

# AHRQ's Safety Program for Nursing Homes: On-Time Pressure Ulcer Healing

## ***On-Time Pressure Ulcer Assessment***

*The On-Time Pressure Ulcer Assessment* incorporates elements from the *Bates-Jensen Wound Assessment Tool* (BWAT) with additional standardized treatment and intervention descriptors. The *On-Time Pressure Ulcer Assessment* was developed by a multistate multidisciplinary design team that consisted of wound nurses, nurse leaders, and consultants from standalone nursing homes, large nursing home chains, and wound centers.

The data elements on the *On-Time Pressure Ulcer Assessment* are used to populate the electronic reports. To take advantage of the full benefit of the On-Time reports, including rules to determine risk for slow healing, data elements included in the assessment would need to be collected.

The *On-Time Pressure Ulcer Assessment* includes information on the following:

- Origin (in-house acquired, present on admission, in-house acquired by decline)
- Onset date
- Site
- Initial stage
- Size (length, width, and depth)
- Wound edges
- Undermining
- Tunneling
- Necrotic tissue type and amount
- Drainage/exudate type and amount
- Periwound area (skin color, heat/redness, edema, and induration)
- Granulation tissue
- Epithelialization
- Ulcer pain
- Current stage
- Followup ulcer status (improving, no change, worsening) per nursing judgment
- Treatments
- Adjunctive therapies
- Interventions and consultations

The following materials are provided:

- On-Time Pressure Ulcer Assessment form
- Assessment Instruction (BWAT)

# ***Bates-Jensen Wound Assessment Elements***

## **Instructions**

### **General Guidelines**

Read the definitions and methods of assessment described below. Then complete the rating sheet to assess a wound's status. Evaluate once a week and whenever a change occurs in the wound.

For each item, pick the response that best describes the wound and enter that score in the item score column for the appropriate date. When you have rated the wound on all items, determine the total score by adding together the 13 item scores. The higher the total score, the more severe the wound status. Plot total score on the Wound Status Continuum to determine progress.

### **Specific Instructions**

1. **Size:** Use a ruler to measure the longest and widest aspect of the wound surface in centimeters; multiply length x width.
2. **Depth:** Pick the depth and thickness most appropriate to the wound using these descriptions:

1 = Tissues damaged but no break in skin surface.

2 = Superficial, abrasion, blister, or shallow crater. Even with and/or elevated above skin surface (e.g., hyperplasia).

3 = Deep crater with or without undermining of adjacent tissue.

4 = Visualization of tissue layers not possible due to necrosis.

5 = Supporting structures include tendon, joint capsule.

3. **Edges:** Use this guide:

Indistinct, diffuse = Unable to clearly distinguish wound outline.

Attached = Even or flush with wound base, no sides or walls present; flat.

Not attached = Sides or walls are present; floor or base of wound is deeper than edge.

Rolled under, thickened = Soft to firm and flexible to touch.

Hyperkeratosis = Calluslike tissue formation around wound and at edges.

Fibrotic, scarred = Hard, rigid to touch.

4. **Undermining:** Assess by inserting a cotton-tipped applicator under the wound edge. Advance it as far as it will go without using undue force. Raise the tip of the applicator so it may be seen or felt on the surface of the skin. Mark the surface with a pen, and measure the distance from the mark on the skin to the edge of the wound. Continue process around the wound. Then use a transparent metric measuring guide with concentric circles divided into four (25%) pie-shaped quadrants to help determine percentage of wound involved.
5. **Necrotic Tissue Type:** Using the guide below, choose the type of necrotic tissue that is predominant in the wound according to color, consistency, and adherence:

White/gray nonviable tissue = May appear prior to wound opening; skin surface is white or gray.

Nonadherent, yellow slough = Thin, mucinous substance; scattered throughout wound bed; easily separated from wound tissue.

Loosely adherent, yellow slough = Thick, stringy, clumps of debris; attached to wound tissue.

Adherent, soft, black eschar = Soggy tissue; strongly attached to tissue in center or base of wound.

Firmly adherent, hard/black eschar = Firm, crusty tissue; strongly attached to wound base and edges (like a hard scab).

6. **Necrotic Tissue Amount:** Use a transparent metric measuring guide with concentric circles divided into four (25%) pie-shaped quadrants to help determine percentage of wound involved.

7. **Exudate Type:** Some dressings interact with wound drainage to produce a gel or trap liquid. Before assessing exudate type, gently cleanse wound with normal saline or water. Using this guide below, pick the exudate type that is predominant in the wound according to color and consistency:

Bloody = Thin, bright red

Serosanguineous = Thin, watery pale red to pink

Serous = Thin, watery, clear

Purulent = Thin or thick, opaque tan to yellow

Foul purulent = Thick, opaque yellow to green with offensive odor

8. **Exudate Amount:** Use a transparent metric measuring guide with concentric circles divided into four (25%) pie-shaped quadrants to determine percentage of dressing involved with exudate. Use this guide:

None = Wound tissues dry.

Scant = Wound tissues moist; no measurable exudate.

Small = Wound tissues wet; moisture evenly distributed in wound; drainage involves < 25% dressing.

Moderate = Wound tissues saturated; drainage may or may not be evenly distributed in wound; drainage involves > 25% to < 75% dressing.

Large = Wound tissues bathed in fluid; drainage freely expressed; may or may not be evenly distributed in wound; drainage involves > 75% of dressing.

9. **Skin Color Surrounding Wound:** Assess tissues within 4 cm of wound edge. Dark-skinned persons show the colors “bright red” and “dark red” as a deepening of normal ethnic skin color or a purple hue. As healing occurs in dark-skinned persons, the new skin is pink and may never darken.
10. **Peripheral Tissue Edema and Induration:** Assess tissues within 4 cm of wound edge. Nonpitting edema appears as skin that is shiny and taut. Identify pitting edema by firmly pressing a finger down into the tissues and waiting 5 seconds; on release of pressure, tissues fail to resume previous position and an indentation appears. Induration is abnormal firmness of tissues with margins. Assess by gently pinching the tissues. Induration results in an inability to pinch the tissues. Use a transparent metric measuring guide to determine how far edema or induration extends beyond wound.
11. **Granulation Tissue:** Granulation tissue is the growth of small blood vessels and connective tissue to fill in full thickness wounds. Tissue is healthy when bright, beefy red, shiny, and granular with a velvety appearance. Poor vascular supply appears as pale pink or blanched to dull, dusky red color.
12. **Epithelialization:** Epithelialization is the process of epidermal resurfacing and appears as pink or red skin. In partial thickness wounds it can occur throughout the wound bed as well as from the wound edges. In full thickness wounds it occurs from the edges only. Use a transparent metric measuring guide with concentric circles divided into four (25%) pie-shaped quadrants to help determine percentage of wound involved and to measure the distance the epithelial tissue extends into the wound.



Resident ID:

On-Time Pressure Ulcer Assessment

Date of Admission: M M / D D / Y Y Y Y

FACILITY NAME:

Date Ulcer Identified:										Initial Stage:				Multiple Ulcers ID Number:																																			
<table border="1"> <tr> <td>M</td><td>M</td><td>D</td><td>D</td><td>Y</td><td>Y</td><td>Y</td><td>Y</td><td></td><td></td> </tr> </table>										M	M	D	D	Y	Y	Y	Y			(Stage ulcer first identified)				<b>Multiple Ulcer ID:</b> Ulcers will be uniquely identified for reporting. Use this section if you can answer "yes" to 1 AND 2 below: 1. There are two or more ulcers on the same ulcer location and 2. Multiple ulcers on the same location were identified on the same date (i.e., ulcers have same onset date).																									
M	M	D	D	Y	Y	Y	Y																																										
Condition: New Reopened					Occurrence: Present on Admission (POA) In-House Acquired (IHA)					1 2 3 4		Unstageable sDTI																																					
Site of Ulcer:																																																	
Position of Resident When Assessed:										Guidelines suggest consistent positioning of the resident over time to enhance assessment																																							
REPORT DATE										M	M	D	D	Y	Y	Y	Y	M	M	D	D	Y	Y	Y	Y	M	M	D	D	Y	Y	Y	Y	M	M	D	D	Y	Y	Y	Y	M	M	D	D	Y	Y	Y	Y
REPORT TYPE - Initial (I) or Followup (F)										I	F	I	F	I	F	I	F	I	F	I	F	I	F	I	F	I	F	I	F	I	F	I	F	I	F	I	F	I	F	I	F								
<b>Ulcer Dimensions:</b> Enter all in centimeters to one decimal point. Enter ulcer length once; use method used at your facility (either clock or longest aspect) and enter in appropriate space. It should be noted that the CMS RAI User's Manual recognizes length as the longest point head to toe (i.e., from 12 to 6 o'clock) and width perpendicular to length.																																																	
Length (clock method – longest point from 12 to 6 o'clock)																																																	
Length (longest aspect of the ulcer)																																																	
Width (perpendicular to length at the widest point of the ulcer)																																																	
Depth (deepest point of the ulcer)																																																	
<b>Wound Edges</b>																																																	
1= Indistinct, diffuse, none clearly visible																																																	
2= Distinct, outline clearly visible, attached, even with wound base																																																	
3= Well defined, not attached to wound base																																																	
4= Well defined, not attached to base, rolled under, thickened																																																	
5= Well defined, fibrotic, scarred, hyperkeratotic																																																	
<b>Undermining</b>																																																	
Undermining Direction: Note two points on the clock to describe the location of the undermining (e.g., undermining from 12 to 4 o'clock should be entered as 12 and 04.																																																	
Length of undermining at the longest point (centimeters to one decimal)																																																	
1= None present																																																	
2= Undermining <2 cm in any area																																																	
3= Undermining 2-4 cm involving < 50% wound margins																																																	
4= Undermining 2-4 cm involving > 50% wound margins																																																	
5= Undermining >4 cm or tunneling in any area																																																	
<b>Tunneling</b>																																																	
None present																																																	
Tunneling direction (o'clock)																																																	
Length of tunneling (centimeters to one decimal)																																																	
<b>Necrotic Tissue Type</b>																																																	
1= None visible																																																	
2= White/gray nonviable tissue and/or nonadherent yellow slough																																																	
3= Loosely adherent yellow slough																																																	
4= Adherent, soft, black eschar																																																	
5= Firmly adherent, hard, black eschar																																																	

Resident ID:

REPORT DATE

M M D D Y Y M M D D Y Y M M D D Y Y M M D D Y Y M M D D Y Y M M D D Y Y

**Necrotic Tissue Amount**

1= None visible					
2= <25 % of wound bed covered					
3= 25% - 50% wound covered					
4= =>50% and <75 % of wound covered					
5= 75% - 100% of wound covered					
Enter necrotic tissue amount (enter % if 1-5 above are not used at your facility)					

**Drainage/ Exudate Type**

1= None					
2= Bloody					
3= Serosanguineous: thin, watery, pale red/pink					
4= Serous: thin, watery, clear					
5= Purulent: thin or thick, opaque, tan/yellow, without odor					
6= Purulent: thin or thick, opaque, tan/yellow, with odor					

**Drainage/ Exudate Amount**

1= None, dry wound					
2= Scant, wound moist but no observable exudate					
3= Small					
4= Moderate					
5= Large					

**Periwound Area**

1= Pink or normal for ethnic group					
2= Bright red and/or blanches to touch					
3= White or gray pallor or hypopigmented					
4= Dark red or purple and/or nonblanchable					
5= Black or hyperpigmented					

**Periwound Edema**

1= No swelling or edema					
2= Nonpitting edema extends <4cm around wound					
3= Nonpitting edema extends ≥4cm around wound					
4= Pitting edema extends <4 cm around wound					
5= Crepitus and/or pitting edema extends ≥4cm around wound					

**Periwound Induration**

1= No induration					
2= Induration <2 cm around wound					
3= Induration 2-4 cm extending <50% around wound					
4= Induration 2-4 cm extending ≥50% around wound					
5= Induration >4 cm in any area around wound					

**Periwound Temperature**

1= Normal temperature					
2= Heat noted in periwound					

Resident ID:																																			
REPORT DATE	M	M	D	Y	Y	M	M	D	Y	Y	M	M	D	Y	Y	M	M	D	Y	Y	M	M	D	Y	Y	M	M	D	Y	Y					
<b>Granulation</b>																																			
1= Skin intact or partial thickness wound																																			
2= Bright, beefy red; 75% - 100% of wound filled and/or tissue overgrowth-																																			
3= Bright, beefy red; < 75% and > 25% of wound filled																																			
4= Pink and/or dull dusky red and/or fills ≤25% of wound																																			
5= No granulation tissue present																																			
Enter Granulated Amt (enter % if 1-5 above not used at your facility)																																			
<b>Epithelialization</b>																																			
1= 100% wound covered, surface intact																																			
2= 75% to <100% wound covered and/or epithelial tissue extends >0.5 cm into wound bed																																			
3= 50% to <75% wound covered and/or epithelial tissue extends to <0.5 cm into wound bed																																			
4= 25% to <50% wound covered																																			
5= <25% wound covered																																			
<b>Pain</b>																																			
Pressure Ulcer Site Pain							0	1	2	0	1	2	0	1	2	0	1	2	0	1	2	0	1	2	0	1	2	0	1	2	0	1	2		
Select 0-10 on pain scale							3	4	5	3	4	5	3	4	5	3	4	5	3	4	5	3	4	5	3	4	5	3	4	5	3	4	5		
							6	7	8	6	7	8	6	7	8	6	7	8	6	7	8	6	7	8	6	7	8	6	7	8	6	7	8		
							9	10		9	10		9	10		9	10		9	10		9	10		9	10		9	10		9	10			
Pain medication given for ulcer pain																																			
<b>Current Pressure Ulcer Stage</b>																																			
Stage 1																																			
Stage 2																																			
Stage 3																																			
Stage 4																																			
Unstageable																																			
Suspected Deep Tissue Injury (SDTI)																																			
<b>Followup Ulcer Status Per Nurse Assessment</b>																																			
Healed																																			
Improving																																			
No change																																			
Worsening																																			
<b>Comments</b>																																			

Resident ID:

REPORT DATE M M D D Y Y M M D D Y Y M M D D Y Y M M D D Y Y M M D D Y Y M M D D Y Y

Treatments (check all that apply)

No change since last report date; treatments remain appropriate

**Wound Cleanser:**

Saline						
Soap and water						
Commercially available cleansing agent without antimicrobial						
Antimicrobial cleansing agent						
Other						

**Debridement:**

Autolytic						
Enzymatic						
Mechanical (includes ultrasound and hydrosurgical)						
Conservative sharp						
Surgical/sharp						
Other						

**Topical and Protective Agents (including for periwound skin):**

Cream or ointment						
Liquid skin protectant (e.g., spray or wipe)						
Other						

**Dressings:**

Hydrocolloid dressing						
Transparent film dressing						
Hydrogel dressing (includes amorphous, sheet, etc.)						
Alginate dressing						
Foam dressing						
Silver-impregnated dressing						
Honey-impregnated dressing						
Cadexomer iodine dressing						
Gauze dressing						
Silicone dressing						
Collagen matrix dressing						
No dressing						
Other						

**Additional Treatments:**

Growth factors						
Electromagnetic biophysical agents (e.g., electrical stimulation, electromagnetic fields, pulsed radio frequency energy, and phototherapy)						
Ultrasound						
Negative pressure wound therapy						
Hydrotherapy (e.g., whirlpool, pulsed lavage, vibration therapy)						
Oxygen therapy (includes hyperbaric and topical therapy)						
Other						



Resident ID:

REPORT DATE M M D D Y Y M M D D Y Y M M D D Y Y M M D D Y Y M M D D Y Y M M D D Y Y

**Interventions (check all that apply)**

No change since last report date; interventions remain

**Support Surfaces for Bed:**

Foam mattress or overlay

Fluid-filled mattress or overlay (including gel)

Alternating pressure air mattress or overlay

Low-air-loss mattress

Other

**Seating Support Surfaces:**

Foam cushion

Fluid-filled cushion (including gel)

Air cushion (including multiple cell air)

Other

**Additional Offloading Strategies:**

Splint or orthotic (e.g., ankle foot orthotic)

Offloading boot or shoe

Elevate heels using pillow(s)

Turning and repositioning schedule

Other

**Nutritional Interventions:**

Vitamin or mineral supplement

Nutritional supplement (e.g., high calorie or high protein beverage or fortified foods) provided with meals

Nutritional supplement provided between meals or with medication pass

Monitor protein, calorie, and/or fluid intake

Other intervention(s) to maintain/improve nutrition and hydration status

**Additional Interventions:**

Monitor skin integrity and tissue tolerance

Minimize exposure to moisture, including but not limited to fecal and urinary contamination and perspiration

Minimize risk for sheer and friction

Monitor labs as ordered by physician or facility protocol

Other

**Consultations:**

Dietitian

Rehabilitation (PT, OT, SLP, or restorative nursing)

Wound, ostomy, and/or continence nurse (in-house)

Wound, ostomy, and/or continence nurse (consultant)

Wound clinic

Surgical consult (including plastic surgeon)

Vascular consult

Other