Virtual WOC Wound Complex Plan of Care

Name: **Erica Crenshaw** **Date:** _____

Clinical Focus: Wound
Score 50-1 for re-submission

<table>
<tr><th>Pertinent Medical/Nursing History</th><th>Pertinent lab/diagnostic test results</th></tr>
<tr><td>Pt is a 68-year-old female with a past medical history of spina bifida, anemia, osteomyelitis, & diabetes. Pt. admitted with a stage 4 sacral pressure injury. At times she is incontinent of stool or urine & has minimal sensation in her feet and toes with some sensation in her legs & buttock areas. The wound base is red with areas of thin layer of yellow tissue, peri wound is blanchable erythema, with no fluctuance, induration, edema & not warm to touch. The shape is irregular measuring 6.6 cm x 3.4 cm x 3 cm with scant serosanguineous drainage, no odor. Current dressing is calcium alginate rope & ABD being changed every 3 days.
Pt is wheelchair bound but she still retains fair functional capacity, can wheel herself around and pivot from bed to chair & to toilet. Additionally, she can turn in bed with assistance. She has Medicaid as her insurance & lives at a skilled nursing facility as she cannot care for herself in an apartment & has no support systems. Pt. will be discharged to the SNF.

The WOC team consulted for wound and skin care.

Braden Scale
<table>
<tr><td>Sensory</td><td>2</td></tr>
<tr><td>Moisture</td><td>3</td></tr>
<tr><td>Activity</td><td>2</td></tr>
<tr><td>Mobility</td><td>2</td></tr>
<tr><td>Nutrition</td><td>2</td></tr>
<tr><td>Friction/Shear</td><td>2</td></tr>
<tr><td>Total score</td><td>13</td></tr>
</table>
Medications
Tylenol, Zofran, Fluoxetine, Ferrous sulfate, Lovenox, insulin glargine, Lipitor</td><td>Labs from current day
A1c 7.5%
HGB 11.0
HCT 34.5
Plts 248
WBC 13.15
Glucose 250
BMI 26

VS
99° 92 26 150/86</td></tr>
</table>

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Assessment	Plan/Interventions/Alternatives	Evaluation	Rationale
GI/ GU -BSx4 with no abdominal distention or pain with touch -Occasional incontinence to bowel and bladder with pt reporting ability to sense urgency and loss of bladder/ bowel control -Denies N/V Wound -Stage 4 Pressure Injury present on Admission - Areas of redness and slough to base of wound bed with desiccation noted at 3 o'clock measuring at 0.5cm and at 9 o'clock at 0.6cm and in the center of the wound bed -Irregularly shaped wound - Periwound skin is blanchable with erythema & with no fluctuance, induration, edema, warmth or macerated edges -Wound measurements: 6.6 cm x 3.4 cm x 3 cm -Scant amount of serosanguineous drainage with no odor	GI/GU Management Recommendations Plan -Inspect and palpate abdomen for signs of distention every shift -Auscultate for presence of bowel sounds/ activity every shift -Administer scheduled stool softeners and laxatives -Document pt I/Os -Repeat CBC to confirm fluid & electrolyte imbalances. Follow-up with treatment regimen as needed. -Bladder scan pt and document residual urine to the bladder -Perform intermittent catheterization when bladder measurements exceed 400mL -Dietary/ nutrition consult request for dietary, fiber and liquid intake measures and recommendations Incontinence Skin Care Management Recommendations Plan -Cleanse moist areas of skin gently with pH balanced products with every incontinence episode -Avoid applying friction or force when cleansing skin -Allow areas on skin to dry and apply Coloplast Critic Aid Clear to intact skin. Avoid contact with foam dressing -Inspect and palpate the skin including incontinence areas prone to MASD such as the perineum, genitalia, buttocks, groin/ gluteal folds, thighs, lower back and abdomen for changes to color, induration, edema, temperature change	GI/GU Management Evaluation Last visit, WOC nurse previously discussed wound healing benefits and encouragement of a simulated defecation program with Digital Stimulation to be performed every morning. Documentation demonstrates pt has BMs at the most twice in a 24 hour period or at the least every 2 days with FI primarily occurring 1-2 times in a night within a 7 day period. MAR documentation demonstrates administration of scheduled and PRN doses of oral laxatives and stool softeners qhs. Pt self-reports being forgetful with the completion of the Digital Stimulation every morning but continues to immediately notify staff of incontinence episodes and the "need to be cleaned". Documentation in pt chart demonstrates routine abdominal assessments and bladder scan measurements performed once a shift and IC documented and performed by Clinicians as needed. Nursing assistant documentation demonstrates that pt's underpad remains dry during the daytime with an average of 1-2 incontinence episodes of urine or stool leakage overnight. Incontinence Skin Care Management Evaluation Nursing assistant documentation demonstrates record of every incontinence cleaning with recommended skin cleansers, moisture barrier cream and wound dressings at pt's bedside. Clinician and NA documentation demonstrate	GI/GU Management Rationale Motility disorders of the sphincter places individuals with conditions including spina bifida at high risk for recurrent episodes of FI. The Clinician should implement measures to correct motility disorders and other reversible factors (Lonergan Callan, Francis, 2022). Occasionally, a low-dose laxative agent or softener may be used in the evening, followed by a stimulated defecation program in the morning, and waiting for defecation to occur. How quickly the stimulant works also varies from person to person (Lonerfan & Francis, 2022). Additionally, alternative stimulant programs are an option if pt doesn't feel successful with digital stimulation. The predictability of bowel movement patterns may help to reduce episodes of fecal contact on the skin. Neurological disorders such as spina bifida could precipitate acute urinary retention (AUR) (Sheldon & Santos, 2022) and cause symptoms of dehydration and electrolyte imbalance secondary to hydronephrosis and reflux. The WOC nurse may oversee care or encourage staff to carefully measure I/Os; monitoring for signs and symptoms of dehydration, electrolyte abnormalities, hypotension, and hypovolemic shock (Sheldon & Santos, 2022). Repeat blood work indicates electrolyte levels within normal range and no indications of fluid and electrolyte imbalance. IC is an accepted method of bladder emptying for individuals with neurogenic lower urinary tract dysfunction where bladder emptying is impaired or incomplete. Although AUR is

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Musculoskeletal
-Pt's baseline is chair bound and wheelchair dependent for mobility.
Braden
-Braden score of 13 with moderate risk for PI development
-Pt able to rotate self from side to side with limited assist
-+5/5 equal and bilateral upper extremity strength for transfers
-Occasional incontinence to bowel and bladder with pt reporting ability to sense urgency and loss of bladder/ bowel control
-Pt reports good appetite, enjoying at meats and low-sugar dairy products at least 3-4 times daily with 1-2 occasional snacks in between

Neurological
-Pt reports minimal sensation to bilat feet and toes with some sensation to bilat legs and buttocks
-Pt has +5/5 normal resistance and strength to bilateral upper extremities.
-Pt has +3/3 resistance able to move against gravity but not resistance

Other: Diabetic Management
-A1c 7.5% with a Glucose level of 250.
-Pt is on a Diabetic diet

and pain to touch with each shift. Document and notify changes to WOC team.
-Apply and secure female external collection device, Purewik while pt is in bed
-Apply Ultrasorb underpad beneath pt and change when soiled or saturated

Wound Care Management Recommendations Plan

-Gently cleanse the wound and periwound skin with gauze and a slow stream of NS using a saline flush
-Inspect the wound for changes in color, induration, edema, temperature change, increased drainage, and pain. Document and notify WOC team to report changes to wound changes. -Replace Calcium Alginate rope and ABD dressing, change q 3 days and apply Hydrogel (Cardinal Health hydrogel wound dressing) and lightly fluffed gauze to SIV PI
-Cover wound with waterproof transparent film dressing
-Change dressing q 3-4 days or with soiled dressing during incontinence care

Musculoskeletal Management Recommendations Plan

-Initiate standard fall risk protocol and place bed in lowest position before transfer. Instruct pt to wait and call for assistance to the bathroom
-Re-assess pt for fall risks q shift
-Place bedside commode at bedside for use when pt is alert in wheelchair or in bed
-Apply specialty redistribution chair cushion to wheelchair and limit wheelchair time to 2 hours or less. Reserve use for PT time or mealtime.
-Apply mesh underpants with a disposable

completion of skin inspections which occur every shift and with incontinence episodes.
WOC skin assessment demonstrates no evidence of IAD/MASD, maceration to the periwound skin or overhydration to any areas of skin. Sacral foam dressing is intact and in place with no folded edges or peeling. Pt verbally denies overall skin irritation, itchiness or pain.

Wound Care Management Evaluation

-WOC documentation includes wound assessment of Stage IV PI 10 days following initial assessment
with current measurements at 6.0 cm x 2.5 cm x 1.5 cm and a notable decrease to size and depth of wound. Small amounts of liquified slough noted to wound dressing with no slough assessed on wound bed
No evidence of wound desiccation to base of wound bed with areas of desiccation noted at 3 o'clock measuring 0.2cm and 9 o'clock measuring at 0.3 cm. Moderate amounts of liquified serosanguineous drainage noted to base of wound and wound dressings with no odor noted.
Blanchable periwound skin with no fluctuance, induration, edema, warmth or macerated edges

Musculoskeletal Care Management Evaluation

-Pt documentation demonstrates records each time pt was transferred from wheelchair to bed and from chair to bedside commode. No new witnessed or unwitnessed falls documented over the last 10 days of admission.
WOC nurse previously fitted pt for specialty

primarily a clinical diagnosis, a bladder scan will further confirm the diagnosis before catheterization IC mimics normal bladder function allowing the bladder to fill and periodically to empty completely reducing infection risk. (Newman, 2022).

Incontinence Management Rationale

A guideline for IAD prevention and treatment involves key interventions including risk assessment, continence management, skin assessment, and skin care. The most effective way to prevent IAD is to eliminate or reduce incontinence episodes which removes the primary factors (moisture, irritants, friction) that contribute to skin injury (Thayer & Nix, 2022) as outlined in the GI/GU Management Recommendations Plan.
Best practice guidelines for cleansing advocates use of no-rinse, "pH balanced" liquid cleansers. Cleansers for incontinence are water-based solutions containing surfactant ingredients to reduce surface tension and allow cleansing with a minimum of friction. "Gentleness" has consistently been identified as an important criterion for cleanser selection (Thayer & Nix, 2022). Performing routine skin inspections thereafter will greatly reduce progression of skin injury such as MASD or maceration to the periwound and could help to immediately escalate a plan of care.
Protection of skin is the second critical step in a structured skin care regimen.
Protection from liquid stool, or dual stool and urine, require a substantive barrier that's capable of protecting skin from irritant (i.e. fecal enzymes) in addition to moisture remaining in place over the affected area. Barrier function is achieved

insert and line wheelchair with Ultrasorb advanced underpads when pt is upright in wheelchair
-Apply bilateral Stryker Heel protector boots with ventilation holes while pt is in bed
-Remove bilateral protector boots while showering or during foot inspections
-Apply foot powder to bilateral feet as needed to prevent moisture build-up inside heel protector

Braden Scale Recommendations Plan

-Perform pain assessment and assess for intact pain and sensory reflex to bilateral upper and lower extremities q shift.
-Replace standard mattress and place pt on a specialty low air loss mattress
-Instruct pt to immediately call when soiled in the bed
-Perform immediate incontinence cleaning with episodes of pt incontinence
-Turn q2h from right lateral side to left lateral side. Avoid lying in prone position for extended periods of time

Neurological Management Recommendations Plan

-Wash bilateral bare feet with pH balanced cleanser daily. Use lukewarm water between 90 and 95 deg and avoid scalding hot water temps prior to foot cleansing.
-Inspect skin and nails for changes in integrity, ulcerations, bleeding, nail thickening, increased pain, discoloration and signs of infection q shift. Document and report changes to WOC
-Instruct pt to wear bilateral foot protectors while in bed and to protective footwear while out of bed. Remove protective foot coverings only when

redistribution wheelchair cushion and no new PI/ DTPI documented or assessed.

Braden ScaleEvaluation

-The primary interventions of focus involve Sensory, Moisture, Activity, Mobility and Friction+Shear. Pt documentation demonstrates intact and equal sensation to U/L extremities with ability to support, reposition and turn self with ease. Pt also has intact protective sensation to all extremities with documented numerical pain assessment values noted in chart. Q2 hour turns also recorded in pt documentation q shift with records showing right and left sided lying techniques with NA notes documenting pt incontinence cleaning with the assist of x1 care provider. WOC nursing assessment of pt placement in specialty low air loss mattress. Current Braden score is 16 with a minimal risk for development of PI which has trended upward from the original score of 13 upon admission.

Braden Scale

Sensory	**2**
Moisture	**3**
Activity	**2**
Mobility	**3**
Nutrition	**4**
Friction/Shear	**2**
Total score	**16**

Neurological Management Evaluation

-Since admission, documentation has demonstrated an absence of wounds or skin deformities to bilat lower extremities/ feet. No wound or skin abnormalities to the bilat lower extremities/ feet noted in WOC nurse

by adding common ingredients such as zinc oxide, petrolatum, and dimethicone alone or in combination (Thayer & Nix, 2022) such as in Coloplast Critic Aid Clear ointment. After placing the external collection device, it's connected to a low suction allowing for diversion and containment of urine, thus preserving the perineal area (and buttocks) from erosion from urine wetness and dampness and assisting in prevention of skin breakdown (Kent & Holderbaum, 2022). Absorbent underpads are frequently the first-line product used in acute care to manage pts w/ UI/ FI. They are designed to be used in a bed or chair and lack absorbent filling allowing pooling of urine on the thin surface (Kent & Holderbaum, 2022). Ultrasorb underpads are designed to greatly reduce the risk of moisture retention or build-up. Additionally, at this time, vanishing barrier creams and polymer-based barriers attach to the skin and appear to not transfer to other surfaces, maintaining functionality of BWAP (Thayer & Nix, 2022).

Wound Care Management Rationale

Hydrogels are designed to hydrate the wound through the donation of water. While alginate rope can be used as a filler, they are indicated for wounds with moderate to heavy exudate (Jaszarowski & Murphree, 2022) and hydrogel dressings are composed of polymers which work to expand and serve as a filler when in contact with water. This wound has minimal amounts of exudate and alginate ropes covered with ABD dressings could create a desiccating effect to the wound ultimately damaging cells in wound healing. Transparent films are semiocclusive dressings that keep a

	showering or inspecting feet. Nursing Communication Order Check and document blood glucose POCT achs If insulin coverage is given for bedtime blood glucose POCT, recheck blood glucose POCT 4 hours later Review insulin parameters and administrations with physician	assessment during this pt visit. WOC nurse assessment includes Monofilament Testing this visit to determine (+/-) and degree of LOPS. Pt was able to feel 10/10 sites to bilat plantar feet w/ presence of intact protective sensation noted. Pt will be referred to the Vascular team for further consultation and evaluation if any plantar sites to the feet denote LOPS/ absence of protective sensation. Pt Diabetes Management and Evaluation -Dietary and nutrition consultation was completed 8 days ago for recommendations of limited carbohydrate and sugar intake. Current A1C is 6.5% with POC of 160 (outside of sliding scale parameters for coverage) taken during the daytime before breakfast. MAR documentation demonstrates a need for long-acting insulin coverage a total of 2 times before lunchtime with a POCT of 194 and 205 within the last 48 hours. Documentation shows that far less coverage has been needed compared to 8 days ago when insulin coverage was needed achs for elevated POCTs. The Endocrinology team will be consulted following a trend of uncontrolled glycemic levels.	wound moist by retaining moisture lost by the wound. They serve as a great secondary product when wounds are at risk for contamination from urine and stool and also promote autolysis, liquifying nonviable tissue such as slough (Jaszarowski & Murphree, 2022). An alternative dressing to replace the transparent film dressing is the foam dressing with a change frequency of daily or qod. Foam dressings maintain a moist wound surface and promote autolytic debridement of moist avascular tissue and slough (Jaszarowski & Murphree, 2022) which could work synergistically in the presence of hydrogel. Foam dressings also provide extra cushion protecting bony prominences from PIs, and are easy for caregivers to change and manage. Musculoskeletal Care Management Recommendations Plan -Wounds that develop from sitting are located on the sacrum when slouching, sliding, or reclining and pressure redistribution chair cushions should be used with seated individuals at risk for PI development (Mackey & Watts, 2022; EPUAP/NPIAP/PPPIA, 2019). Pts Pts with existing ischial/ sacral PIs should avoid sitting for long periods of time until injury has completely healed (Mackey & Watts, 2022). The pt should be advised and re-advised to ‘call before fall’ to decrease fall risks especially in pts reliant on mechanical assist devices. A surface that increases the pt’s overall height in bed or creates distance between mattress and side rails increase risk for falls. A pressure redistribution surface that minimizes height and gaps reduces fall risk (Mackey & Watts, 2022). Bed and/ or chair bound pts are at high risk for DTPI and should have their heels off loaded. Ideally, off-loading

			devices should completely elevate/ float the heel without creating pressure in another location, reduce friction and shear, protect from foot drop and rotation of leg and easy to clean (Bonham, 2022).
			<u>Braden Management Rationale</u> -The most widely used risk assessment tool is the Braden Scale depicting extrinsic factors (increased moisture, increased friction, and increased shear forces), as well as intrinsic factors (nutrition) that affect intensity and duration of pressure on tissue (Edsberg, 2022). If the pt's nutrition is intact and sensory assessments demonstrate intact sensation to pain, performance of interventions focusing on areas of Moisture, Activity, Mobility and Friction+Shear could promptly be addressed to increase Braden score and decrease PI development risk. The low air loss support surface has been reported as an effective treatment surface improving wound healing outcomes. As the pt sinks into a low air loss mattress, weight is evenly distributed for pressure redistribution (Mackey & Watts, 2022). Clinician/ NA documentation and WOC assessment supports ongoing evaluation and interventions were performed q shift. <u>Neurological Management Rationale</u> Diabetes is a common comorbid condition and those with long-standing or poorly controlled diabetes significantly increases the risk for both LEAD and LEND. Neuropathy places the individual at risk for LOPS resulting in painless trauma (Beuscher, 2022) and although Braden assessments call to measure and account for sensation related to pain, a Sensorimotor assessment is a critical screening tool used as an early indicator testing severity. The Monofilament test is a tool recommended by the International Diabetes Federation the World

			Health Organization (WHO) to screen sensory function. Inability to sense touch at any site denotes LOPS which has immediate implications for education and counseling (Beuscher, 2022). <u>Diabetes Management Rationale</u> Individuals with diabetes are at increased risk for non healing wounds and wound infections. Poorly managed blood glucose levels can affect the ability of a wound to heal (Friedrich, Posthauer & Dorner, 2022). Factors increasing the risk of LEAD in pts with diabetes include duration of diabetes, poor glycemic control, and use of insulin (Bonham, 2022). Including the Nutrition team as apart of her IDT became warranted at the time of admission when her blood glucose levels read 250 and was admitted with a sacral wound. Effective blood glucose control requires an interdisciplinary approach that addresses diet, physical activity, and medication management. Goals of nutrition therapy for adults with diabetes include to promote and support healthful eating-patterns, emphasize a variety of nutrient dense foods in appropriate portion sizes, and improve overall health (Friedrich, Posthauer & Dorner, 2022). Glycemic control is a critical component in improving wound outcomes.

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References

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Content		Possible Points	Awarded Points	Comments
Summary of Selected Patient	Summarizes pertinent medical and surgical history	2		
Assessment	Describe assessment findings	6		
	List current products and interventions addressing WOC needs reflective of the specialty scope of practice (wound, ostomy, or continence)	6		
	Wound and Continence Case Study Journal: Using the Braden scale, assess for pressure injury risk. **You must submit your completed Braden risk assessment with your care plan.	5		
Planning	Formulate a comprehensive management plan based on the assessment and the specialty (wound, ostomy, or continence) needs. **Wound and Continence Case Study Journal:** Include specific Braden sub-scale scores	12		
	Propose alternative products. Include generic & brand names	4		
Evaluation	Identify plan of care evaluation parameters that demonstrate the desired outcomes	6		
Rationale	Explain the rationale for identified interventions	6		
Scholarly work	Rationales referenced & cited according to APA formatting guidelines	1		
	Proper grammar & punctuation used	1		
	References: See the course syllabus for specific requirements on references for all assignments	1		
	Total Points 80 % or higher is required to pass. Minimum scores: Ostomy: 36/45 Wound and Continence: 40/50	**Score 50-1 for re-submission**		

Additional comments:

Reviewed by: _____ Date: _____