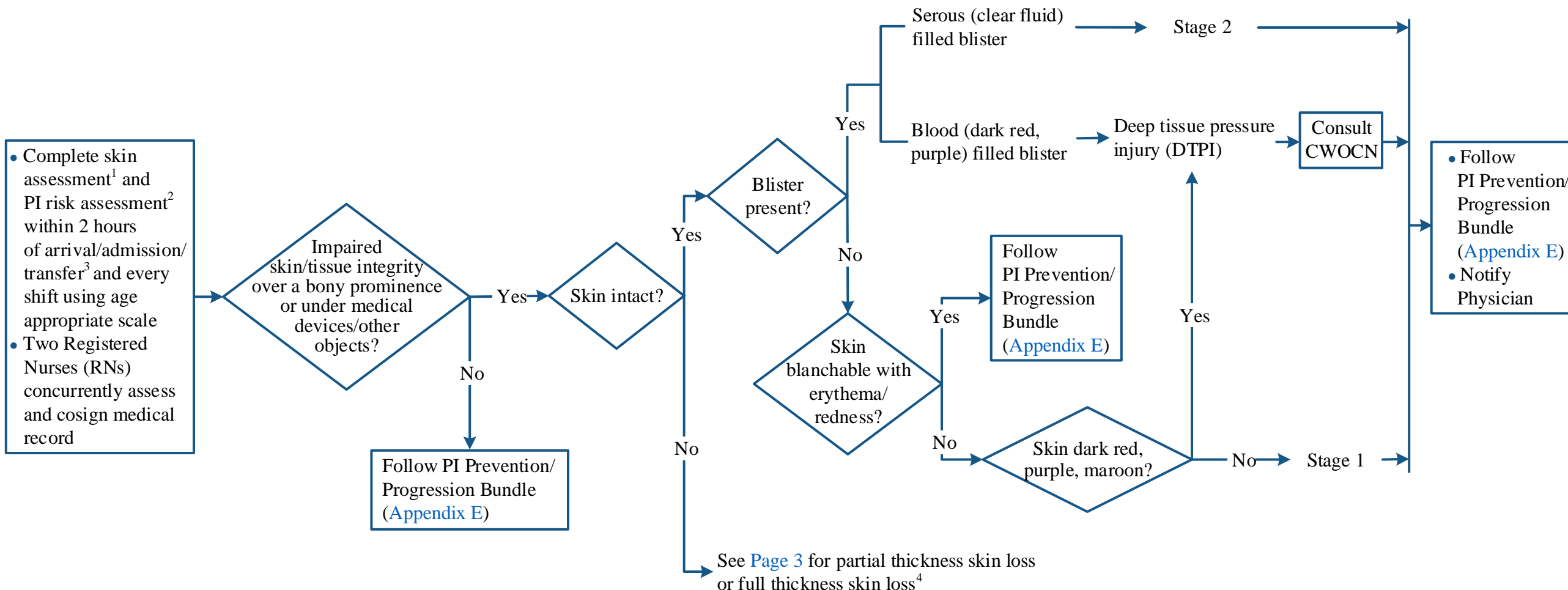
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ASSESSMENT

EVALUATION OF INJURY

STAGE

INTERVENTIONS



CWOCN = certified wound ostomy continence nurse

¹ See [Appendix A](#) for Bony Prominences: Common Sites of Pressure Injury and [Appendix B](#) for Pressure Injury Staging System

² See [Appendix C](#) Braden scale (adults) or [Appendix D](#) Braden Q scale (pediatrics)

³ Arrival/admission/transfer [Inpatient units, Perioperative, Emergency Center, Clinical Decision Unit (CDU), Pediatrics/Pediatric ICS]. Identify community-acquired versus hospital/unit acquired pressure injuries.

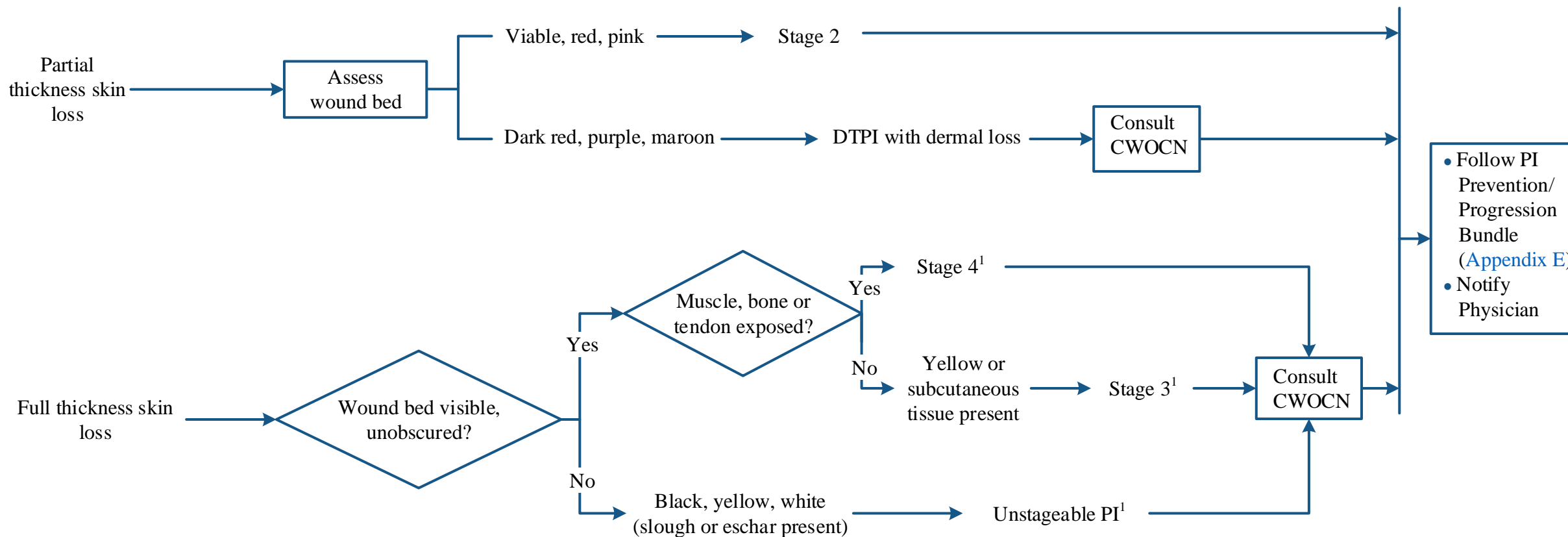
⁴ Stages 3, 4, and Unstageable PI are reportable preventable adverse events to the Texas Department of State Health Services and are reported through Patient Safety

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EVALUATION OF INJURY

STAGE

INTERVENTIONS



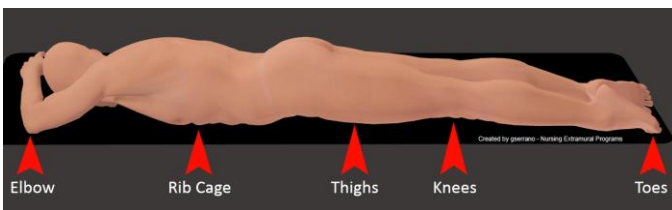
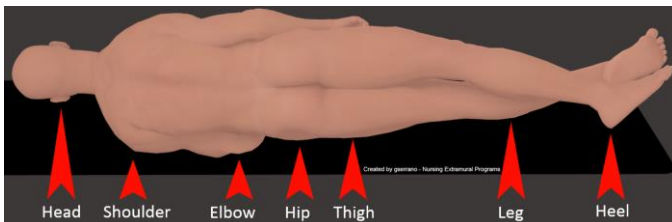
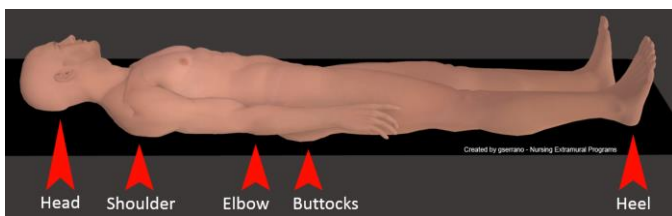
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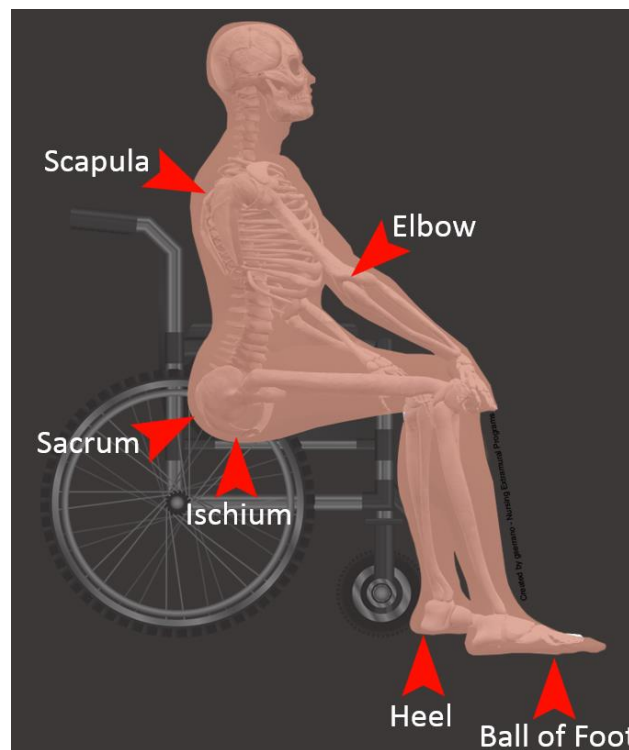
APPENDIX A: Bony Prominences: Common Sites of Pressure Injury

Impaired skin/tissue integrity over a bony prominence or under medical devices/objects

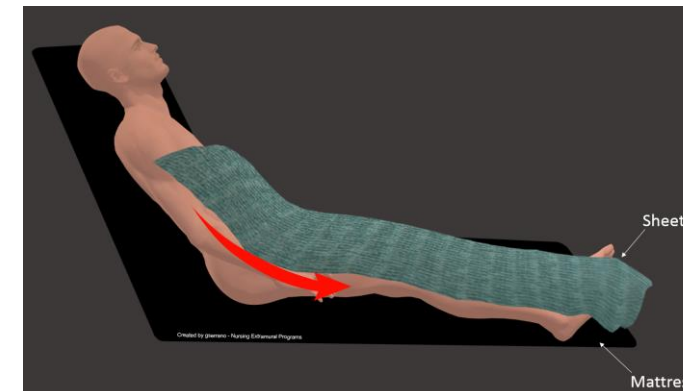
BONY PROMINENCES: COMMON SITES OF PRESSURE INJURY



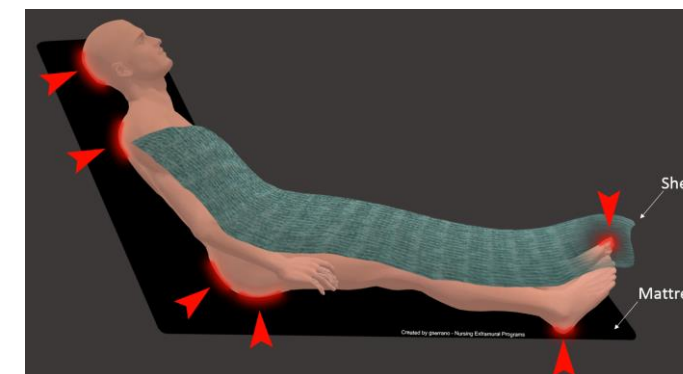
Common sites of pressure injury when lying down



Common sites of pressure injury when sitting in a wheelchair






Shear effect



Effect of friction

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APPENDIX B: Pressure Injury Staging System

<p>Stage 1: Non-blanchable erythema of intact skin</p>	 <p><i>Photo from MD Anderson WOCN resources</i></p>	<p>Intact skin with a localized area of non-blanchable erythema.</p>	<p>Unstageable: Obscured full-thickness skin and tissue loss</p>	 <p><i>Photo from MD Anderson WOCN resources</i></p>	<p>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.</p>
<p>Stage 2: Partial-thickness skin loss with exposed dermis</p>	 <p><i>Photo from MD Anderson WOCN resources</i></p>	<p>Partial-thickness loss of skin 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.</p>	<p>Deep Tissue Pressure Injury: Persistent non-blanchable deep red, maroon or purple discoloration</p>	 <p><i>Photo from MD Anderson WOCN resources</i></p>	<p>Intact or non-intact skin with localized area of persistent non-blanchable 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.</p>
<p>Stage 3: Full-thickness skin loss</p>	 <p><i>Photo from MD Anderson WOCN resources</i></p>	<p>Full-thickness 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.</p>	<p>Medical Device Related Pressure Injury:</p>	 <p><i>Photo from MD Anderson WOCN resources</i></p>	<p>Pressure injury result from the use of devices designed and applied for diagnostic or therapeutic purposes.</p>
<p>Stage 4: Full-thickness skin and tissue loss</p>	 <p><i>Photo from MD Anderson WOCN resources</i></p>	<p>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.</p>	<p>Mucosal Membrane Pressure Injury:</p>	<p>Pressure injury is found on mucous membranes with a history of a medical device in use at the location of the injury. Due to the anatomy of the tissue these ulcers cannot be staged.</p>	

Pressure Injury: A localized injury to the skin and/or underlying tissue usually over a bony prominence/medical devices/other objects, as a result of pressure, or pressure in combination with shear and/or friction.

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APPENDIX C: Braden Scale (Adults)

	1	2	3	4
Sensory Perceptions	Completely Limited: Unresponsive (does not moan, flinch, or grasp) to painful stimuli, due to diminished level of consciousness or sedation or limited ability to feel pain over most of body.	Very Limited: Responds only to painful stimuli. Cannot communicate discomfort except by moaning or restlessness or has a sensory impairment which limits the ability to feel pain or discomfort over half of body.	Slightly Limited: Responds to verbal commands, 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	Constantly Moist: Skin is kept moist almost constantly by perspiration, urine, etc. Dampness 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	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	Completely Immobile: Does not make even slight changes in body or extremity position without assistance.	Very Limited: Makes occasional light changes in body or extremity position but unable to make frequent or significant changes independently.	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	Very Poor: Never eats a complete meal. Rarely eats more than 1/3 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 IVs for more than 5 days.	Probably Inadequate: Rarely eats a complete meal and generally eats only about 1/2 of any food offered. Protein intake includes only 3 servings of meat or dairy products per day. Occasionally will take a dietary supplement or receives less than optimum amount of liquid diet or tube feeding.	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 offered or is on a tube feeding or TPN regimen which probably meets 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 and Shear	Problem: Requires moderate to maximum assistance in moving. Complete lifting without sliding against sheets is impossible. Frequently slides down in bed or chair. 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 bed 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.	N/A

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APPENDIX D: Braden Q Scale (Pediatrics)

	1	2	3	4
Mobility The 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 completely turn self independently	Slightly Limited: Makes frequent though slight changes in body or extremity position independently	No Limitations: Makes major and frequent changes in position without assistance
Activity The degree of physical activity	Bedfast: Confined to bed	Chair fast: 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.	All patients too young to ambulate or walks frequently: Walks outside the room at least twice a day and inside room at least once every 2 hours during waking hours.
Sensory Perception The ability to respond in a developmentally appropriate way to pressure related discomfort	Completely Limited: Unresponsive (does not moan, flinch, or grasp) to painful stimuli, due to diminished level of consciousness or sedation or limited ability to feel pain over most of body surface.	Very Limited: Responds only to painful stimuli. Cannot communicate discomfort except by moaning or restlessness or has sensory impairment which limits the ability to feel pain or discomfort over ½ of body.	Slightly Limited: Responds to verbal commands, but cannot always communicate discomfort or 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 limits ability to feel or communicate pain or discomfort.
Moisture Degree to which skin is exposed to moisture	Constantly Moist: Skin is kept moist almost constantly by perspiration, urine, drainage, etc. Dampness is detected every time patient is moved or turned.	Very Moist: Skin is often, but not always moist. Linen must be changed at least every 8 hours.	Occasionally Moist: Skin is occasionally moist, requiring an extra linen change every 12 hours.	Rarely Moist: Skin is usually dry, routine diaper changes, linen change only requires changing every 24 hours.

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APPENDIX D: Braden Q Scale (Pediatrics) - continued

	1	2	3	4
Friction – Shear <i>Friction:</i> occurs when skin moves against support surfaces <i>Shear:</i> occurs when skin and adjacent bony surface slide across one another	Significant Problem: Spasticity, contracture, itching or agitation leads to almost constant thrashing and friction.	Problem: Requires moderate to maximum assistance in moving. Complete lifting without sliding against sheets is impossible. Frequently slides down in bed or chair, requiring frequent repositioning with maximum assistance.	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 relative good position in chair or bed most of the time but occasionally slides down.	No Apparent Problem: Able to completely lift patient during a position change. 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 at all times.
Nutrition <i>Usual</i> food intake pattern	Very Poor: NPO and/or maintained on clear liquids, or IVs for more than 5 days or albumin less than 2.5 mg/dl or never eats a complete meal. Rarely eats more than ½ of any food offered. Protein intake includes only 2 servings of meat or dairy products per day. Takes fluids poorly. Does not take a liquid dietary supplement.	Inadequate: Is on liquid diet or tube feedings/TPN which provide inadequate calories and minerals for age or albumin less than 3 mg/dl or 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 dietary supplement.	Adequate: Is on tube feedings or TPN, which provide adequate calories and minerals for age or eats over half of most meals. Eats a total of 4 servings of protein (meat, dairy products) each day. Occasionally will refuse a meal, but will usually take a supplement if offered.	Excellent: Is on a normal diet providing adequate calories for age. For example: eats/drinks most of every meal/feeding. 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.
Tissue Perfusion and Oxygenation	Extremely Compromised: Hypotensive (MAP less than 50 mmHg; less than 40 in a newborn) or the patient does not physiologically tolerate position changes.	Compromised: Normotensive; oxygen saturation may be less than 95% or hemoglobin may be less than 10 mg/dL or capillary refill may be greater than 2 seconds; serum pH is less than 7.40.	Adequate: Normotensive; oxygen saturation may be less than 95% or hemoglobin may be less than 10 mg/dL or capillary refill may be greater than 2 seconds; serum pH is normal.	Excellent: Normotensive; oxygen saturation greater than 95%; normal hemoglobin; and capillary refill less than 2 seconds.

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APPENDIX E: Pressure Injury Prevention/Progression Bundle

Minimize Pressure/Friction/Shear	
Braden Score/Braden Q Score	Interventions
<p>Total Braden score less than or equal to 18 Total Braden Q score less than or equal to 16 or Sensory Perception Subset Score less than or equal to 3 Mobility Subset score less than or equal to 3 Activity Subset score less than or equal to 3 Friction/Shear less than or equal to 2 (Tissue Perfusion Subset Score less than or equal to 2)</p>	<ul style="list-style-type: none"> • Turn/reposition patient every 2 hours while in bed • Reposition patient every 1 hour while on up on chair • Apply appropriate foam padding to at risk area(s) • Float/off load at risk area <ul style="list-style-type: none"> ○ Elevate heels/feet with pillow <ul style="list-style-type: none"> - Use offloading boot instead if patient is immobile and cannot lift heels/feet ○ Use chair cushion as appropriate ○ Order air loss pressure redistribution surface (bed/mattress) for Total Braden Score/Braden Q Score less than or equal to 14 (see Appendix F). Nurse to place bed order with "Patient Supplies: No Cosign Required" order mode. • Avoid positioning patient on an area of erythema or pressure injury • Keep head of bed at less than or equal to 30 degree angle • For medical device-related interventions (see Appendix G) • Ensure linen is free of wrinkles and bed is free of objects that may cause pressure • Do not "drag" patient - use appropriate lift or transfer device • Consult Rehabilitation Medicine Services <ul style="list-style-type: none"> ○ OT (sensory deficits/ADLs) ○ PT (mobility/exercise)
Manage Moisture and Promote Skin Care	
Braden Score/Braden Q Score	Interventions
<p>Total Braden score less than or equal to 18 Total Braden Q score less than or equal to 16 or Moisture subset score of less than or equal to 3</p>	<ul style="list-style-type: none"> • Keep skin/folds clean and dry <ul style="list-style-type: none"> ○ Cleanse skin promptly with mild/pH-balanced cleanser after episodes of incontinence ○ No diaper unless indicated ○ Establish a toileting schedule ○ Bowel management system (if indicated) • Limit to 2 layers of linens <ul style="list-style-type: none"> ○ Two layers: fitted sheet and draw sheet (no more than 3 layers if additional layers indicated) ○ Use breathable incontinence pads <ul style="list-style-type: none"> - One layer only over a low air loss/pressure redistribution surface • Apply appropriate moisture or protective skin barriers • For management of moisture-associated skin damage see Appendix H • For Moisture subset score of less than or equal to 2 order low air loss/pressure redistribution surface (bed mattress) (see Appendix F). Nurse to place bed order with "Patient Supplies: No Cosign Required" order mode

ADL = activities of daily living

OT = Occupational Therapy

PT = Physical Therapy

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Department of Clinical Effectiveness V 1

Approved by the Executive Committee of the Medical Staff on 05/29/2018

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APPENDIX E: Pressure Injury Prevention/Progression Bundle - continued

Optimize Nutrition/Hydration	
Braden Score/Braden Q Score	Interventions
Total Braden score less than or equal to 18 Total Braden Q score less than or equal to 16 or Nutrition subset score less than or equal to 3	<ul style="list-style-type: none"> • Review nutritional factors and assess hydration status • Monitor patient's weight for significant changes • Monitor patient's intake and output • Evaluate changes in dietary pattern • Monitor associated signs/symptoms that impact patient's nutritional status (e.g., nausea/vomiting, diarrhea, anorexia, cachexia) • Consult Nutrition Services

Engage, Educate and Empower	
Braden Score/Braden Q Score	Interventions
Total Braden score less than 18 Total Braden Q score less than or equal to 16	<ul style="list-style-type: none"> • Engage all healthcare professionals/staff <ul style="list-style-type: none"> ○ Notify physician upon discovery of pressure injury ○ Discuss at risk patients and patients with active pressure injury during hand-off, pod brief, physician rounding, interdisciplinary or family care conferences • Educate all nursing staff <ul style="list-style-type: none"> ○ Utilize the Clinical Practice Guidelines (CPG) in developing actions plans for education and intervention ○ Update the Patient Needs Assessment throughout the inpatient stay ○ Ensure timely consults with Nutrition, PT/OT, and CWOCN as appropriate • Empower all patients and family members <ul style="list-style-type: none"> ○ Educate at risk patients and family members about risk factors and PI prevention or progression ○ Provide educational materials and resources (e.g., Patient Education Online: Bedsore Prevention)

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APPENDIX F: Low Air Loss/Pressure Redistribution Surface (Bed/Mattress)

Bed	Indication	Weight Capacity	Bed	Indication	Weight Capacity
 <p>Envision® E700</p>	First line for at risk patients: <ul style="list-style-type: none"> • Braden Score less than or equal to 14 • Moisture Subset Score less than or equal to 2 	180 kg (400 lbs)	 <p>Envella™ Air Fluidized Bed</p>	First line for at risk patients (Braden Score of less than or equal to 14) and at least of one the following conditions: <ul style="list-style-type: none"> • Status post flap or graft • Severe pain • Poor nutrition/emaciation • Multiple pressure injuries or large in size involving more than one turning surface 	30-160 kg (70 to 350 lbs)
 <p>TotalCare® Bariatric Plus Pulmonary</p>	First line for at risk patients: <ul style="list-style-type: none"> • Braden Score less than or equal to 14 • Moisture Subset Score less than or equal to 2 Note: Equipped with Continuous Lateral Rotation Therapy (CLRT) and Percussion and Vibration therapy	90-225 kg (200-500 lbs)	 <p>Compella™ Bariatric Bed CLRT</p>	First line for at risk patients: <ul style="list-style-type: none"> • Braden Score less than or equal to 14 • Moisture Subset Score less than or equal to 2 Note: Equipped with CLRT and Percussion and Vibration therapy	115-450 kg (250-1,000 lbs)
 <p>TotalCare® Sport Connect</p>	First line for at risk patients: <ul style="list-style-type: none"> • Braden Score less than or equal to 14 • Moisture Subset Score less than or equal to 2 Note: Equipped with CLRT and Percussion and Vibration therapy	30-225 kg (70-500 lbs)			

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APPENDIX G: Medical Device Related Pressure Injury Prevention

Standard interventions for ALL devices:

- Assess site and surrounding skin every shift and as needed
- Replace protective or securement device per standards and when visibly soiled (e.g., spinal brace)
- Consult appropriate discipline for concerns regarding device that is not routinely removed
- Pad, secure or reposition devices to minimize pressure

Location	Device	Intervention
Face	BiPAP, CPAP, face mask (simple, non-rebreather mask, venti-mask)	<ul style="list-style-type: none"> • Apply small foam padding over the bridge of nose and cheeks • Evaluate failure criteria for BiPAP use
Face/Ears	Nasal cannula, high flow	Apply thin foam padding around elastic straps to protect cheeks and ears
Nose	Nasogastric tube (NGT), Dobhoff tubing (DHT)	<ul style="list-style-type: none"> • Use appropriate securement device to secure and protect bridge of nose • Use silicone tape for additional support • Apply small foam padding over the cheeks, if secured to the cheeks (e.g., pediatric)
Neck	Endotracheal tube (ET)	<ul style="list-style-type: none"> • RT to reposition the ET tube side to side every 12 hours • Allow two fingers' width between the strap and the patient's neck • Ensure ET holder/bumper is not too tight. Change ET holder as appropriate. Notify RT if indicated
	Trach plate	Apply appropriate foam padding size under trach plate
	Trach collar	<ul style="list-style-type: none"> • Apply appropriate foam padding size between the edge of trach collar and patient's skin • Allow two fingers' width between the strap and the patient's neck
Upper Extremities	Arterial line	Use soft splint to position wrist as needed
	O ₂ saturation probe	<ul style="list-style-type: none"> • Rotate site daily and as needed • Keep probe wire away from patient • For pediatric patients, use pediatric probe
	Arm sling	<ul style="list-style-type: none"> • Readjust every 2 hours when in use • Monitor for increasing edema

BiPAP = bilevel positive airway pressure
 CPAP = continuous positive airway pressure
 RT = Respiratory Therapy

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APPENDIX G: Medical Device Related Pressure Injury Prevention-continued

Location	Device	Intervention
Lower Extremities	SCD	<ul style="list-style-type: none"> Remove SCD and assess skin every shift and as needed Monitor for increasing edema
	Antiembolic stocking (AES)	<ul style="list-style-type: none"> Remove AES and assess skin every shift and as needed Ensure correct size; no wrinkles Monitor for increasing edema
	Knee immobilizer	<ul style="list-style-type: none"> Check every 2 hours for proper alignment and for pressure point checks Monitor for increasing edema
	Shrinker (for below the knee amputation)	Release for 1 hour daily
Heels/Feet	Heel offloading device	<ul style="list-style-type: none"> Ensure correct application Adjust stabilizer as appropriate Monitor for increasing edema
	Orthopedic boots	<ul style="list-style-type: none"> Ensure correct size and application Monitor for increasing edema
Abdomen	Feeding tube (e.g., J tube, PEG tube)	<ul style="list-style-type: none"> Place foam padding between tube bumper and patient's skin Use silicone tape for additional securement
	Abdominal binder	<ul style="list-style-type: none"> Remove binder every shift to assess skin Ensure correct size; no folded areas
Thigh	Indwelling foley catheter, three-way foley catheter/continuous bladder irrigation	<ul style="list-style-type: none"> Use appropriate securement device to secure and foley (with enough slack) Use silicone tape for additional securement Rotate thigh (where tubing is taped/secured)

SCD = sequential compression device J Tube = jejunostomy tube PEG = percutaneous endoscopic gastrostomy

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APPENDIX G: Medical Device Related Pressure Injury Prevention-continued

Location	Device	Intervention
Other	Braces/Collar (e.g., Spinal Brace, C Collar, Hip Abduction Brace, Knee Brace, etc.)	<ul style="list-style-type: none"> • Remove brace/collar and assess skin every shift and as needed • Monitor for increasing edema
	Drains (e.g., JP drain, nephrostomy tube, etc.)	<ul style="list-style-type: none"> • Place foam padding between tube bumper and patient's skin • Use silicone tape for additional securement • Change dressing every other day and as needed
	Tubes (e.g., rectal tube)	<ul style="list-style-type: none"> • Direct tubing away from patient • Use silicone tape for additional securement
	Other tubing (e.g., IV tubing)	<ul style="list-style-type: none"> • Direct tubing away from patient • Apply small foam padding under tubing as appropriate • Use silicone tape for additional securement
	Pads and wires (e.g., cardiac monitor device, EEG, etc.)	<ul style="list-style-type: none"> • Direct wires away from patient • Rotate pad placement (if appropriate)
	Other potential objects (e.g., call light, needle cap, etc.)	<ul style="list-style-type: none"> • Ensure linens are free of wrinkles (smooth wrinkles every two hours when turning) • Ensure there are no objects caught under the patient's skin

JP = Jackson-Pratt drain

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APPENDIX H: Moisture-Associated Skin Damage (MASD) Prevention/Treatment

MASD is inflammation and erosion of the skin caused by prolonged exposure to urine, stool, saliva, mucus, perspiration, wound exudate or any other type of drainage (any substance which causes "irritation" to the skin). Gluteal, abdominal and groin skin folds are high moisture areas. **Note: MASD may progress to Pressure Injury**

Problem		Risk Factors	Prevention	Treatment
Intertriginous Dermatitis (ITD)	<ul style="list-style-type: none"> • Inflammatory skin condition of opposing skin surfaces caused by moisture • Linear breaks in skin at base of skin folds caused by overhydration of the skin due to trapped moisture and friction exerted by opposing skin folds • Most commonly occurs inframammary, axillary and inguinal skin folds • Alkaline pH of the skin in these areas supports the growth of bacteria and fungus • "Mirror-image" appearance on each side of the skin fold • Skin can be erythematous, macerated, oozing or draining • Patients report itching, pain, burning and odor 	<ul style="list-style-type: none"> • Diaphoresis • Diabetes • Broad spectrum antibiotic therapy • Obesity • Steroids • Poor hygiene • Chemotherapy 	<ul style="list-style-type: none"> • Use non-perfumed cleansers • Use non-talc powders • Avoid use of lotions or ointments under skin folds • Ensure skin folds are dry at all times • Reduce heat and moisture • Reduce skin to skin friction • Contain or divert urine/stool as appropriate (e.g., condom catheter, rectal pouch) • Use absorptive/wicking products between skin folds (e.g., moisture-wicking fabric, pillowcase, etc.) • Apply moisture barrier products (<i>dimethicone-based only</i>) 	<ul style="list-style-type: none"> • Apply moisture-wicking fabric <ul style="list-style-type: none"> ◦ Leave 1 inch area of strip exposed to air to allow for wicking of moisture • Antifungal powder only if candidiasis <ul style="list-style-type: none"> ◦ Apply lightly after cleaning and pat drying area
Periwound MASD	Damage due to prolonged contact between periwound skin and wound exudate mechanisms of injury include maceration and inflammation	Pre-existing wound	<ul style="list-style-type: none"> • Use appropriate dressing to manage exudate (pouch or dressing) • Change dressing if saturation • Change pouch weekly or as needed (e.g., leaking) • Apply only in areas where adhesion is not required • Apply non-alcohol liquid barrier film if indicated 	
Peristomal MASD	Prolonged or recurrent exposure of peristomal skin to drainage from urinary or fecal stoma, tracheostomy, gastrostomy	Stoma	<ul style="list-style-type: none"> • Establish secure pouching system • Assure correctly sized pouch opening (protection of all peristomal skin) • Assure appropriate pouch change frequency • Correct causative factors (e.g., diarrhea, peristomal hernia) 	

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APPENDIX H: Moisture-Associated Skin Damage (MASD) Prevention/Treatment - continued

Problem	Risk factors	Prevention	Treatment
<p>Incontinence-Associated Dermatitis (IAD)</p> <ul style="list-style-type: none"> • Skin damage caused by prolonged or repetitive exposure to stool and/or urine • Typically superficial, appears erythematous with patch areas of skin loss and/or with candidiasis • Source of moisture is external 	<ul style="list-style-type: none"> • Urinary and/or fecal incontinence • Altered mental status • Loss of normal “gut” flora • Poor skin condition • Use of diapers 	<ul style="list-style-type: none"> • Identify “at risk” patients • Early use of protective barrier products • Contain or divert of urine/stool as appropriate (e.g., condom catheter, rectal pouch) • “Wick” urine and liquid stool away from skin (“Wick” means to absorb and draw off) • Use only breathable, absorptive pads • Limit diaper use • Routine skin care for patients on diaper • Cleanse the skin promptly following episodes of incontinence • Use appropriate perineal cleansers/perineal wipes • Apply moisture barrier products 	<p>Intact Skin:</p> <ul style="list-style-type: none"> • Routine skin assessment and care • Routine application of moisture barrier products <p>Wet, Denuded Skin: Create “crusting” over denuded skin (“crusting” creates a “dry” surface and allows for easier application of barrier ointment)</p> <p>Steps of “Crusting”:</p> <ol style="list-style-type: none"> 1. Apply pectin powder to denuded area; then brush excess powder off 2. Spray layer of non-alcohol barrier film to seal powder

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DEVELOPMENT CREDITS

This practice consensus statement is based on majority opinion of the Pressure Injury experts at the University of Texas MD Anderson Cancer Center for the patient population. These experts included:

Stella Dike, MSN, RN, OCN (Nursing Education)
Staci Eguia, MSN, RN, CCRN (Nursing Post Anesthesia Care Unit)
Joylyn Mae Estrella, MSN, RN, OCN, CNL (Nursing Administration)
Olga N. Fleckenstein♦
Cori Kopecky, MSN, RN, OCN (Nursing)
Kasey Matura, MSN, RN, CWOCN, CFCN (Nursing WOC)
Faith Pattavana, MSN, RN, CWOCN, CFCN (Nursing WOC)
Amber Tarvin, MSN, RN, CNL (Nursing ICU)
Gloria Trowbridge, MSN, RN♦

♦ Clinical Effectiveness Development Team