CLINICAL MANAGEMENT

extra

CMS MDS 3.0 Section M Skin Conditions in Long-term Care: Pressure Ulcers, Skin Tears, and Moisture-Associated Skin Damage Data Update

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Editor's note: The CMS has not yet changed its terminology to pressure injury. Because existing CMS language in the RAI manual, training materials, and website still uses the term *pressure ulcer*, in this article *pressure ulcer* will be used.

Supplemental digital content is available for this article. Direct URL citations appear in the printed text and are provided in the HTML and PDF versions of this article on the journal's Web site (www.woundcarejournal.com).

GENERAL PURPOSE:

The purpose of this learning activity is to provide information about the updates to the Centers for Medicare & Medicaid Services (CMS) MDS 3.0 Section M, Skin Conditions documentation in long-term care.

TARGET AUDIENCE:

This continuing education activity is intended for physicians, physician assistants, nurse practitioners, and nurses with an interest in skin and wound care.

LEARNING OBJECTIVES/OUTCOMES:

After participating in this educational activity, the participant should be better able to:

1. Explain the use of the CMS MDS 3.0 tool for documenting skin problems in long-term care.

2. Demonstrate examples of proper documentation for specific skin problems.

ABSTRACT

This manuscript reviews some of the key parts of the October 2016 revised Long-term Care Resident Assessment Instrument manual for Minimum Data Set (MDS) 3.0 Section M Skin Conditions. It also reports the Centers for Medicare & Medicaid's publicly reported frequency data in long-term care for selected items on the MDS 3.0 Section M Skin Conditions. Percentages and trends of pressure ulcers/injuries, skin tears, and moisture-associated skin damage are assessed.

KEYWORDS: CMS MDS 3.0 Section M Skin Conditions, CMS publicly reported frequency data, long-term care, moisture-associated skin damage frequency data, pressure ulcers frequency data, skin tear frequency data

ADV SKIN WOUND CARE 2017;30:415–29.

INTRODUCTION

In the United States, the Centers for Medicare & Medicaid Services (CMS) mandates an assessment of residents in long-term care (LTC). This resident assessment form is called the Minimum Data Set (MDS) and was mandated by Congress from the Omnibus Budget Reconciliation Act of 1987, also known as the Nursing Home Reform Amendments.[1] The MDS is part of a process of clinical assessment of all residents and provides a foundation to identify health needs and develop an individual plan of care for a resident.[2] The CMS requires that MDS assessments are conducted on admission to the nursing facility, periodically, and again on discharge from the facility.[2] Each LTC facility must transmit the MDS information electronically to the CMS national MDS database within the federally defined time frames. These data are also used by CMS for quality improvement efforts and for reimbursement determinations.

HISTORY OF MINIMUM DATA SET

Although the user manual for MDS 2.0 was published in October 1995, criticism of MDS 2.0 was noted in the literature.[3–8] Thus, the CMS undertook an extensive revision and testing of a new version of the MDS 3.0 and its Resident Assessment Instrument (RAI) user manual. For the remainder of this continuing education article, the focus will be on only selected parts of Section M Skin Conditions.

MDS 3.0 SKIN CONDITIONS

In MDS 3.0, Section M Skin Conditions increased from 4 to 11 sections (Table 1). More important, it discontinued the former CMS-directed requirement of "backstaging or reverse staging" pressure ulcers (PrUs). It also expanded PrU classification from only 4 stages on MDS 2.0 to now include 6 stages—the 4 numerical stages plus unstageable and deep tissue injury. Sections M0100 to M0900 were designated for documentation of the required information on PrUs. Clinicians had long emphasized the importance of Section M to allow them to account for the etiology of different wounds. Therefore, MDS 3.0 also expanded the classification of ulcers to include a section for arterial and venous ulcers (M1030). Section M1030 will be described later in the article.

Minimum Data Set 3.0 was implemented on October 1, 2010.[9–11] Since that time, the CMS has continued to refine Section M of MDS 3.0 and to clarify its accompanying RAI manual. One example is the addition of skin tears and moisture-associated skin damage (MASD) to Section M1040 in 2012. The latest RAI manual, version 1.14, became effective in October 2016.[12] The

Table 1.
PARTS OF MDS 3.0 SECTION M SKIN CONDITIONS

M0100: Determination of pressure ulcer risk
M0150: Risk of pressure ulcers
M0210: Unhealed pressure ulcers
M0300A: Number of Stage 1 pressure ulcers
M0300B: Stage 2 pressure ulcers
M0300C: Stage 3 pressure ulcers
M0300D: Stage 4 pressure ulcers
M0300E: Unstageable pressure ulcers related to nonremovable dressing/device
M0300F: Unstageable pressure ulcers related to slough and/or eschar
M0300G: Unstageable pressure ulcers related to suspected deep tissue injury
M0610: Dimensions of unhealed Stage 3 or 4 pressure ulcers or unstageable pressure ulcer due to slough and/or eschar
M0700: Most severe tissue type for any pressure ulcer
M0800: Worsening in pressure ulcer status since prior assessment (OBRA or scheduled PPS) or last admission/entry or reentry
M0900 Healed pressure ulcers
M1030: Number of venous and arterial ulcers
M01040: Other ulcers, wounds, and skin problems
M1200: Skin and ulcer treatments

Abbreviations: OBRA, Omnibus Budget Reconciliation Act; PPS, Prospective Payment System.

CMS advises that questions regarding information in the RAI should be directed to the individual's/facility's state RAI coordinator. It also encourages the ongoing checking of their website (www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/NursingHomeQualityInits/MDS30RAIManual.html) for more information. Instructional resources, such as slides and a video recording of the educational session as presented at the 2016 State RAI Coordinator Training session, are also available for viewing on the CMS website.[13]

HIGHLIGHTS OF SECTION M SKIN CONDITIONS

Pressure Ulcers: Risk Assessment for Pressure Ulcers

The CMS requires that the process used to determine if a resident is at risk for a PrU be coded in M0100. This can include a history of a previous healed PrU; use of a standardized risk assessment tool, such as the Braden Scale; and/or clinical assessment of the resident's skin, comorbidities, and medications. It is interesting to note that the CMS does not require use of a risk assessment tool, but allows its use.

M0100. Determination of Pressure Ulcer Risk	
↓ Check all that apply	
☐	A. Resident has a stage 1 or greater, a scar over bony prominence, or a non-removable dressing/device
☐	B. Formal assessment instrument/tool (e.g., Braden, Norton, or other)
☐	C. Clinical assessment
☐	Z. None of the above

After assessing a resident's risk of developing a PrU, clinicians need to determine if the resident is at risk. This is documented in Section M0150.

M0150. Risk of Pressure Ulcers	
Enter Code	Is this resident at risk of developing pressure ulcers? 0. No 1. Yes

Documentation of the individualized plan to prevent (or treat) any PrU is coded in M1200 as illustrated.

M1200. Skin and Ulcer Treatments	
↓ Check all that apply	
☐	A. Pressure reducing device for chair
☐	B. Pressure reducing device for bed
☐	C. Turning/repositioning program
☐	D. Nutrition or hydration intervention to manage skin problems
☐	E. Pressure ulcer care
☐	F. Surgical wound care
☐	G. Application of nonsurgical dressings (with or without topical medications) other than to feet
☐	H. Applications of ointments/medications other than to feet
☐	I. Application of dressings to feet (with or without topical medications)
☐	Z. None of the above were provided

The CMS's intent is that "the care process should include efforts to stabilize, reduce, or remove underlying risk factors: to monitor the impact of the interventions; and to modify the interventions as appropriate."[12] A facility will place a check mark in Section M1200 that corresponds to interventions used to prevent (or treat) a PrU. All wound care to a resident's PrU is coded on M1200E. This includes any dressing or negative-pressure wound therapy device that is used. "Standing orders" that apply to any resident are to be avoided. The CMS emphasizes the importance of individualizing (rather than 1 standard routine for all residents) interventions based on the resident's specific needs. Some examples of having interventions that are customized for the resident rather than having 1 standard routine for the facility for all residents are pressure-reducing devices (M1200A [chair], M1200B [bed]), turning/repositioning program, (M1200C) nutrition or hydration intervention (M1200D). The RAI manual gives guidance regarding turning/repositioning program (M1200C) as follows:

> "*The turning/repositioning program is specific as to the approaches for changing the resident's position and realigning the body. The program should specify the intervention (eg, reposition on side, pillows between knees) and frequency (eg, every 2 hours). Progress notes, assessments, and other documentation (as dictated by facility policy) should support that the turning/repositioning program is monitored and reassessed to determine the effectiveness of the intervention.*"[12]

Current Unhealed Pressure Ulcers

The MDS 3.0 requires documentation of whether the resident has any unhealed PrUs in Section M0210 except those on mucosa.

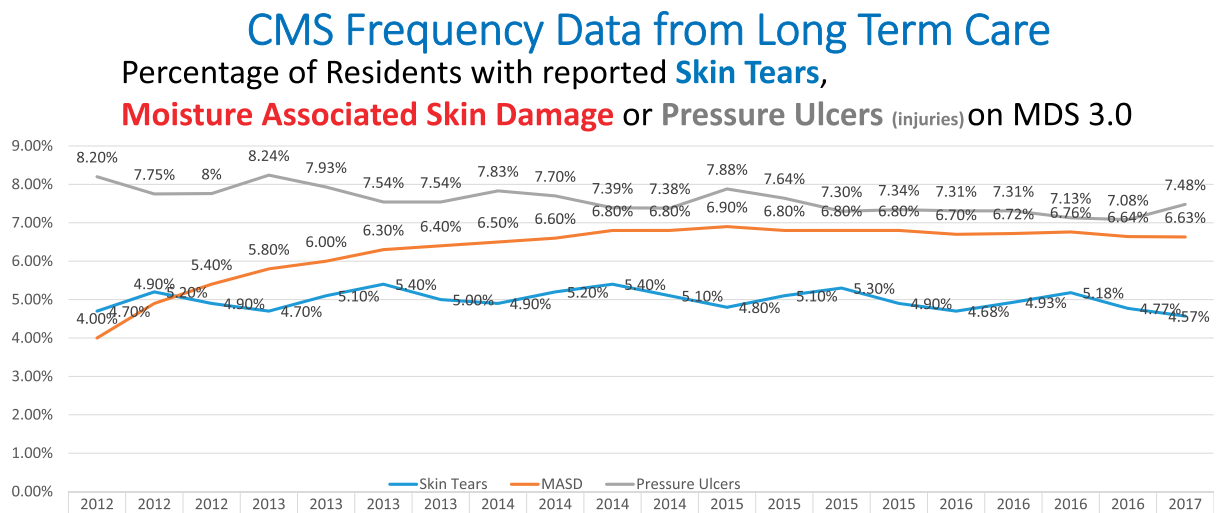
M0210. Unhealed Pressure Ulcer(s)	
Enter Code	Does this resident have one or more unhealed pressure ulcer(s) at Stage 1 or higher? 0. No → Skip to M0900, Healed Pressure Ulcers 1. Yes → Continue to M0300, Current Number of Unhealed Pressure Ulcers at Each Stage

Figure 1 displays PrU frequency data from 2012 through the first quarter of 2017. These data are available for anyone to view on the CMS MDS 3.0 Public Reports—Frequency Report (www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/Minimum-Data-Set-3-0-Public-Reports/Minimum-Data-Set-3-0-Frequency-Report.html). Not all items coded in Section M are publicly reported on the CMS website. One such example of frequency data not reported is Section M610—Dimensions of Unhealed PrU.

Data are listed by each individual state, Puerto Rico, US Virgin Islands, and nationally. National PrU data in LTC as reported on this CMS website range from a high of 8.24% in the first quarter of 2013 to 7.08% in the fourth quarter of 2016.[14] The national frequency for the number of unhealed PrUs in residents in LTC for the first quarter of 2017 is 7.48%.[14] From 2013 to 2016, the highest PrU data numbers are in the first quarter of each year. This

Figure 1.

PERCENTAGE OF RESIDENTS WITH REPORTED SKIN TEARS, MOISTURE-ASSOCIATED SKIN DAMAGE OR PRESSURE ULCERS (INJURIES) ON MINIMUM DATA SET 3.0



	2012 Q2	2012 Q3	2012 Q4	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4	2017 Q1
Skin Tears	4.70%	5.20%	4.90%	4.70%	5.10%	5.40%	5.00%	4.90%	5.20%	5.40%	5.10%	4.80%	5.10%	5.30%	4.90%	4.68%	4.93%	5.18%	4.77%	4.57%
MASD	4.00%	4.90%	5.40%	5.80%	6.00%	6.30%	6.40%	6.50%	6.60%	6.80%	6.80%	6.90%	6.80%	6.80%	6.80%	6.70%	6.72%	6.76%	6.64%	6.63%
Pressure Ulcers	8.20%	7.75%	8%	8.24%	7.93%	7.54%	7.54%	7.83%	7.70%	7.39%	7.38%	7.88%	7.64%	7.30%	7.34%	7.31%	7.31%	7.13%	7.08%	7.48%

author hypothesizes that the findings might be due to less mobility in the winter.

PRESSURE ULCER STAGING

Section 300A-G is where the stage of any unhealed PrUs is coded. While CMS used the 2007 National Pressure Ulcer Advisory Panel (NPUAP) staging definition as a basis for its own definitions, it is imperative to note that the CMS has "adapted" but not "adopted" the NPUAP staging definitions, wherefore "the definitions do not perfectly correlate with each stage as described by NPUAP."[12] The Table, Supplemental Digital Content 1, http://links.lww.com/NSW/A3, shows the most recent information on the recent changes in terminology from the NPUAP in CMS documents and forms.[15]

While NPUAP definitions may be used in clinical practice, the CMS RAI is very clear in stating that the NPUAP definitions cannot be used to code PrUs on the MDS. Facilities must use the instructions and definitions given in the RAI manual to code PrU stages on the MDS.[12] The Table, Supplemental Digital Content 2, http://links.lww.com/NSW/A4, compares the CMS definitions as listed in the RAI manual with the 2016 NPUAP definitions. Note that the CMS has 3 types of unstageable PrUs: (1) those where the ulcer cannot be assessed because it is under a nonremovable cast, dressing, or device; (2) the ulcer bed cannot be visualized enough (for example due to slough or necrotic tissue) to see the deepest type of tissue involved; and (3) deep tissue injury. Because the tissue type affected is unknown, and therefore a numerical stage cannot yet be determined, the CMS considers all 3 of these situations as unstageable PrUs. The major difference between CMS and NPUAP definitions is regarding how to stage blister PrUs.

BLISTER PRESSURE ULCERS

One of the biggest differences between CMS RAI manual definitions and NPUAP definitions concerns blister PrUs (Figure, Supplemental Digital Content 3, http://links.lww.com/NSW/A5). There is a paucity of data regarding blister PrUs. One 2013 study by Shannon[16] reports that of 263 wounds from a retrospective chart review in LTC, 84 (31.8%) were identified as blisters. Unfortunately, no information is given as to the color of the fluid in the blister PrUs. Because there are few published quantitative data on the color of the fluid in a PrU that presents as a blister and how that impacts on staging, CMS has indicated that a comprehensive assessment of the surrounding tissue as well as the blister color is necessary to stage a PrU. As stated in the RAI manual:

> "*Examine the area adjacent to or surrounding an intact blister for evidence of tissue damage. If other conditions are ruled out, and the tissue adjacent to or surrounding the blister demonstrates signs of tissue damage (eg, color change, tenderness, bogginess or firmness, warmth or coolness),*

these characteristics suggest a suspected deep tissue injury (sDTI) rather than a Stage 2 pressure ulcer."[12]

This difference in how to stage a blister PrU by not relying on only the color of the fluid in the blister has been confusing to some practitioners. In addition, some clinicians in other care settings may not be aware of this CMS variant from NPUAP staging definitions. Figure 2 provides a visual algorithm to help professionals in LTC and those in other care settings to better assist in their decision-making process.

CENTERS FOR MEDICARE & MEDICAID SERVICES' PUBLICLY REPORTED FREQUENCY DATA FOR PRESSURE ULCERS

Table 2 provides the publicly reported frequency of national CMS data for PrUs by each stage for the first quarter of 2017. Of all PrU classifications, Stage 2 PrUs have the highest number of current unhealed PrUs at 28.24%.[14] Interestingly, for the stages that also code for numbers that were present on admission/entry/or reentry (Stages 2, 3, and 4 and all unstageable [nonremoval dressing/device, slough and/or eschar, deep tissue injury]), these percentages are higher than what is reported for Stage 2.[14] Thus, for Stage 2 PrUs, just a little less than half (45.62%)[14] of the current unhealed PrUs (28.24%)[14] were present on the resident's admission or reentry to the facility. Especially noteworthy is that more than half (65.51%)[14] of the current unhealed Stage 4 PrUs (14.32%)[14] were present on admission or reentry to the facility.

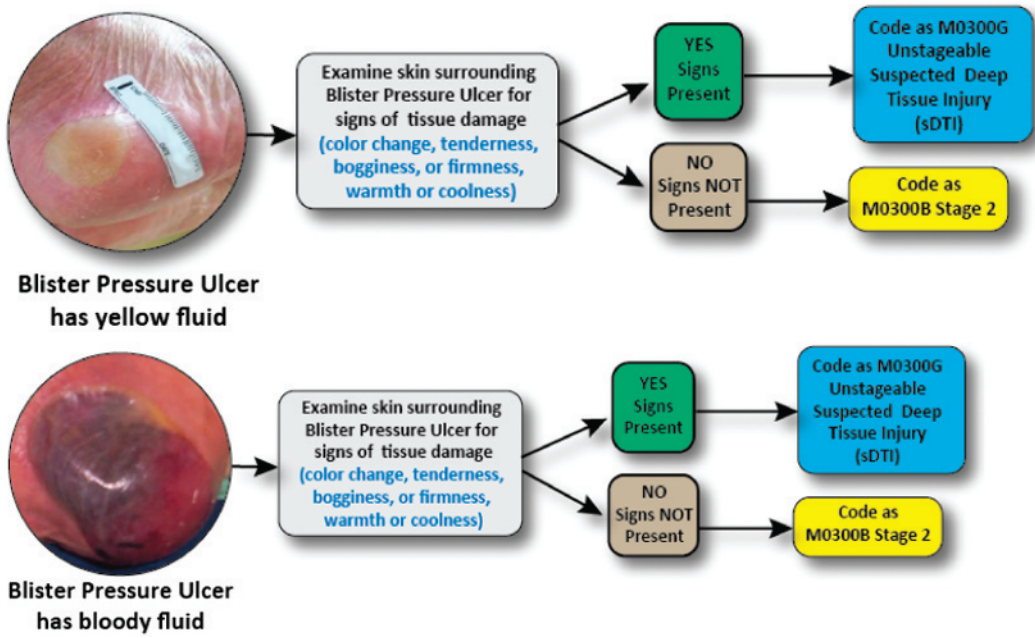
Present on Admission

The October 2016 version of the RAI manual has increased the clarity of how facilities should determine if an unhealed PrU was present on admission.[12] If a resident enters a facility without a PrU, and a PrU is acquired while there, then it is not considered as "present on admission." If a resident has a PrU that was acquired in the facility and is hospitalized and returns with that same PrU at the same numerical stage, then it is not considered "present on admission." However, if the resident had a PrU that was acquired at the facility and was hospitalized and returns to the facility with the PrU, but it is now at a higher numerical stage, then it is coded as "present on admission" because the PrU is at an increased numerical stage on reentry.[12] Table 3 shows some clinical scenarios CMS has provided that illustrate the determination of present on admission to assist in clarifying this concept.

When a resident acquires an unstageable PrU for the first time outside the facility that can be numerically staged, it *is* considered

Figure 2.

DECISION ALGORITHM FOR DETERMINING STAGE OF BLISTER PRESSURE ULCER USING THE CENTERS FOR MEDICARE & MEDICAID SERVICES DEFINITIONS IN LONG-TERM CARE

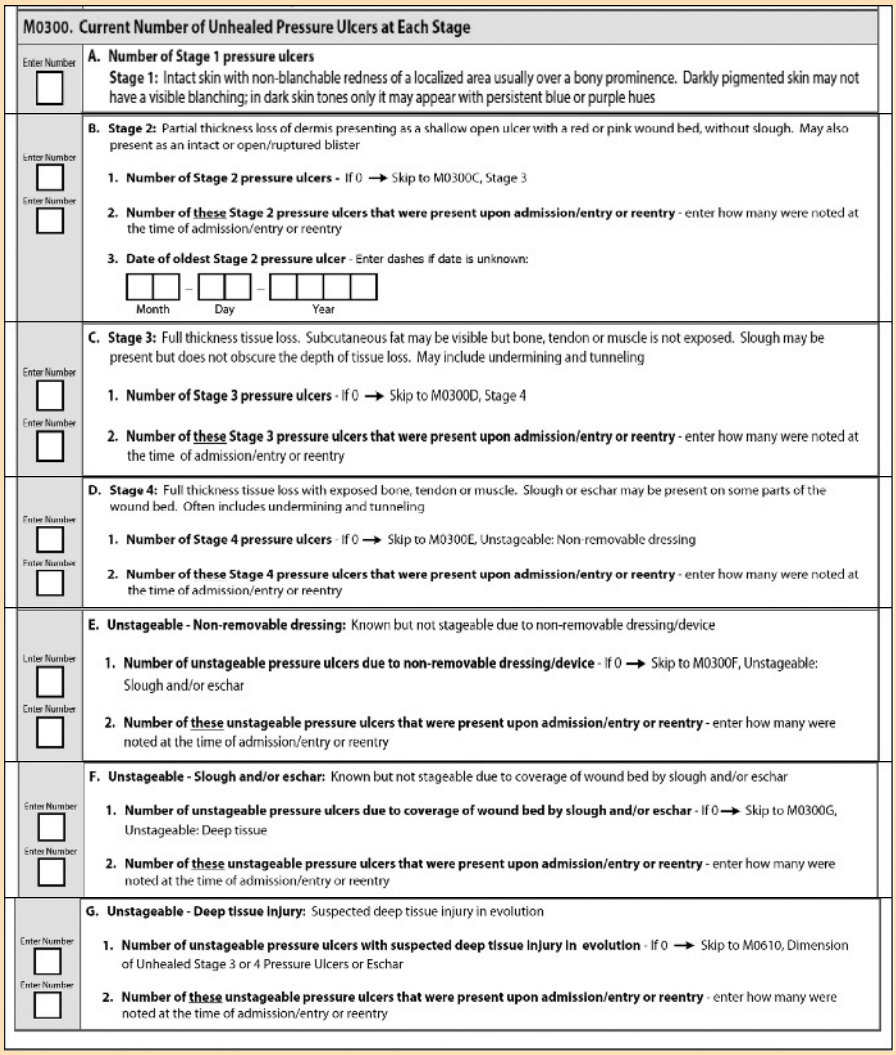


Images © D Weir (top) and C Labish (bottom).
Figure © EA Ayello.

Table 2.

ONE PRESSURE ULCER ON MINIMUM DATA SET 3.0 REPORTED NATIONALLY BY STAGE FOR FIRST QUARTER OF 2017

Percent	
A. 9.25%	
B1: 28.24%[a]	
B2: 45.62%[a]	
C1: 15.76%[a]	
C2: 54.82%[a]	
D1: 14.32%[a]	
D2: 65.51%[a]	
E1: 0.55%[a]	
E2: 50.37%[a]	
F1: 15.79%[a]	
F2: 49.83%	
G1: 12.00%[a]	
G2: 46.03%[a]	



M0300. Current Number of Unhealed Pressure Ulcers at Each Stage

Enter Number ☐

A. Number of Stage 1 pressure ulcers

Stage 1: Intact skin with non-blanchable redness of a localized area usually over a bony prominence. Darkly pigmented skin may not have a visible blanching; in dark skin tones only it may appear with persistent blue or purple hues

Enter Number ☐ Enter Number ☐

B. Stage 2: Partial thickness loss of dermis presenting as a shallow open ulcer with a red or pink wound bed, without slough. May also present as an intact or open/ruptured blister

1. **Number of Stage 2 pressure ulcers** - If 0 → Skip to M0300C, Stage 3
2. **Number of these Stage 2 pressure ulcers that were present upon admission/entry or reentry** - enter how many were noted at the time of admission/entry or reentry
3. **Date of oldest Stage 2 pressure ulcer** - Enter dashes if date is unknown:

☐☐ – ☐☐ – ☐☐☐☐
Month – Day – Year

Enter Number ☐ Enter Number ☐

C. Stage 3: Full thickness tissue loss. Subcutaneous fat may be visible but bone, tendon or muscle is not exposed. Slough may be present but does not obscure the depth of tissue loss. May include undermining and tunneling

1. **Number of Stage 3 pressure ulcers** - If 0 → Skip to M0300D, Stage 4
2. **Number of these Stage 3 pressure ulcers that were present upon admission/entry or reentry** - enter how many were noted at the time of admission/entry or reentry

Enter Number ☐ Enter Number ☐

D. Stage 4: Full thickness tissue loss with exposed bone, tendon or muscle. Slough or eschar may be present on some parts of the wound bed. Often includes undermining and tunneling

1. **Number of Stage 4 pressure ulcers** - If 0 → Skip to M0300E, Unstageable: Non-removable dressing
2. **Number of these Stage 4 pressure ulcers that were present upon admission/entry or reentry** - enter how many were noted at the time of admission/entry or reentry

Enter Number ☐ Enter Number ☐

E. Unstageable - Non-removable dressing: Known but not stageable due to non-removable dressing/device

1. **Number of unstageable pressure ulcers due to non-removable dressing/device** - If 0 → Skip to M0300F, Unstageable: Slough and/or eschar
2. **Number of these unstageable pressure ulcers that were present upon admission/entry or reentry** - enter how many were noted at the time of admission/entry or reentry

Enter Number ☐ Enter Number ☐

F. Unstageable - Slough and/or eschar: Known but not stageable due to coverage of wound bed by slough and/or eschar

1. **Number of unstageable pressure ulcers due to coverage of wound bed by slough and/or eschar** - If 0 → Skip to M0300G, Unstageable: Deep tissue
2. **Number of these unstageable pressure ulcers that were present upon admission/entry or reentry** - enter how many were noted at the time of admission/entry or reentry

Enter Number ☐ Enter Number ☐

G. Unstageable - Deep tissue injury: Suspected deep tissue injury in evolution

1. **Number of unstageable pressure ulcers with suspected deep tissue injury in evolution** - If 0 → Skip to M0610, Dimension of Unhealed Stage 3 or 4 Pressure Ulcers or Eschar
2. **Number of these unstageable pressure ulcers that were present upon admission/entry or reentry** - enter how many were noted at the time of admission/entry or reentry

[a]Percentage who had 1 pressure ulcer at that stage.

present on admission/entry or reentry. Table 3 provides a clinical example that illustrates this concept.

PRESSURE ULCERS REQUIRING DEBRIDEMENT

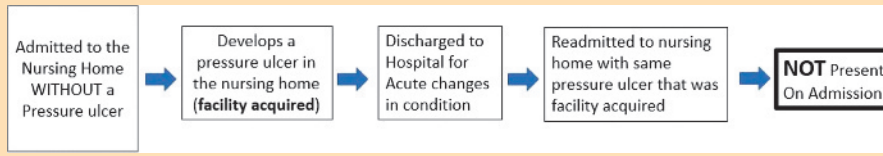
Depending on care goals, debridement may be part of the treatment plan for a resident whose PrU has slough or eschar covering (partially or fully) the wound bed. Any intervention to treat a PrU (including debridement) is coded by checking M1200E.[12] Even though enzymatic debriding agents are drugs, they should not be coded on M1200H (applications of ointments, medications).[12] Page M-39 of the RAI reminds facilities that all PrU care is coded in M1200 E. The Figure, Supplemental Digital Content 4, http://links.lww.com/NSW/A6, shows a clinical example of how to stage a

Table 3.

CLINICAL EXAMPLES TO DETERMINE IF A PRESSURE ULCER IS "PRESENT ON ADMISSION"

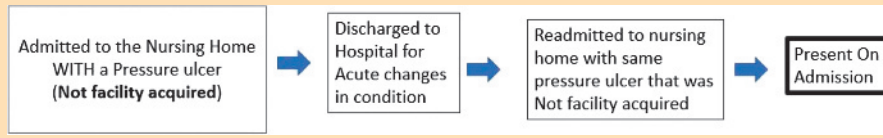
Example 1:

Ms K. is admitted to the facility without a pressure ulcer. During the stay, she develops a Stage 2 pressure ulcer. This is a facility-acquired pressure ulcer and was not "present on admission." Ms K. is hospitalized and returns to the facility with the same Stage 2 pressure ulcer. This pressure ulcer was originally acquired in the nursing home and should not be considered as "present on admission" when she returns from the hospital.



Example 2:

Mr J. is a new admission to the facility and is admitted with a Stage 2 pressure ulcer. This pressure ulcer is considered as "present on admission" because it was not acquired in the facility. Mr J. is hospitalized and returns with the same Stage 2 pressure ulcer, unchanged from the prior admission/entry. This pressure ulcer is still considered "present on admission" because it was originally acquired outside the facility and has not changed.



Source: This information is from the CMS LTC RAI manual[12] on pages M-7 and M-8 and is a public domain document.

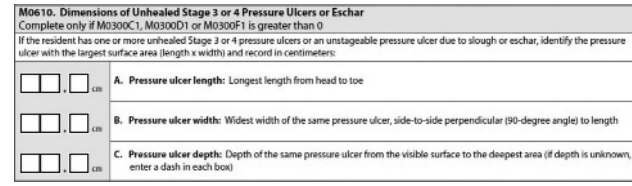
PrU before and after debridement. Remember that even if a PrU is surgically debrided it is not coded as a surgical wound.[12] Rather, it continues to be coded as a PrU.

Another section that CMS has clarified in the October 2016 revised RAI manual[12] concerns staging of unstageable PrUs after debridement and whether a PrU is present on admission. Page M-18 of the RAI manual provides the following instructions:

"Once the pressure ulcer is debrided of slough and/or eschar such that the anatomic depth of soft tissue damage involved can be determined, then code the ulcer for the reclassified stage. The pressure ulcer does not have to be debrided or free of all slough and/or eschar tissue in order for reclassification of stage to occur."

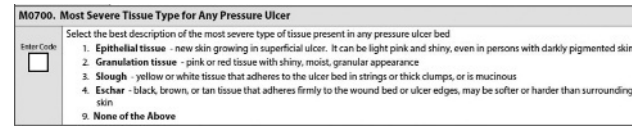
OTHER PRESSURE ULCER CHARACTERISTICS CODED ON MDS SECTION M

The CMS gives guidance in the RAI manual as to how to obtain the dimensions for the largest size PrU.[12] This includes determining the longest length, head-to-toe, and greatest width of the largest Stage 3 or 4 or unstageable PrU by using a disposable measuring device or a cotton-tipped applicator. To assess depth of the PrU, it is suggested to use a cotton-tipped applicator moistened with either 0.9% saline (NaCl) solution or sterile water placed in the deepest part of the ulcer. Length, width, and depth are recorded in M0610 as follows:


M0610. Dimensions of Unhealed Stage 3 or 4 Pressure Ulcers or Eschar
Complete only if M0300C1, M0300D1 or M0300F1 is greater than 0
If the resident has one or more unhealed Stage 3 or 4 pressure ulcers or an unstageable pressure ulcer due to slough or eschar, identify the pressure ulcer with the largest surface area (length x width) and record in centimeters:

☐☐.☐ cm	**A. Pressure ulcer length:** Longest length from head to toe
☐☐.☐ cm	**B. Pressure ulcer width:** Widest width of the same pressure ulcer, side-to-side perpendicular (90-degree angle) to length
☐☐.☐ cm	**C. Pressure ulcer depth:** Depth of the same pressure ulcer from the visible surface to the deepest area (if depth is unknown, enter a dash in each box)

The most severe type of tissue for any PrU is recorded in Section M0700; a quick summary of the tissue type definition is provided in the following table. For the first quarter of 2017, national reported data are as follows: epithelial tissue 18.96%, granulation tissue 27.8%, slough 18.67%, necrotic 14.56%, and none of the above 20.01%.[14]


M0700. Most Severe Tissue Type for Any Pressure Ulcer
Select the best description of the most severe type of tissue present in any pressure ulcer bed
Enter Code ☐
1. **Epithelial tissue** - new skin growing in superficial ulcer. It can be light pink and shiny, even in persons with darkly pigmented skin
2. **Granulation tissue** - pink or red tissue with shiny, moist, granular appearance
3. **Slough** - yellow or white tissue that adheres to the ulcer bed in strings or thick clumps, or is mucinous
4. **Eschar** - black, brown, or tan tissue that adheres firmly to the wound bed or ulcer edges, may be softer or harder than surrounding skin
9. **None of the Above**

PRESSURE ULCER STATUS: WORSENING OR HEALED

Once an unhealed PrU has been identified in sections M0210 to M0300A-G, the CMS requires that LTC facilities reassess

the status of a PrU on subsequent MDS resident submissions. The CMS requires that the PrU status be assessed as to whether it worsened or healed.

Section M0800 is where "worsening" in ulcer status since prior assessment or last admission/entry or reentry is captured for any Stage 2, 3, or 4 PrUs. The RAI manual defines PrU worsening as follows:

> "*A pressure ulcer that has progressed to a deeper level of tissue damage and is therefore staged at a higher number using a numerical scale of 1–4 (using the staging assessment system classifications assigned to each stage; starting at Stage 1, and increasing in severity to Stage 4) on an assessment as compared to the previous assessment. For the purposes of identifying the absence of a pressure ulcer, zero pressure ulcer is used when there is no skin breakdown or evidence of damage.*"[12]

M0800. Worsening in Pressure Ulcer Status Since Prior Assessment (OBRA or Scheduled PPS) or Last Admission/Entry or Reentry
Complete only if A0310E = 0

Indicate the number of current pressure ulcers that were **not present or were at a lesser stage** on prior assessment (OBRA or scheduled PPS) or last entry. If no current pressure ulcer at a given stage, enter 0.

Enter Number	A. Stage 2
Enter Number	B. Stage 3
Enter Number	C. Stage 4

Ongoing assessment and documentation of PrU status will assist professionals in LTC to monitor PrU status. If it is determined that the numerical stage of a PrU has increased, then the ulcer is considered to have worsened and needs to be coded in Section M0800. However, the CMS considers the following situations as examples where the PrUs have not worsened:

- the first time an unstageable PrU (on admission/entry or reentry) is able to be given a numerical stage,
- 2 PrUs that merge as 1 as long as the numerical stage has not increased, and
- a PrU that was numerically staged becomes unstageable. The determination of whether this PrU has "worsened" can be made only after enough wound bed is visible to see if the numerical stage has increased. If it was the same as before it became unstageable, then it has not worsened.[12]

Section M0900 is where the number of any healed Stage 2, 3, or 4 PrUs is documented. A healed PrU is defined as "completely closed, fully epithelialized, covered completely with epithelial tissue, or resurfaced with new skin, even if the area continues to have some surface discoloration."[12] Within this portion of the manual, the CMS affirms that PrUs do not heal in a reverse sequence, and therefore backstaging or reverse staging should not be done. Rather, throughout the healing process, the ulcer should be documented as a healing PrU at its highest numerical assessed stage.[12]

M0900. Healed Pressure Ulcers
Complete only if A0310E = 0

Enter Code	A. Were pressure ulcers present on the prior assessment (OBRA or scheduled PPS)? 0. No → Skip to M1030, Number of Venous and Arterial Ulcers 1. Yes → Continue to M0900B, Stage 2
	Indicate the number of pressure ulcers that were noted on the prior assessment (OBRA or scheduled PPS) that have completely closed (resurfaced with epithelium). If no healed pressure ulcer at a given stage since the prior assessment (OBRA or scheduled PPS), enter 0.
Enter Number	B. Stage 2
Enter Number	C. Stage 3
Enter Number	D. Stage 4

To provide clarity regarding a reopened PrU, the RAI manual offers a specific coding tip. "If the prior assessment documents that a pressure ulcer healed between MDS assessments, but another pressure ulcer occurred at the same anatomical location, do not consider this pressure ulcer as healed. The re-opened pressure ulcer should be staged at its highest numerical stage until fully healed."[12]

WHAT IS NOT RECORDED IN THE PRESSURE ULCER SECTION

The RAI manual explains what is considered a PrU. It clearly states "If an ulcer arises from a combination of factors which are primarily caused by pressure, then the ulcer should be included in this section as a pressure ulcer."[12] Determining the etiology of an ulcer is not always very clear. For instance, without knowing the history, the wound in Figure 3 might not have been correctly identified as a burn. Burns are coded in Section M1040F.

Figure 3.
WHY KNOWING THE HISTORY OF A WOUND IS ESSENTIAL TO GETTING THE ETIOLOGY CORRECT. THIS IS A 2 WK OLD BURN CAUSED BY HOT COFFEE WHILE SITTING IN A WHEELCHAIR

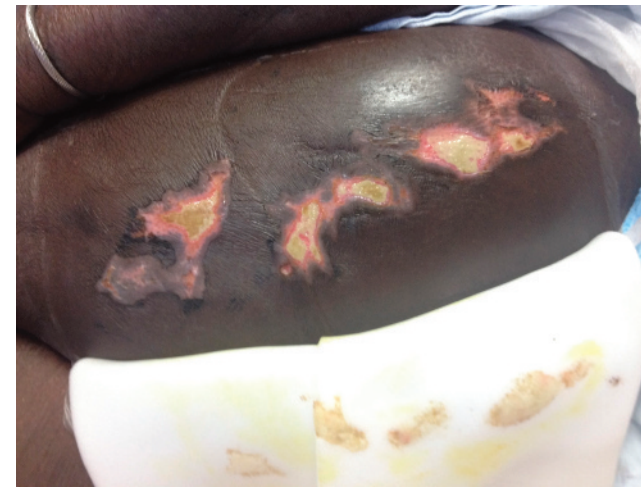


Image © L Goodman.

M1040. Other Ulcers, Wounds and Skin Problems	
↓ Check all that apply	
	Foot Problems
☐	**A. Infection of the foot** (e.g., cellulitis, purulent drainage)
☐	**B. Diabetic foot ulcer(s)**
☐	**C. Other open lesion(s) on the foot**
	Other Problems
☐	**D. Open lesion(s) other than ulcers, rashes, cuts** (e.g., cancer lesion)
☐	**E. Surgical wound(s)**
☐	**F. Burn(s)** (second or third degree)
☐	**G. Skin tear(s)**
☐	**H. Moisture Associated Skin Damage (MASD)** (e.g., incontinence-associated dermatitis [IAD], perspiration, drainage)
	None of the Above
☐	**Z. None of the above** were present

Another example is that the RAI manual recognizes that "residents with diabetes mellitus (DM) can have a pressure, venous, arterial, or diabetic neuropathic ulcer. The primary etiology should be considered when coding whether the person with diabetes has an ulcer that is caused by pressure or other factors."[12] Some professionals have expressed difficulty in definitions that limit classification of a wound as a PrU rather than a neuropathic/diabetic foot ulcer, even though pressure may be a component of the ulcer in the person with diabetes mellitus (DM). They suggest that this is due to histological and transcriptional differences in DM ulcers, making managing the treatment of DM wounds different in this population.[17] Professionals believe that the difficulty is how to determine which is primary—the pressure or the underlying DM. Currently in the United States, however, LTC must follow what the RAI manual states regarding ulcers in persons with diabetes:

> "*If a resident with DM has a heel ulcer from pressure and the ulcer is present in the 7-day look-back period, code 1 and proceed to code items M0300–M0900 as appropriate for the pressure ulcer. If a resident with DM has an ulcer on the plantar (bottom) surface of the foot closer to the metatarsal and the ulcer is present in the 7-day look-back period, code 0 and proceed to M1040 to code the ulcer as a diabetic foot ulcer.*"[12] *Figure 4 shows clinical photographs of diabetic foot ulcers.*

MUCOSAL PRESSURE ULCERS

The NPUAP has been instrumental in promoting awareness of mucosal PrUs.[18] Figure 5 provides a clinical photograph of a mucosal PrU on the lip. Because mucosa is unable to keratinize, it cannot be staged by the present NPUAP staging classification system.[18] Therefore, the CMS has provided direction regarding how to code this type of PrU as follows:

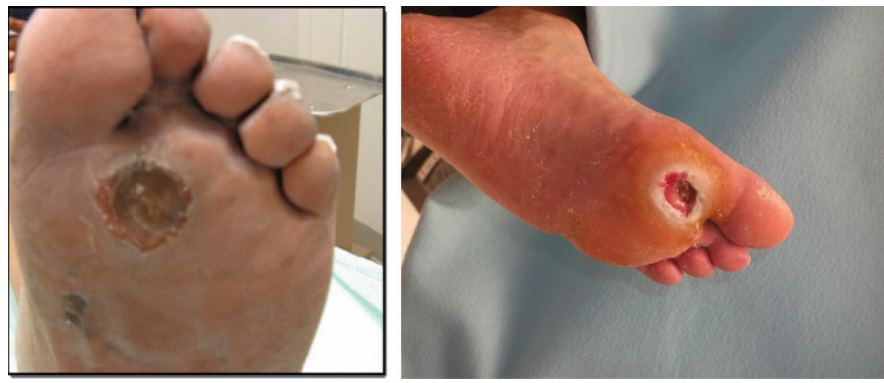
> "*Oral mucosal ulcers caused by pressure should not be coded in Section M. These ulcers are captured in item L0200C, abnormal mouth tissue. Mucosal ulcers are not staged using the skin pressure ulcer staging system because anatomical tissue comparisons cannot be made.*"[12]

This is an instance where the recommendation about not coding mucosal PrUs is consistent between CMS and the NPUAP. The CMS publicly reported data reveal that less than 1% (0.20%–0.21%) indicated yes for the item L0200C.[14] Remember that this coding item is not exclusive to only oral mucosal PrUs, but also includes oral masses and lesions under dentures.

PRESSURE ULCERS TREATED WITH A FLAP OR GRAFT

For some persons with a PrU, treatment will include surgery to close their PrU with a graft and/or flap (Figure, Supplemental Digital Content 5, http://links.lww.com/NSW/A7). "If a pressure ulcer is surgically closed with a flap or graft, it should be coded as a surgical wound and not as a pressure ulcer. If the flap or graft fails,

Figure 4.
CLINICAL EXAMPLES OF ULCERS ON THE FEET OF PERSONS WITH DIABETES MELLITUS



Images © RG Sibbald.

Figure 5.
ORAL MUCOSAL PRESSURE ULCER ON THE LIP

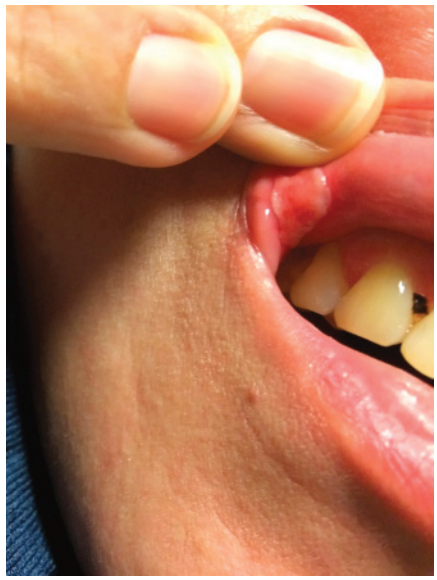


Image © EA Ayello.

continue to code it as a surgical wound until healed."[12] The wound is no longer considered a PrU and therefore is not coded in the PrU section (M210–M900), but rather on M1040E, Surgical Wounds.

VENOUS AND ARTERIAL ULCERS

As previously mentioned, venous and arterial ulcers (Figure 6) were given a separate coding section when MDS 3.0 was revised in 2010. Although the CMS recognizes the differences in the etiology and treatment of these 2 types of ulcers, the combined number of both of these ulcers that a resident has is recorded on M1030 as seen below.

M1030. Number of Venous and Arterial Ulcers	
Enter Number	Enter the total number of venous and arterial ulcers present

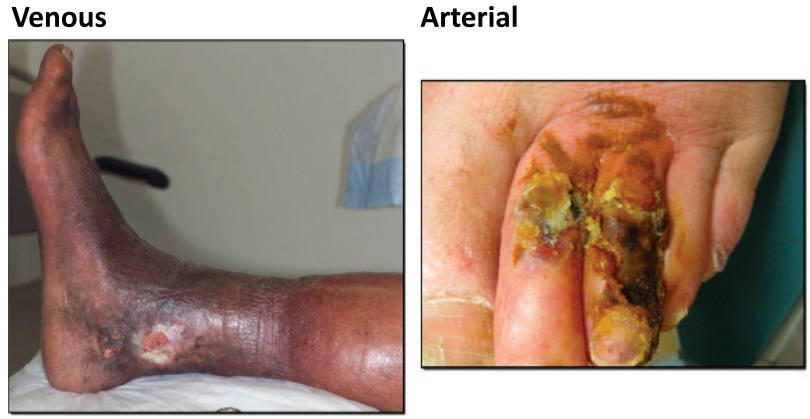
Evidence from the Cochrane Collaboration review supports the use of compression bandaging systems for the treatment and prevention of venous ulcers.[19] Facilities will check M1200G if a compression bandaging system is used as part of the resident's care plan. The Figure, Supplemental Digital Content 6, http://links.lww.com/NSW/A8 shows an example of compression bandaging being applied to a person with a venous leg ulcer.

SKIN TEARS

In April 2012, in response to stakeholder comments, both skin tears (M1040G) and MASD (M1040H) were added to Section M Skin Conditions as reportable skin conditions. The CMS defines "skin tears are a result of shearing, friction, or trauma to the skin that causes a separation of the skin layers. They can be partial or full thickness."[12] While these acute wounds (Figure 7) can be painful, nurses may not have received adequate education in their training to fully understand how to identify, prevent, and/or treat skin tears. Data from undergraduate nursing programs in the United States reveal the following percentage for content taught: preventing skin tears 70%, common location of skin tears 65%, classifying skin tears 26%, and treating skin tears 60%.[20]

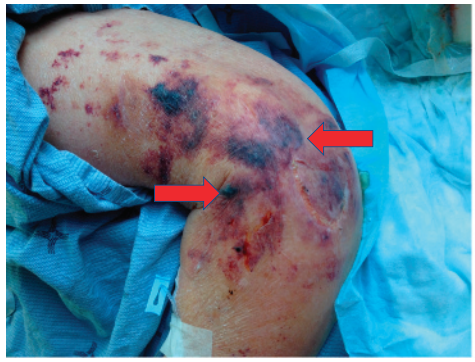
The International Skin Tear Advisory Panel (ISTAP) has produced an extensive body of evidence calling attention to skin tears.[21–28] The CMS does not require the type of skin tear to be included on MDS 3.0, just whether it is present. Clinically, however,

Figure 6.
VENOUS AND ARTERIAL ULCERS

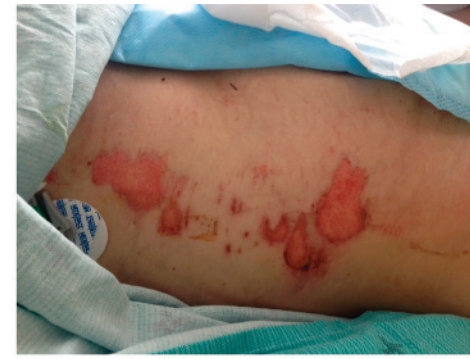


Images © H Smart (left) and © RG Sibbald (right).

Figure 7.
SKIN TEARS



This skin tear the patient's left arm was caused by banging on side of the stretcher and bedrail. Note the purple areas that are from anticoagulants and have bruised easily (see arrows).



Skin tear injury on a person's (right lateral side) due to film membrane tape removal injury.

Images © L Goodman.

professionals may find the use of the ISTAP simplified skin tear classification system, developed and tested by the ISTAP, to be helpful to guide prevention and treatment practices, especially regarding dressing selection.[21–28] Many useful resources can be downloaded for free from the ISTAP website (www.skintears.org). Differentiating skin tears from other skin injuries is an art, and there are resources in the literature to assist clinicians.[23–25,29]

All skin tears are captured in item M1040G, regardless of the cause of the skin tear. Review of the graph in Figure 1 reveals national skin tear frequency data (CMS Division of Nursing Homes, personal email communication; April 22, 2017) beginning at 4.70% (the first quarter that data were collected) to a high of 5.40% in the third quarter of both 2013 and 2014 (CMS Division of Nursing Homes, personal email communication; April 22, 2017). Current trends in the data seem to reveal that within a given year the third quarter has the highest frequency of skin tears. This author hypothesizes that this could be because third-quarter data typically reflect the hottest summer months in the United States. Thus, residents may not want to wear long sleeves that could be providing extra protection/padding to prevent the occurrence of skin tears.

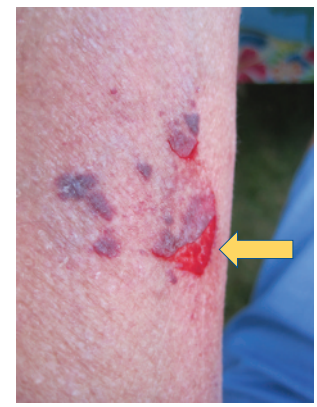
While ISTAP cautions that skin tears can occur in neonates and children, a systematic literature review of skin tear risk factors reported advanced age as the most prevalent risk factor for skin tears.[30] Other risk factors reported by this research team were impaired mobility, falls, accidental injuries, previous skin tears, cognitive deficit/dementia, and dependence in transfers.[30] Figure 8 illustrates a skin tear on the arm of an older adult who fell from his chair and sustained a skin tear on this arm. In addition, a skin tear that occurs after a resident sustained a fall must also be coded in MDS item J1900B as follows:

J1900. Number of Falls Since Admission/Entry or Reentry or Prior Assessment (OBRA or Scheduled PPS), whichever is more recent

Coding: 0. None 1. One 2. Two or more	↓ Enter Codes in Boxes
	☐ A. **No injury** - no evidence of any injury is noted on physical assessment by the nurse or primary care clinician; no complaints of pain or injury by the resident; no change in the resident's behavior is noted after the fall
	☐ B. **Injury (except major)** - skin tears, abrasions, lacerations, superficial bruises, hematomas and sprains; or any fall-related injury that causes the resident to complain of pain
	☐ C. **Major injury** - bone fractures, joint dislocations, closed head injuries with altered consciousness, subdural hematoma

Frequency data from the first quarter of 2017 reveal that following a fall for item J1900B 70.01% had no injury, 25.29% had 1 injury, and 4.7% had 2 or more injuries.[14] Because this category includes skin conditions other than skin tears, such as abrasions, lacerations, superficial bruises, hematomas, sprains, or any

Figure 8.
SKIN TEAR INJURY AFTER A FALL



Although not required for MDS 3.0, note the partial loss of the skin flap indicating a type 2 skin tear according to the ISTAP Classification system.

Image © EA Ayello.

fall-related injury that causes pain to the resident, it is unknown how many of these falls results in a skin tear.

Regardless of the cause of the skin tear, skin care products such as creams, lotions, acrylates (M1200H), and nontraumatic dressings (M1200G) (all or some of which may be part of a resident's prevention or treatment care plan for skin tears) needs to be documented on MDS 3.0 section M. This needs to be captured on the appropriate part of M1200 (Figure 9).

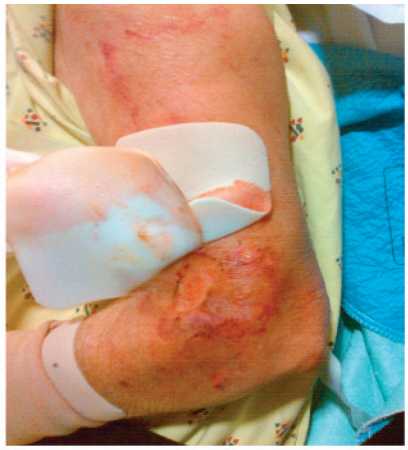
MOISTURE-ASSOCIATED SKIN DAMAGE

Moisture-associated skin damage is defined by CMS in the RAI manual as a "result of skin damage caused by moisture rather than pressure. It is caused by sustained exposure to moisture which can be caused, for example, by incontinence, wound exudate, and perspiration. It is characterized by inflammation of the skin, and occurs with or without skin erosion and/or infection."[12] There are several names by which the 4 types of MASD in the

Figure 9.

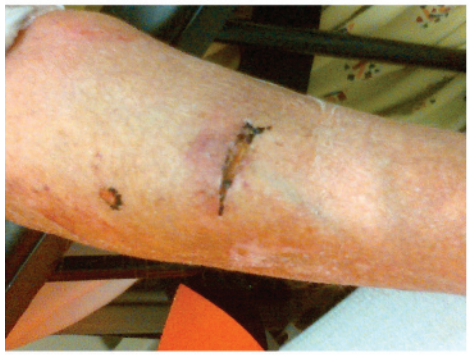
SKIN TEAR TREATMENTS. A, HOW TO DOCUMENT SKIN TEAR TREATMENTS ON MDS 3.0 SECTION M IF DRESSINGS ARE BEING USED TO TREAT THE SKIN TEAR. B, HOW TO DOCUMENT SKIN TEAR TREATMENTS ON MDS 3.0 SECTION M IF SKIN SEALANTS ARE BEING USED TO TREAT THE SKIN TEAR

A How to document skin tear treatments on MDS 3.0 section M if **dressings** are being used to treat the skin tear



M1200. Skin and Ulcer Treatments	
↓ Check all that apply	
☐	A. Pressure reducing device for chair
☐	B. Pressure reducing device for bed
☐	C. Turning/repositioning program
☐	D. Nutrition or hydration intervention to manage skin problems
☐	E. Pressure ulcer care
☐	F. Surgical wound care
☑	G. Application of nonsurgical dressings (with or without topical medications) other than to feet
☐	H. Applications of ointments/medications other than to feet
☐	I. Application of dressings to feet (with or without topical medications)
☐	Z. None of the above were provided

B How to document skin tear treatments on MDS 3.0 section M if **skin sealants** are being used to treat the skin tear



M1200. Skin and Ulcer Treatments	
↓ Check all that apply	
☐	A. Pressure reducing device for chair
☐	B. Pressure reducing device for bed
☐	C. Turning/repositioning program
☐	D. Nutrition or hydration intervention to manage skin problems
☐	E. Pressure ulcer care
☐	F. Surgical wound care
☐	G. Application of nonsurgical dressings (with or without topical medications) other than to feet
☑	H. Applications of ointments/medications other than to feet
☐	I. Application of dressings to feet (with or without topical medications)
☐	Z. None of the above were provided

Image © EA Ayello.

literature are known, including incontinence-associated dermatitis, intertriginous dermatitis, periwound MASD (maceration), and peristomal MASD. Figure 10 depicts a typical example of MASD from incontinence. Because MASD on the sacrum can be misidentified as a Stage 1 PrU, it is important to get the etiology correct, so the appropriate treatment plan can be developed.[29,31–44] Table 4 may be helpful in differentiating a sacrum PrU from MASD.

The RAI manual states that "provision of optimal skin care and early identification and treatment of minor cases of MASD can help avoid progression and skin breakdown."[12] Over the past years, several expert panels and literature reviews have added to our understanding of how moisture damages the skin.[29,31–44] Alkaline urine can cause the normal acid pH of the skin (4–5.5) to increase into the alkaline pH range, thus reducing the normal function of the skin's acid mantle. A pH of 7 is considered neutral, with those higher than 7 considered alkaline or basic.

Measures should be taken to correct causes of incontinence (when possible). Skin protection with pH-balanced products is an important part of the management of incontinence-associated dermatitis. Skin care cleansing regimens that reduce rubbing and friction injuries are also part of the intervention options. A variety of skin protection products in various forms (creams, lotions, ointments, sprays) are available for use. Choose products that do not sting, burn, or cause discomfort/pain during application to the skin. A 2017 study by Brennan et al[45] reports that acrylate-based products may be an effective protective barrier for persons with incontinence. Figure 10 shows how to document skin care for residents with MASD on MDS 3.0. Preventing skin damage from incontinence is also important as a study with a large sample by Lachenbruch et al[46] reveals that PrU prevalence was higher in persons with incontinence (16.3%) than in those who were continent (4.1%). Similarly, facility-acquired PrU rate was also higher for those who were incontinent (6.0%) compared with those who were continent (1.6%).[44]

Figure 1 reveals that MASD has increased in frequency since it was first captured on MDS 3.0 beginning in the second quarter of 2012 (CMS Division of Nursing Homes, personal email communication; April 22, 2017). This initial data of 4% rose to greater than 6%, where percentages have remained including up to the most recent reported findings for the first quarter of 2017 (6.63%). The CMS MDS 3.0 MASD frequency data are higher than those reported for skin tears but lower than those for PrUs.

SUMMARY

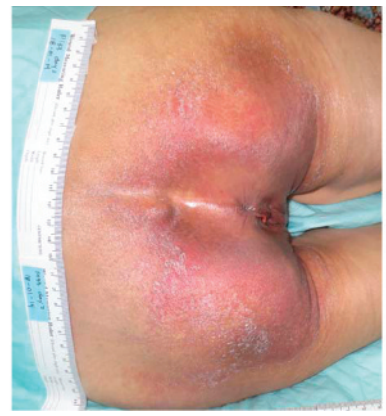
The 52-page RAI manual was created by CMS to assist healthcare professionals in completing the resident's assessment data in Section M Skin Condition of the MDS 3.0. This article provides a brief overview of some of the material contained in section M of that manual. Differences in staging of PrUs for LTC, as compared with other settings where the NPUAP staging system is used, have been enumerated. Algorithms, clinical photographs, and diagrams have been provided to help summarize in a simple way all that is contained in section M of the RAI manual. Data from the CMS publicly reported data for MDS 3.0 provided by US LTC facilities to the CMS have been presented, and possible trends identified. Since the second quarter of 2012 until the first quarter of 2017, PrUs have the highest publicly reported data ranging from 7.08% to 8.24%, followed by MASD (4% to 6.90%) and finally skin tears (4.57% to 5.40%).

Although skin and wound care is an interprofessional effort that requires all team members to work together to prevent and treat these skin conditions, the literature does report deficits in nursing education regarding wound care in general—including

Figure 10.
MOISTURE-ASSOCIATED SKIN DAMAGE AND HOW TO CODE FOR TREATMENT ON MINIMUM DATA SET 3.0

Code for type of wound on M1040H

M1040. Other Ulcers, Wounds and Skin Problems	
↓ Check all that apply	
	Foot Problems
☐	A. Infection of the foot (e.g., cellulitis, purulent drainage)
☐	B. Diabetic foot ulcer(s)
☐	C. Other open lesion(s) on the foot
	Other Problems
☐	D. Open lesion(s) other than ulcers, rashes, cuts (e.g., cancer lesion)
☐	E. Surgical wound(s)
☐	F. Burn(s) (second or third degree)
☐	G. Skin tear(s)
√	H. Moisture-Associated Skin Damage (MASD) (e.g., incontinence-associated dermatitis [IAD], perspiration, drainage)
	None of the Above
☐	Z. None of the above were present

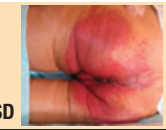
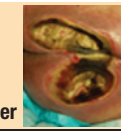


Code care on M1200H

M1200. Skin and Ulcer Treatments	
↓ Check all that apply	
☐	A. Pressure reducing device for chair
☐	B. Pressure reducing device for bed
☐	C. Turning/repositioning program
☐	D. Nutrition or hydration intervention to manage skin problems
☐	E. Pressure ulcer care
☐	F. Surgical wound care
☐	G. Application of nonsurgical dressings (with or without topical medications) other than to feet
√	H. Applications of ointments/medications other than to feet
☐	I. Application of dressings to feet (with or without topical medications)
☐	Z. None of the above were provided

Figure and photo © EA Ayello.

Table 4.
COMPARISON OF TYPICAL CHARACTERISTICS OF IAD TYPE OF MASD VERSUS PRESSURE ULCER

	IAD/MASD 	Pressure Ulcer 
Primary cause	Moisture and friction	Pressure with or without shear
Typical location	Buttocks, perineal area, skin folds, upper part of thighs	Over pressure areas/bony prominences
Skin/wound appearance	Typically diffuse skin involvement	Typically localized wounds oval or round in shape; distinct wound edges
Color	Blanchable erythema, red or bright red skin; may appear brighter brown/black in persons with darker skin tones	Bluish red or purple, may be darker/ discolored in persons with darker skin tones
Necrotic tissue	None	Slough or eschar if full thickness
Depth	Partial thickness	Partial or full thickness

Abbreviations: IAD, incontinence-associated dermatitis; MASD, moisture-associated skin damage.
Table and photos © EA Ayello and RG Sibbald, 2017.

skin tears[20] and specifically for PrU.[47] Thus, ongoing education to keep current with the evidence literature and translate it into everyday practice is vital for appropriate prevention and treatment care. In addition, healthcare professionals need to remember that this article does not supersede their responsibility to consult the CMS RAI manual for the full information necessary to accurately complete Section M of MDS 3.0 and to check periodically for updates/revision to the CMS RAI manual on the CMS website.

PRACTICE PEARLS

- Pressure ulcer (PrU) risk assessment must be holistic and can include skin examination, review of a resident's comorbidities, medications, and/or use of a standardized risk assessment tool.
- Staging for blister PrUs in long-term care differs from the National Pressure Ulcer Advisory Panel; the CMS guidance includes color of the fluid in the blister, and signs of damage in the skin surrounding the blister must be followed.
- Do not "back" stage a PrU as it heals; it remains a healing PrU at the highest numerical stage that had been determined.
- Since 2012, skin tears and moisture-associated skin damage data have become part of section M of the MDS in Long-Term Care.
- CMS frequency data percentages are higher for PrUs than for MASD, which is higher than for skin tears.

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