

August 2017

Final Specifications for IRF QRP Quality Measures and Standardized Patient Assessment Data Elements

Prepared for

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CMS Contract No. HHS-500-2013-130151



FINAL SPECIFICATIONS FOR IRF QRP QUALITY MEASURES AND STANDARDIZED PATIENT
ASSESSMENT DATA ELEMENTS

RTI International
CMS Contract No. HHSM-500-2013-13015I

August 2017

This report was prepared under a project funded by the Centers for Medicare & Medicaid Services under contract no. HHSM-500-2013-13015I and HHSM-500-2013-13014I.

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Chapter 1

IMPACT Act Measure Beginning with the FY 2020 IRF QRP

Section 1: Cross-Setting Measures Development Work: An Introduction

The Improving Medicare Post-Acute Care Transformation Act (IMPACT Act), enacted October 6, 2014, directs the Secretary of Health and Human Services to “specify quality measures on which Post-Acute Care (PAC) providers are required under the applicable reporting provisions to submit standardized patient assessment data” in several quality measure domains, including but not limited to incidence of major falls, skin integrity, and function. The IMPACT Act requires the implementation of quality measures to address these measure domains in Home Health Agencies (HHAs), Skilled Nursing Facilities (SNFs), Long-Term Care Hospitals (LTCHs), and Inpatient Rehabilitation Facilities (IRFs).

The IMPACT Act also requires, to the extent possible, the submission of such quality measure data through the use of a PAC assessment instrument and the modification of such instrument as necessary to enable such use. This requirement refers to the collection of such data by means of the Minimum Data Set (MDS) 3.0 for SNFs, the LTCH Continuity Assessment Record and Evaluation (CARE) Data Set for LTCHs, and the Inpatient Rehabilitation Facility Patient Assessment Instrument (IRF-PAI) for IRFs.

For more information on the statutory history of the SNF, LTCH, or IRF QRP, please refer to the FY 2015 final rules. More information on the IMPACT Act is available at <https://www.govtrack.us/congress/bills/113/hr4994>.

In this document, we present specifications for the following quality measure finalized for the IRF QRP:

Outcome Measure: Changes in Skin Integrity Post-Acute Care: Pressure Ulcer/Injury

Section 2: Cross-Setting Pressure Ulcer Measure: Changes in Skin Integrity Post-Acute Care: Pressure Ulcer/Injury

Measure Description

This cross-setting quality measure reports the percentage of patients/residents with Stage 2-4 pressure ulcers, or unstageable pressure ulcers due to slough/eschar, non-removable dressing/device, or deep tissue injury, that are new or worsened since admission. This measure is a cross-setting quality measure to meet the requirements of the IMPACT Act addressing the domain of skin integrity and changes in skin integrity. This cross-setting quality measure is calculated using data from the MDS 3.0 assessment instrument for SNF residents, the LTCH CARE Data Set for LTCH patients, and the IRF-PAI for IRF patients. Data are collected separately in each of the three settings using standardized data elements. Data elements are referred to hereafter in this specification as items that have been standardized across the MDS 3.0, LTCH CARE Data Set, and IRF-PAI. It is important to note that data collection and measure calculation for this measure are conducted separately for each of the three provider settings and will not be combined across settings. See **Appendix 1** for additional information about measure and data element reliability and validity.

Purpose/Rationale for the Quality Measure

This quality measure is finalized as a cross-setting quality measure to meet the requirements of the IMPACT Act of 2014 addressing the domain of skin integrity and changes in skin integrity. A pressure ulcer measure has previously been successfully implemented in NHs, SNFs, LTCHs and IRFs. The data for the pressure ulcer measure have been collected and submitted by LTCHs and IRFs (using the LTCH CARE Data Set and IRF-PAI, respectively) since October 1, 2012. Effective December 14, 2016, data for the pressure ulcer measure are publicly reported for LTCHs on CMS' Long-Term Care Hospital Compare at: <https://www.medicare.gov/longtermcarehospitalcompare/> and for IRFs on CMS' Inpatient Rehabilitation Facility Compare at: <https://www.medicare.gov/inpatientrehabilitationfacilitycompare/>.

In order to improve the quality measure and address recommendations provided by a cross-setting pressure ulcer Technical Expert Panel (TEP) and supported by the National Pressure Ulcer Advisory Panel (NPUAP), the quality measure has been modified in two ways. First, the measure has been modified to incorporate the addition of unstageable pressure ulcers due to slough or eschar, unstageable pressure ulcers due to non-removable dressing or device, and unstageable pressure ulcers presenting as deep tissue injuries in the numerator. Second, the measure calculation has been amended to include M0300 items instead of M0800 items for the IRF QRP and LTCH QRP. This item calculation modification is intended to reduce redundancies in assessment items. To reflect these two changes, the measure is being finalized for FY 2018 federal rulemaking as: Changes in Skin Integrity Post-Acute Care: Pressure Ulcer/Injury. This measure is intended to encourage IRFs, LTCHs, and SNFs to prevent pressure ulcer development or worsening, and to closely monitor and appropriately treat existing pressure ulcers.

Pressure ulcers are recognized as a serious medical condition. Considerable evidence exists regarding the seriousness of pressure ulcers, and the relationship between pressure ulcers and pain, decreased quality of life, and increased mortality in aging populations.^{1,2,3,4} Pressure ulcers interfere with activities of daily living and functional gains made during rehabilitation, predispose patients to

¹ Casey, G. (2013). "Pressure ulcers reflect quality of nursing care." *Nurs N Z* 19(10): 20-24.

² Gorzoni, M. L. and S. L. Pires (2011). "Deaths in nursing homes." *Rev Assoc Med Bras* 57(3): 327-331.

³ Thomas, J. M., et al. (2013). "Systematic review: health-related characteristics of elderly hospitalized adults and nursing home residents associated with short-term mortality." *J Am Geriatr Soc* 61(6): 902-911.

⁴ White-Chu, E. F., et al. (2011). "Pressure ulcers in long-term care." *Clin Geriatr Med* 27(2): 241-258.

osteomyelitis and septicemia, and are strongly associated with longer hospital stays, longer IRF stays, and mortality.^{5,6,7} Additionally, patients with acute care hospitalizations related to pressure ulcers are more likely to be discharged to long-term care facilities (e.g., a nursing facility, an intermediate care facility, or a nursing home) than hospitalizations for all other conditions.^{8,9}

Pressure ulcers typically result from prolonged periods of uninterrupted pressure on the skin, soft tissue, muscle, or bone.^{10,11,12} Elderly individuals in IRFs, LTCHs, and SNFs have a wide range of impairments or medical conditions that increase their risk of developing pressure ulcers, including but not limited to, impaired mobility or sensation, malnutrition or under-nutrition, obesity, stroke, diabetes, dementia, cognitive impairments, circulatory diseases, and dehydration. The use of wheelchairs and medical devices (e.g., hearing aids, feeding tubes, tracheostomies, percutaneous endoscopic gastrostomy tubes), a history of pressure ulcers, or presence of a pressure ulcer at admission are additional factors that increase pressure ulcer risk in elderly patients.^{13,14,15,16,17,18,19,20,21}

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- 5 Bates-Jensen BM. Quality indicators for prevention and management of pressure ulcers in vulnerable elders. *Ann Int Med.* 2001;135 (8 Part 2), 744-51.
 - 6 Park-Lee E, Caffrey C. Pressure ulcers among nursing home residents: United States, 2004 (NCHS Data Brief No. 14). Hyattsville, MD: National Center for Health Statistics, 2009. Available from <http://www.cdc.gov/nchs/data/databriefs/db14.htm>.
 - 7 Wang, H., et al. (2014). "Impact of pressure ulcers on outcomes in inpatient rehabilitation facilities." *Am J Phys Med Rehabil* 93(3): 207-216.
 - 8 Hurd D, Moore T, Radley D, Williams C. Pressure ulcer prevalence and incidence across post-acute care settings. Home Health Quality Measures & Data Analysis Project, Report of Findings, prepared for CMS/OCSQ, Baltimore, MD, under Contract No. 500-2005-000181 TO 0002. 2010.
 - 9 Institute for Healthcare Improvement (IHI). Relieve the pressure and reduce harm. May 21, 2007. Available from <http://www.ihl.org/resources/pages/improvementstories/relievethethepressureandreduceharm.aspx>.
 - 10 Russo CA, Steiner C, Spector W. Hospitalizations related to pressure ulcers among adults 18 years and older, 2006 (Healthcare Cost and Utilization Project Statistical Brief No. 64). December 2008. Available from <http://www.hcup-us.ahrq.gov/reports/statbriefs/sb64.pdf>.
 - 11 Reddy, M. (2011). "Pressure ulcers." *Clin Evid* (Online) 2011.
 - 12 Advancing Excellence in America's Nursing Homes (AEANH). Explore our goals.. n.d. Available from <https://www.nhqualitycampaign.org/goals.aspx>
 - 13 Reddy, M. (2011). "Pressure ulcers." *Clin Evid* (Online) 2011.
 - 14 Agency for Healthcare Research and Quality (AHRQ). Agency news and notes: pressure ulcers are increasing among hospital patients. January 2009. Available from <https://archive.ahrq.gov/news/newsletters/research-activities/jan09/0109RA22.html>
 - 15 Cai, S., et al. (2013). "Obesity and pressure ulcers among nursing home residents." *Med Care* 51(6): 478-486.
 - 16 DeJong, G., et al. (2014). "Factors Associated with Pressure Ulcer Risk in Spinal Cord Injury Rehabilitation." *Am J Phys Med Rehabil.* 2014 May 29. [Epub ahead of print]
 - 17 MacLean DS. Preventing & managing pressure sores. *Caring for the Ages.* March 2003;4(3):34-7.
 - 18 Michel, J. M., et al. (2012). "As of 2012, what are the key predictive risk factors for pressure ulcers? Developing French guidelines for clinical practice." *Ann Phys Rehabil Med* 55(7): 454-465.
 - 19 National Pressure Ulcer Advisory Panel (NPUAP) Board of Directors; Cuddigan J, Berlowitz DR, Ayello EA (Eds). Pressure ulcers in America: prevalence, incidence, and implications for the future. An executive summary of the National Pressure Ulcer Advisory Panel Monograph. *Adv Skin Wound Care.* 2001;14(4):208-15.
 - 20 Teno, J. M., et al. (2012). "Feeding tubes and the prevention or healing of pressure ulcers." *Arch Intern Med* 172(9): 697-701
 - 21 Centers for Medicare & Medicaid Services (CMS). Medicare program; changes to the hospital inpatient prospective payment system and fiscal year 2008 rates. *Fed Register.* August 22, 2007;72(162):47205.

Pressure ulcers are high-cost adverse events across the spectrum of health care settings, from acute hospitals to home health.^{22,23,24} Pressure ulcer incidence rates vary considerably by clinical setting, ranging from 0.4% to 38% in acute care, 2.2% to 23.9% in SNFs and NHs, and 0% to 17% in home care.²⁵ No national survey of pressure ulcer incidence or prevalence has been conducted in LTCHs or IRFs. However, a study evaluating 2009 Medicare FFS claims data from post-acute care facilities found 15,995 secondary diagnosis claims of Stage 3 or 4 pressure ulcers in LTCHs; 2,342 secondary diagnosis claims of Stage 3 or 4 pressure ulcers in IRFs; and 9,939 secondary diagnosis claims of Stage 3 or Stage 4 pressure ulcers in SNFs.²⁶ Additionally, analysis conducted by RTI International examined the national incidence of new or worsened Stage 2, 3, or 4 pressure ulcers in LTCHs, SNFs, or IRFs at discharge compared with admission using discharges from January through December 2015. In LTCHs, RTI found a national incidence of 0.95 percent of new or worsened Stage 2 pressure ulcers, 0.65 percent of Stage 3 pressure ulcers, and 0.48 percent of Stage 4 pressure ulcers. In SNFs, RTI found a national incidence of 1.28 percent of new or worsened Stage 2 pressure ulcers, 0.26 percent of new or worsened Stage 3 pressure ulcers, and 0.05 percent of new or worsened Stage 4 pressure ulcers. In IRFs, RTI found a national incidence of 0.56 percent of new or worsened Stage 2 pressure ulcers, 0.09 percent of new or worsened Stage 3 pressure ulcers, and 0.01 percent of new or worsened Stage 4 pressure ulcers. See **Appendix 2 and 3** for further information on pressure ulcer incidence in PAC settings.

Pressure ulcers that are unstageable due to slough or eschar, unstageable due to non-removable dressing or device, and unstageable presenting as deep tissue injuries (DTI) are also potentially avoidable and considered to be important indicators of quality of care. Furthermore, some studies indicate that DTIs, if managed using appropriate care, can be resolved without deteriorating into Stage 3, or Stage 4 pressure ulcers.^{27, 28}

The rate of unstageable pressure ulcers varies according to the type of unstageable pressure ulcer and setting. An analysis conducted by RTI International examined the national incidence of new or worsened unstageable pressure ulcers in IRFs, LTCHs, or SNFs at discharge compared with admission using discharges from January through December 2015. In IRFs, RTI found a national incidence of 0.14 percent of new unstageable pressure ulcers due to slough/eschar, 0.02 percent of new unstageable pressure ulcers due to non-removable dressing/device, and 0.26 percent of new DTIs. In LTCHs, RTI found a national incidence of 1.15 percent of new unstageable pressure ulcers due to slough/eschar, 0.05 percent of new unstageable pressure ulcers due to non-removable dressing/device, and 1.01 percent of new DTIs. In SNFs, RTI found a national incidence of 0.40 percent of new unstageable pressure ulcers due to slough/eschar, 0.02 percent of new unstageable pressure ulcers due to non-removable

²² Reddy, M. (2011). "Pressure ulcers." Clin Evid (Online) 2011.

²³ Centers for Medicare & Medicaid Services (CMS). Medicare program; changes to the hospital inpatient prospective payment system and fiscal year 2008 rates. Fed Register. August 22, 2007;72(162):47205.

²⁴ Kandilov AMG, Coomer NM, Dalton K. (2014) The impact of hospital-acquired conditions on Medicare program payments. MMRR 4(4): E1-E23

²⁵ Institute for Healthcare Improvement (IHI). Relieve the pressure and reduce harm. May 21, 2007. Available from <http://www.ihl.org/resources/pages/improvementstories/relievethepressureandreduceharm.aspx>.

²⁶ Bernard SL, Dalton K, Lenfestey N F, Jarrett NM, Nguyen KH, Sorensen AV, Thaker S, West ND. Study to support a CMS report to Congress: Assess feasibility of extending the hospital-acquired conditions—present on admission IPPS payment policy to non-IPPS payment environments. Prepared for Centers for Medicare & Medicaid Services. 2011.

²⁷ Sullivan, R. (2013). A Two-year Retrospective Review of Suspected Deep Tissue Injury Evolution in Adult Acute Care Patients. Ostomy Wound Management 59(9) <http://www.o-wm.com/article/two-year-retrospective-review-suspected-deep-tissue-injury-evolution-adult-acute-care-patient>

²⁸ Posthauer, ME, Zulkowski, K. (2005). Special to OWM: The NPUAP Dual Mission Conference: Reaching Consensus on Staging and Deep Tissue Injury. Ostomy Wound Management 51(4) <http://www.o-wm.com/content/the-npuap-dual-mission-conference-reaching-consensus-staging-and-deep-tissue-injury>

dressings/device, and 0.57 percent of new DTIs. See **Appendix 2 and 3** for further information on pressure ulcer incidence in PAC settings. There is some evidence to suggest that the proportion of pressure ulcers identified as DTI has increased over time. An international study spanning the time 2006 to 2009 found DTIs increased by three-fold, to nine percent of all observed ulcers in 2009 and that DTIs were more prevalent than either Stage 3 or 4 ulcers. During the same time period, the proportion of Stage 1 and 2 ulcers decreased, and the proportion of Stage 3 and 4 ulcers remained constant.²⁹

As reported in the Federal Register, in 2006 the average cost for a hospital stay related to pressure ulcers was \$40,381.³⁰ As of 2010, the cost for treatment of Stage 4 hospital acquired pressure ulcers and complications averaged \$129,248 per admission.³¹ Using data from 2009 and 2010, severe (Stage 3 and Stage 4) pressure ulcers acquired during a hospital stay were estimated to have increased CMS payments across 90-day episodes of care by at least \$18.8 million a year.³²

The terminology and definitions developed by the National Pressure Ulcer Advisory Panel (NPUAP) for the care of pressure ulcers are often used to inform the PAC patient and resident assessment instruments and corresponding assessment manuals, specifically the IRF-PAI, the LTCH CARE Data Set, the MDS for SNFs, and the OASIS for HHAs. Considering the recent updates made by the NPUAP to their Pressure Ulcer Staging System, CMS intends to continue the adaptation of NPUAP terminology for coding the patient and resident assessment instruments. CMS will provide guidance which emphasizes that terminology related to these wounds may include injuries, as well as pressure ulcers, while retaining current holistic assessment instructions definitions and terminology. Further guidance and information on adaptation of the NPUAP guidelines, and definitions, and terminology, via assessment manuals and assessment instruments will be posted on the Web site at: <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/IRF-Quality-Reporting/IRF-PAI-and-IRF-QRP-Manual.html>

Denominator

Specific denominator definitions for each setting are provided below.

IRF Denominator

The denominator is the total number of Medicare* (Part A and Medicare Advantage) patient stays with an IRF-PAI assessment in the measure target period, except those that meet the exclusion criteria.

*IRF-PAI data are submitted for Medicare patients (Part A and Medicare Advantage) only.

LTCH Denominator

The denominator is the number of all-payer patient stays with both an admission and planned or unplanned discharge LTCH CARE Data Set assessment with the discharge date in the measure target period, except those that meet the exclusion criteria.

²⁹ VanGilder, C, MacFarlane, GD, Harrison, P, Lachenbruch, C, Meyer, S (2010). The Demographics of Suspected Deep Tissue Injury in the United States: An Analysis of the International Pressure Ulcer Prevalence Survey 2006-2009. *Advances in Skin & Wound Care*. 23(6): 254-261.

³⁰ Centers for Medicare & Medicaid Services (CMS). Medicare program; changes to the hospital inpatient prospective payment system and fiscal year 2008 rates. *Fed Register*. August 22, 2007;72(162):47205.

³¹ Brem, H., Maggi, J., Nierman, D., Rolnitzky, L., Bell, D., Rennert, R., ... Vladeck, B. (2010). High Cost of Stage IV Pressure Ulcers. *American Journal of Surgery*, 200(4), 473-477. <http://doi.org/10.1016/j.amjsurg.2009.12.021>

³² Kandilov AMG, Coomer NM, Dalton K. (2014) The impact of hospital-acquired conditions on Medicare program payments. *MMRR* 4(4): E1-E23.

SNF Denominator

The denominator is the number of Medicare Part A SNF stays in the selected time window for SNF residents ending during the selected time window, except those who meet the exclusion criteria.

Denominator Exclusions

Specific denominator exclusions for each setting are provided below.

IRF Denominator Exclusions:

1. Patient stay is excluded if data on new or worsened Stage 2, 3, 4, and unstageable pressure ulcers, including deep tissue injuries, are missing at discharge; i.e., (M0300B1 = [-] or M0300B2 = [-]) and (M0300C1 = [-] or M0300C2 = [-]) and (M0300D1 = [-] or M0300D2 = [-]) and (M0300E1 = [-] or M0300E2 = [-]) and (M0300F1 = [-] or M0300F2 = [-]) and (M0300G1 = [-] or M0300G2 = [-]).
2. Patient stay is excluded if the patient died during the IRF stay; i.e., Item 44C = [0].

LTCH Denominator Exclusions:

1. Patient stay is excluded if data on new or worsened Stage 2, 3, 4, and unstageable pressure ulcers, including deep tissue injuries, are missing on the planned or unplanned discharge assessment; i.e., (M0300B1 = [-] or M0300B2 = [-]) and (M0300C1 = [-] or M0300C2 = [-]) and (M0300D1 = [-] or M0300D2 = [-]) and (M0300E1 = [-] or M0300E2 = [-]) and (M0300F1 = [-] or M0300F2 = [-]) and (M0300G1 = [-] or M0300G2 = [-]).
2. Patient stay is excluded if the patient died during the LTCH stay; i.e., A0250 = [12].

SNF Denominator Exclusions:

1. Resident stay is excluded if data on new or worsened Stage 2, 3, 4, and unstageable pressure ulcers, including deep tissue injuries are missing at discharge; i.e., (M0300B1 = [-] or M0300B2 = [-]) and (M0300C1 = [-] or M0300C2 = [-]) and (M0300D1 = [-] or M0300D2 = [-]) and (M0300E1 = [-] or M0300E2 = [-]) and (M0300F1 = [-] or M0300F2 = [-]) and (M0300G1 = [-] or M0300G2 = [-]).
2. Resident stay is excluded if the resident died during the SNF stay.

Numerator

Specific numerator definitions for each setting are provided below.

IRF Numerator

The numerator is the number of Medicare (Part A and Medicare Advantage) stays for which the IRF-PAI indicates one or more Stage 2-4 pressure ulcer(s), or unstageable pressure ulcers due to slough/eschar, non-removable dressing/device, or deep tissue injury, that are new or worsened at discharge compared to admission.

- 1) Stage 2 (M0300B1) - (M0300B2) > 0, OR
- 2) Stage 3 (M0300C1) - (M0300C2) > 0, OR
- 3) Stage 4 (M0300D1) - (M0300D2) > 0, OR

- 4) Unstageable – Non-removable dressing/device (M0300E1) - (M0300E2) > 0, OR
- 5) Unstageable – Slough and/or eschar (M0300F1) - (M0300F2) > 0, OR
- 6) Unstageable – Deep tissue injury (M0300G1) - (M0300G2) > 0

LTCH Numerator

The numerator is the number of stays for which the discharge assessment indicates one or more new or worsened Stage 2-4 pressure ulcers, or unstageable pressure ulcers due to slough/eschar, non-removable dressing/device, or deep tissue injury, compared to admission.

- 1) Stage 2 (M0300B1) - (M0300B2) > 0, OR
- 2) Stage 3 (M0300C1) - (M0300C2) > 0, OR
- 3) Stage 4 (M0300D1) - (M0300D2) > 0, OR
- 4) Unstageable – Non-removable dressing/device (M0300E1) - (M0300E2) > 0, OR
- 5) Unstageable – Slough and/or eschar (M0300F1) - (M0300F2) > 0, OR
- 6) Unstageable – Deep tissue injury (M0300G1) - (M0300G2) > 0

SNF Numerator

The numerator is the number of complete resident Medicare Part A stays for which the discharge assessment indicates one or more new or worsened Stage 2-4 pressure ulcers, or unstageable pressure ulcers due to slough/eschar, non-removable dressing/device, or deep tissue injury, compared to admission.

- 1) Stage 2 (M0300B1) - (M0300B2) > 0, OR
- 2) Stage 3 (M0300C1) - (M0300C2) > 0, OR
- 3) Stage 4 (M0300D1) - (M0300D2) > 0, OR
- 4) Unstageable – Non-removable dressing/device (M0300E1) - (M0300E2) > 0, OR
- 5) Unstageable – Slough and/or eschar (M0300F1) - (M0300F2) > 0, OR
- 6) Unstageable – Deep tissue injury (M0300G1) - (M0300G2) > 0

Measure Time Window

Specific measure time window descriptions for each setting are provided below.

IRF Time Window

The measure will be calculated quarterly using a rolling 12 months of data. For public reporting, the quality measure score reported for each quarter is calculated using a rolling 12 months of data. All IRF records, except those that meet the exclusion criteria, during the 12 months will be included in the denominator and are eligible for inclusion in the numerator. For patients with multiple records during the 12-month time window, each record is eligible for inclusion in the measure.

LTCH Time Window

The measure will be calculated quarterly using a rolling 12 months of data. For public reporting, the quality measure score reported for each quarter is calculated using a rolling 12 months of

data. All LTCH stays, except those that meet the exclusion criteria, during the 12 months are included in the denominator and are eligible for inclusion in the numerator. For patients with multiple stays during the 12-month time window, each stay is eligible for inclusion in the measure.

SNF Time Window

The measure will be calculated quarterly using a rolling 12 months of data. For public reporting, the quality measure score reported for each quarter is calculated using a rolling 12 months of data. All Medicare Part A SNF stays, except those that meet the exclusion criteria, during the 12 months are included in the denominator and are eligible for inclusion in the numerator. For residents with multiple stays during the 12-month time window, each stay is eligible for inclusion in the measure.

Items Included in the Quality Measure

See **Appendix 4 and 5** for a summary of the M0300 items in instruments across settings, and **Appendix 6** for a summary of the items used for risk adjustment.

IRF Items:

- Items from the time of discharge are listed below. These items are used to calculate the measure:
 - M0300B1 (Number of Stage 2 pressure ulcers), M0300B2 (Number of these Stage 2 pressure ulcers that were present upon admission),
 - M0300C1 (Number of Stage 3 pressure ulcers), M0300C2 (Number of these Stage 3 pressure ulcers that were present upon admission),
 - M0300D1 (Number of Stage 4 pressure ulcers), M0300D2 (Number of these Stage 4 pressure ulcers that were present upon admission),
 - M0300E1 (Number of unstageable pressure ulcers/injuries due to non-removable dressing/device), M0300E2 (Number of these unstageable pressure ulcers/injuries that were present upon admission),
 - M0300F1 (Number of unstageable pressure ulcers due to coverage of wound bed by slough and/or eschar), M0300F2 (Number of these unstageable pressure ulcers that were present upon admission),
 - M0300G1 (Number of unstageable pressure injuries presenting as deep tissue injury), M0300G2 (Number of these unstageable pressure injuries that were present upon admission).
- In addition, items from the time of admission used to risk-adjust this quality measure are listed below:
 1. Functional Mobility Admission Performance:
 - GG0170C (Functional Mobility Admission Performance; Lying to Sitting on Side of Bed);
 2. Bowel Continence:
 - H0400 (Bowel Continence);

3. Peripheral Vascular Disease / Peripheral Arterial Disease or Diabetes Mellitus:
I0900 (Peripheral Vascular Disease (PVD) or Peripheral Arterial Disease (PAD)); or
I2900 (Diabetes Mellitus);
4. Low Body Mass Index, based on Height and Weight at admission:
25A (Height); and
26A (Weight).

LTCH Items:

- Items from the planned or unplanned discharge assessment are listed below. These items are used to calculate the measure.
 - M0300B1 (Number of Stage 2 pressure ulcers), M0300B2 (Number of these Stage 2 pressure ulcers that were present upon admission),
 - M0300C1 (Number of Stage 3 pressure ulcers), M0300C2 (Number of these Stage 3 pressure ulcers that were present upon admission),
 - M0300D1 (Number of Stage 4 pressure ulcers), M0300D2 (Number of these Stage 4 pressure ulcers that were present upon admission),
 - M0300E1 (Number of unstageable pressure ulcers/injuries due to non-removable dressing/device), M0300E2 (Number of these unstageable pressure ulcers/injuries that were present upon admission),
 - M0300F1 (Number of unstageable pressure ulcers due to coverage of wound bed by slough and/or eschar), M0300F2 (Number of these unstageable pressure ulcers that were present upon admission),
 - M0300G1 (Number of unstageable pressure injuries presenting as deep tissue injury), M0300G2 (Number of these unstageable pressure injuries that were present upon admission).
- In addition, items from the admission assessment used to risk-adjust this quality measure are listed below:
 1. Functional Mobility Admission Performance:
GG0170C (Functional Mobility; Lying to Sitting on Side of Bed);
 2. Bowel Continence:
H0400 (Bowel Continence);
 3. Peripheral Vascular Disease / Peripheral Arterial Disease or Diabetes Mellitus:
I0900 (Peripheral Vascular Disease (PVD) or Peripheral Arterial Disease (PAD)); or
I2900 (Diabetes Mellitus);
 4. Low Body Mass Index, based on Height and Weight:
K0200A (Height); and
K0200B (Weight).

SNF Items:

- Items from the discharge assessment are listed below. These items are used to calculate the measure.:
 - M0300B1 (Number of Stage 2 pressure ulcers), M0300B2 (Number of these Stage 2 pressure ulcers that were present upon admission/entry or reentry),
 - M0300C1 (Number of Stage 3 pressure ulcers), M0300C2 (Number of these Stage 3 pressure ulcers that were present upon admission/entry or reentry),
 - M0300D1 (Number of Stage 4 pressure ulcers), M0300D2 (Number of these Stage 4 pressure ulcers that were present upon admission/entry or reentry),
 - M0300E1 (Number of unstageable pressure ulcers/injuries due to non-removable dressing/device), M0300E2 (Number of these unstageable pressure ulcers/injuries that were present upon admission/entry or reentry),
 - M0300F1 (Number of unstageable pressure ulcers due to coverage of wound bed by slough and/or eschar), M0300F2 (Number of these unstageable pressure ulcers that were present upon admission/entry or reentry),
 - M0300G1 (Number of unstageable pressure injuries presenting as deep tissue injury), M0300G2 (Number of these unstageable pressure injuries that were present upon admission/entry or reentry).
- In addition, items from the PPS 5-Day assessment used to risk-adjust this quality measure are listed below:
 1. Functional Mobility Admission Performance:
 - GG0170C (Functional Mobility; Lying to Sitting on Side of Bed);
 2. Bowel Continence:
 - H0400 (Bowel Continence);
 3. Peripheral Vascular Disease / Peripheral Arterial Disease or Diabetes Mellitus:
 - I0900 (Peripheral Vascular Disease (PVD) or Peripheral Arterial Disease (PAD)); or
 - I2900 (Diabetes Mellitus);
 4. Low Body Mass Index, based on Height and Weight:
 - K0200A (Height); and
 - K0200B (Weight).

Risk Adjustment Covariates

Specific covariate definitions for each setting are provided below.

IRF Risk Adjustment Covariates

For each patient stay covariate values are assigned either '0' for covariate condition not present or '1' for covariate condition present as reported at admission.

1. Functional Mobility Admission Performance:
 - Indicator of supervision/touching assistance or more assistance for the functional mobility item Lying to Sitting on Side of Bed at admission:

Covariate = [1] (yes) if GG0170C = [01, 02, 07, 09, 10, 88] ([01] = Dependent, [02] = Substantial/maximal assistance, [07] = Patient refused, [09] = Not applicable, [10] = Not attempted due to environmental limitations, [88] = Not attempted due to medical condition or safety concerns)

Covariate = [0] (no) if GG0170C = [03, 04, 05, 06, -, ^] (**[03] = Partial/moderate assistance, [04] = Supervision or touching assistance, [05] = Setup or clean-up assistance, [06] = Independent, [-] = No response available, [^] = Valid skip**)

2. Bowel Continence

Bowel Continence (H0400) at admission

Covariate = [1] (yes) if H0400 = [1, 2, 3] ([1] = Occasionally incontinent, [2] = Frequently incontinent, [3] = Always incontinent)

Covariate = [0] (no) if H0400 = [0, 9, -, ^] ([0] = Always continent, [9] = Not rated, [-] = No response available, [^] = Valid skip)

3. Peripheral Vascular Disease / Peripheral Arterial Disease or Diabetes Mellitus:

Covariate = [1] (yes) if any of the following are true:

1. I0900 = [1] (checked)
2. I2900 = [1] (checked)

Covariate = [0] (no) if I0900 = [0, -] AND I2900 = [0, -] ([0] = No, [-] = No response available)

4. Low body mass index (BMI), based on height (25A) and weight (26A):

Covariate = [1] (yes) if $BMI \geq [12.0]$ AND $\leq [19.0]$

Covariate = [0] (no) if $BMI < [12.0]$ OR $> [19.0]$

Covariate = [0] (no) if 25A = [0, 00, -] OR 26A = [-] ([-] = Not assessed/no information)

Where: $BMI = (\text{weight} * 703 / \text{height}^2) = ([26A] * 703) / (25A^2)$ and the resulting value is rounded to one decimal place.

LTCH Risk Adjustment Covariates

For each patient stay covariate values are assigned, either '0' for covariate condition not present or '1' for covariate condition present, as reported on the admission assessment.

1. Functional Mobility Admission Performance:

Supervision/touching assistance or more for the functional mobility item Lying to Sitting on Side of Bed

Covariate = [1] (yes) if GG0170C = [01, 02, 07, 09, 10, 88] ([01] = Dependent, [02] = Substantial/maximal assistance, [07] = Patient refused, [09] = Not applicable, [10] = Not attempted due to environmental limitations, [88] = Not attempted due to medical condition or safety concerns)

Covariate = [0] (no) if GG0170C = [03, 04, 05, 06, -, ^] (**[03] = Partial/moderate assistance, [04] = Supervision or touching assistance, [05] = Setup or clean-up assistance, [06] = Independent, [-] = No response available, [^] = Valid skip**)

2. Bowel Continence:

Covariate = [1] (yes) if H0400 = [1, 2, 3] ([1] = Occasionally incontinent, [2] = Frequently incontinent, [3] = Always incontinent)

Covariate = [0] (no) if H0400 = [0, 9, -, ^] ([0] = Always continent, [9] = Not rated, [-] = No response available, [^] = Valid skip)

3. Peripheral Vascular Disease / Peripheral Arterial Disease or Diabetes Mellitus:

Covariate = [1] (yes) if any of the following are true:

1. I0900 = [1] (checked)
2. I2900 = [1] (checked)

Covariate = [0] (no) if I0900 = [0, -] AND I2900 = [0, -] ([0] = No, [-] = No response available)

4. Low body mass index (BMI), based on height (K0200A) and weight (K0200B) on the Admission assessment:

Covariate = [1] (yes) if $BMI \geq [12.0]$ AND $BMI \leq [19.0]$

Covariate = [0] (no) if $BMI < [12.0]$ OR $BMI > [19.0]$

Covariate = [0] (no) if K0200A = [0, 00, -] OR K0200B = [-] ([-] = Not assessed/ no information)

Where: $BMI = (\text{weight} * 703 / \text{height}^2) = ([K0200B] * 703) / (K0200A^2)$ and the resulting value is rounded to one decimal place.

SNF Risk Adjustment Covariates

For each resident covariate values are assigned, either '0' for covariate condition not present or '1' for covariate condition present, as reported on the PPS 5-Day assessment.

1. Functional Mobility Admission Performance:

Covariate = [1] (yes) if GG0170C = [01, 02, 07, 09, 10, 88] ([01] = Dependent, [02] = Substantial/maximal assistance, [07] = Resident refused, [09] = Not applicable, [10] = Not attempted due to environmental limitations, [88] = Not attempted due to medical condition or safety concerns)

Covariate = [0] (no) if GG0170C = [03, 04, 05, 06, -, ^] (**[03] = Partial/moderate assistance, [04] = Supervision or touching assistance, [05] = Setup or clean-up assistance, [06] = Independent, [-] = No response available, [^] = Valid skip**)

2. Bowel Continence:

Covariate = [1] (yes) if H0400 = [1, 2, 3] (1 – Occasionally incontinent, 2 – Frequently incontinent, 3 – Always incontinent)

Covariate = [0] (no) if H0400 = [0, 9, -, ^] (0 – Always continent, 9 – Not rated, '[-]' – No response available, '[^]' – Valid skip)

3. Peripheral Vascular Disease / Peripheral Arterial Disease or Diabetes Mellitus:

Covariate = [1] (yes) if any of the following are true:

1. Active Peripheral Vascular Disease (PVD) or Peripheral Arterial Disease (PAD) in the last 7 days (I0900 = [1] (checked))

2. Active Diabetes Mellitus (DM) in the last 7 days (I2900 = [1] (checked))
 Covariate = [0] (no) if I0900 = [0, -] AND I2900 = [0, -]
4. Low body mass index (BMI), based on height (K0200A) and weight (K0200B):
 Covariate = [1] (yes) if $BMI \geq [12.0]$ AND $BMI \leq [19.0]$
 Covariate = [0] (no) if $BMI < [12.0]$ OR $BMI > [19.0]$
 Covariate = [0] (no) if K0200A = [0, 00, -] OR K0200B = [-] ([-] = Not assessed/ no information)
- Where: $BMI = (\text{weight} * 703 / \text{height}^2) = ([K0200B] * 703) / (K0200A^2)$ and the resulting value is rounded to one decimal place.

Quality Measure Calculation Algorithm

The following steps are used to calculate the measure:

A. Calculate the facility observed score (steps 1 through 3)

Step 1. Calculate the denominator count:

In the IRF setting, calculate the total number of stays with an IRF-PAI assessment ending in the measure time window, which do not meet the exclusion criteria.

In the LTCH setting, calculate the total number of stays with both an admission and discharge LTCH CARE Data Set assessment ending in the measure time window, which do not meet the exclusion criteria.

In the SNF setting, calculate the total number of complete Medicare Part A SNF stays ending in the measure time window, which do not meet the exclusion criteria.

Step 2. Calculate the numerator count:

In the IRF setting, calculate the total number of patient stays in the denominator whose IRF-PAI assessment indicates one or more new or worsened pressure ulcers at discharge compared to admission.

In the LTCH setting, calculate the total number of patient stays in the denominator whose discharge assessment indicates one or more new or worsened pressure ulcers compared to admission.

In the SNF setting, calculate the total number of Medicare Part A SNF stays in the denominator with discharge assessment that indicates one or more new or worsened pressure ulcers.

Step 3. Calculate the facility's observed score:

Divide the facility's numerator count by its denominator count to obtain the facility's observed score; that is, divide the result of step 2 by the result of step 1.

B. Calculate the expected score for each patient/resident (steps 4 and 5)

Step 4. Determine presence or absence of the pressure ulcer covariates for each patient/resident:

Assign covariate values, either '0' for covariate condition not present or '1' for covariate condition present, for each patient/resident for each of the four covariates as reported on the assessment at admission for the LTCH and IRF settings or the PPS 5-Day assessment for the SNF setting, as described in the Risk Adjustment section above.

Step 5. Calculate the expected score for each patient/resident with the following formula:

$$\text{Patient-/resident-level expected QM score} = 1 / [1 + e^{-X}] \quad (1)$$

Where e is the base of natural logarithms and X is a linear combination of the constant and the logistic regression coefficients times the covariate scores (from Formula [2], below).

$$X = \beta_0 + \beta_1 * COVA + \beta_2 * COVB + \beta_3 * COVC + \beta_4 * COVD \quad (2)$$

Where β_0 is the logistic regression constant, β_1 is the logistic regression coefficient for the first covariate, $COVA$ is the patient/resident-level score for the first covariate, β_2 is the logistic regression coefficient for the second covariate, and $COVB$ is the patient-/resident-level score for the second covariate, etc. The regression constant and regression coefficients* are numbers obtained through statistical logistic regression analysis.

* Regression coefficients and constants are calculated separately for each facility type (IRF, LTCH, and SNF) and are updated each reporting period.

C. Calculate the facility-level expected score (step 6)

Step 6. Once an expected QM score has been calculated for all resident or patient stays for the IRF, LTCH, and SNF settings, calculate the facility-level expected QM score by averaging all resident-/patient-level expected scores.

D. Calculate National mean observed QM score (steps 7 through 9)

Step 7. Calculate the national denominator count:

Calculate the total number of resident or patient stays retained after exclusions and sum to derive the national denominator count.

Step 8. Calculate the national numerator count:

Calculate the total number of resident or patient stays in the denominator that triggered the QM and sum to derive the national numerator count.

Step 9. Calculate National mean observed QM score:

Divide the numerator count by its denominator count to obtain the national mean observed score; that is, divide the result of step 8 by the result of step 7.

E. Calculate the Facility-level adjusted score (step 10)

Step 10. Calculate the facility-level adjusted score based on the:

- Facility-level observed QM score (step 3),
- Facility-level expected QM score (step 6), and
- National mean observed QM score (step 9).*

*The national mean observed QM score is updated separately for each facility type (IRF, LTCH, and SNF) for each reporting period.

The calculation of the adjusted score uses the following equation:

$$Adj = 1 / [1 + e^y] \quad (3)$$

where

- Adj is the facility-level adjusted QM score, and
- $y = (\text{Ln}(\text{Obs}/(1-\text{Obs})) - \text{Ln}(\text{Exp}/(1-\text{Exp})) + \text{Ln}(\text{Nat}/(1-\text{Nat})))$
- Obs is the facility-level observed QM score,
- Exp is the facility-level expected QM score,
- Nat is the national mean observed QM score,
- Ln indicates a natural logarithm, and
- e is the base of natural logarithm.

Multiply the risk-adjusted score (Adj) by 100 and round the percent value to one decimal place. If the digit in the second decimal place is 5 or greater, add 1 to the first decimal place, otherwise leave the first decimal place unchanged. Drop all of the digits following the first decimal place.

Facility-level recoding instructions: If the facility-level observed score (step 3) equals 0, then the facility-level risk-adjusted percent is set to 0.0. If the facility-level observed score (step 3) equals 1, then the facility-level risk-adjusted percent is set to 100.0.

Section 3: Public Display Period Update for the Potentially Preventable 30-Day Post-Discharge Readmission Measure for IRF QRP, Potentially Preventable Within Stay Readmission Measure for IRFs, Discharge to Community-Post Acute Care (PAC) IRF QRP, and Medicare Spending Per Beneficiary-Post Acute Care (PAC) IRF QRP Measures

In the FY 2017 IRF PPS Final Rule, CMS adopted the Potentially Preventable 30-Day Post-Discharge Readmission Measure for IRF QRP (81 FR 52103 through 52108), Potentially Preventable Within Stay Readmission Measure for IRFs (81 FR 52108 through 52111), Discharge to Community-PAC IRF QRP measure (81 FR 52095 through 52103), and Medicare Spending Per Beneficiary-PAC IRF QRP measure (81 FR 52087 through 52095). The specifications for the Potentially Preventable 30-Day Post-Discharge Readmission Measure for IRF QRP and Discharge to Community-PAC IRF QRP measure can be found at: <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/IRF-Quality-Reporting/Downloads/Measure-Specifications-for-FY17-IRF-QRP-Final-Rule.pdf>. The specifications for the Medicare Spending Per Beneficiary-PAC IRF QRP measure can be found at: https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Post-Acute-Care-Quality-Initiatives/Downloads/2016_04_06_mspb_pac_measure_specifications_for_rulemaking.pdf

As previously adopted in the FY 2017 IRF PPS final rule (81 FR 52130 through 52131), confidential feedback reports for these 4 claims-based measures will be based on calendar years 2015 and 2016 and data collected for discharges beginning January 1, 2015 through December 31, 2016. In the FY 2018 IRF PPS Final Rule, CMS finalized a modification to the measurement period for public display of these measures, shifting from a calendar year to fiscal year cycle, beginning with public reporting of claims data for discharges in fiscal years 2016 and 2017.

Chapter 2

Standardized Data Elements

Section 1: Standardized Patient Assessment Data Element Work: An Introduction

The Improving Medicare Post-Acute Care Transformation Act of 2014 (IMPACT Act) requires CMS to develop, implement, and maintain standardized patient assessment data elements for PAC settings. The goals of implementing cross-setting standardized patient assessment data elements are to facilitate care coordination, interoperability, and improve outcomes of Medicare beneficiaries and other patients receiving post-acute care. Existing PAC assessment instruments (i.e., Outcome and Assessment Information Set (OASIS) for HHAs, Inpatient Rehabilitation Facility Patient Assessment Instrument (IRF-PAI) for IRFs, LTCH CARE Data Set (LCDS) for LTCHs, and the Minimum Data Set (MDS) for SNFs) often collect data items pertaining to similar concepts, but the individual data elements -- questions and response options -- vary by assessment instrument. With a few exceptions, the data elements collected in these assessment instruments are not currently standardized or interoperable, therefore, patient responses across the assessment instruments cannot be compared easily. The IMPACT Act further requires that the assessment instruments described above be modified to include core data elements on health assessment categories and that such data be standardized and interoperable. Implementation of a core set of standardized assessment items across PAC settings has important implications for Medicare beneficiaries and other patients receiving post-acute care, families, providers, and policymakers. These categories specified in the IMPACT Act are:

1. Functional status, such as mobility and self-care
2. Cognitive function (e.g., able to express ideas and to understand normal speech) and mental status (e.g., depression and dementia)
3. Special services, treatments, and interventions (e.g., need for ventilator, dialysis, chemotherapy, and total parenteral nutrition)
4. Medical conditions and co-morbidities (e.g., diabetes, heart failure, and pressure ulcers)
5. Impairments (e.g., incontinence; impaired ability to hear, see, or swallow)

In the following sections, we present specifications and evidence of support for the standardized patient assessment data elements finalized in the IRF QRP.

We are finalizing the standardized patient assessment data elements that we proposed to adopt for the IMPACT Act categories of Functional Status and Medical Conditions and Co-Morbidities. The standardized patient assessment data that we proposed for these clinical categories are collected and used to calculate the Percent of Residents or Patients with Pressure Ulcers That Are New or Worsened (NQF # 0678) measure and the Application of Percent of Long-Term Care Hospital Patients with an Admission and Discharge Functional Assessment and a Care Plan That Addresses Function (NQF #2631) measure.

We will not finalize the standardized patient assessment data element proposals due to the substantial comments requesting the delay for standardized patient assessment data element implementation coupled with extensive comments on the increase in burden the proposed standardized patient assessment data element policy would impose on facilities, and the need for time to prepare and implement training, manuals, and reports. We intend to adopt standardized patient assessment data elements for the three categories of Cognitive Function and Mental Status; Special Services, Treatments, and Interventions; and Impairments no later than in the FY 2020 IRF PPS proposed rule.

Section 2: Functional Status

Beginning with the FY 2020 IRF QRP, we are finalizing that the submission of the admission and discharge performance data used in the measure, Application of Percent of Long-Term Care Hospital Patients with an Admission and Discharge Functional Assessment and a Care Plan That Addresses Function (NQF #2631), that we finalized in the FY 2016 IRF PPS final rule (80 FR 47100 through 47111), also meets the requirement for the collection of standardized patient assessment data in the area of Functional Status.

This cross-setting function process measure requires the collection of admission and discharge functional status data using standardized clinical assessment items, or data elements, which assess specific functional activities, that is, 3 self-care and 9 mobility activities. These activities are coded using a 6-level rating scale that indicates the patient's level of independence with the activity; higher scores indicate more independence. For more information about this quality measure, we refer readers to the FY 2016 IRF PPS final rule (80 FR 47100 through 47111).

A table showing the functional status data elements for the measure, Application of Percent of Long-Term Care Hospital Patients with an Admission and Discharge Functional Assessment and a Care Plan That Addresses Function (NQF #2631), included in the MDS 3.0, IRF-PAI 2.0 and LCDS 4.00 is provided in **Appendix 7**.

Section 3: Medical Condition and Comorbidity Data

Standardized patient assessment data elements to satisfy the IMPACT Act category of Medical conditions and comorbidities are already submitted for calculation of the measure the Percent of Residents or Patients with Pressure Ulcers That Are New or Worsened (Short Stay) (NQF #0678), which was finalized for adoption into the IRF QRP in the FY 2012 IRF PPS final rule (76 FR 47876 through 47878), adopted as a non-risk-adjusted application of the NQF-endorsed version in the CY 2013 OPPTS/ASC Final Rule (77 FR 68500 through 68507), adopted as the risk adjusted, NQF-endorsed version in FY 2014 IRF PPS Final Rule (78 FR 47911 through 47912), and adopted in the FY 2016 IRF PPS final rule (80 FR 47089 through 47096) to fulfill IMPACT Act requirements. It was also adopted for the other PAC quality reporting programs in the FY 2016 SNF PPS final rule, the FY 2014 IPPS/LTCH PPS final rule, and the CY 2016 HH PPS final rule. The standardized patient assessment data elements used to calculate and risk adjust this measure fall under the IMPACT Act category “medical conditions and comorbidities,” listed in section 1899B(b)(1)(B) of the Act, which includes pressure ulcers and diabetes. The data elements used to calculate the finalized measure, Changes in Skin Integrity Post-Acute Care: Pressure Ulcer/Injury, are also related to the category of medical conditions and comorbidities, are described in Chapter 2, Section 2 of this document.

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Appendix 1

Reliability and Validity of Items used to Calculate Changes in Skin Integrity Post-Acute Care: Pressure Ulcer/Injury

The assessment items used in the quality measure Changes in Skin Integrity Post-Acute Care: Pressure Ulcer/Injury have undergone rigorous reliability and validity testing. The goal of reliability testing is to ensure that items on an assessment obtain consistent results when assessed by different individuals. Validity testing determines if an item measures what it intends to measure. Testing of pressure ulcer assessment items conducted across post-acute care settings indicated high inter-rater reliability of the items. In addition, testing showed that inclusion of unstageable pressure ulcers in the measure increased variability of scores in IRFs, LTCHs, and SNFs and may improve the ability of the measure to distinguish between high and low performing facilities. Also, support from Technical Expert Panels (TEP), the National Pressure Ulcer Advisory Panel (NPUAP), and public commenters offer construct validity. A brief summary of testing conducted on the pressure ulcer assessment items is provided below.

Item-Level Reliability Testing (MDS 3.0)

Item reliability for data elements assessing pressure ulcers, including unstageable pressure ulcers, was tested for the nursing home setting during implementation of MDS 3.0. Testing results are from the RAND Development and Validation of MDS 3.0 project.³³ The project consisted of a representative sample of for-profit and not-for-profit facilities, and hospital-based and freestanding facilities, which included 71 community nursing facilities in 8 states and 19 Veterans Affairs (VA) nursing homes. The sample included 3,822 residents from community nursing homes and 764 residents from VA nursing homes. The RAND pilot test of the MDS 3.0 items showed good reliability and are applicable to the IRF-PAI as well as the LTCH Continuity Assessment Record and Evaluation (CARE) Data Set because the items tested are the same as those used in the IRF-PAI and LTCH CARE Data Set. Furthermore, the MDS 3.0 testing results are appropriate to apply to the evaluation of the LTCH and IRF items because the items are identical across assessments, and there is significant overlap in the populations cared for by these providers. The short stay nursing home NQF endorsed measure, Percent of Residents or Patients with Pressure Ulcers That Are New or Worsened (Short Stay) (NQF #0678), was endorsed by NQF to include the IRF and LTCH settings using this MDS data as evidence of reliability and validity.

Across the pressure ulcer items, average gold-standard to gold-standard kappa statistic was 0.905. The average gold-standard to facility-nurse kappa statistic was 0.937. These kappa scores indicate “almost perfect” agreement using the Landis and Koch standard for strength of agreement.³⁴ We believe that the kappa statistics comparing gold-standard nurse to facility nurse responses should be sufficient for evaluation of the validity of these items as well. The results of this study are publicly available on the CMS website.

³³ Saliba, D., & Buchanan, J. (2008, April). *Development and validation of a revised nursing home assessment tool: MDS 3.0*. Contract No. 500-00-0027/Task Order #2. Santa Monica, CA: Rand Corporation. Retrieved from <http://www.cms.hhs.gov/NursingHomeQualityInits/Downloads/MDS30FinalReport.pdf>.

³⁴ Landis, R., & Koch, G. (1977, March). The measurement of observer agreement for categorical data. *Biometrics* 33(1), 159-174.

More specifically, the RAND project found a high level of inter-rater reliability for assessment items used to calculate the pressure ulcer quality measure, including assessment items for unstageable pressure ulcers. The study included the following results³⁵:

- Number of existing stage 2 pressure ulcers: Kappa statistic = 0.993 (weighted)
- Number of stage 2 ulcers present on admission: Kappa statistic= 0.966 (weighted)
- Percent agreement for number of stage 3, stage 4, and nonstageable ulcers existing and present on admission was 100%

Item-Level Reliability Testing (CARE/PAC PRD)

Additional inter-rater reliability testing of pressure ulcer items similar to those used to calculate the quality measure in the IRF, LTCH and SNF settings was conducted as a part of the PAC PRD.³⁶ For the pressure ulcer item “Does this patient have one or more unhealed pressure ulcer(s) at stage 2 or higher or unstageable?” The kappa score across all settings (acute, IRF, LTCH, SNF and HHA) was 0.845, indicating almost perfect agreement. Setting specific scores are presented below. Kappa statistics for IRF, LTCH, SNF and HHA ranged from 0.58 to 0.92 indicating “moderate” to “almost perfect” agreement.

For the pressure ulcer items collecting number of pressure ulcers present at assessment by stage, the kappa scores across all settings (acute, HHA, IRF, LTCH, SNF) were:

- Stage 2 Pressure Ulcers = 0.815
- Stage 3 Pressure Ulcers = 0.852
- Stage 4 Pressure Ulcers = 0.780

For the pressure ulcer item “Number of pressure ulcers present at admission by stage- Unstageable”, the kappa score across settings was 0.652, indicating substantial agreement. A setting specific score was only provided for the LTCH setting (kappa= 0.417, moderate agreement) as the sample size for most individual settings was too small to report (< 15).

Results of the PAC PRD study are publicly available at <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Post-Acute-Care-Quality-Initiatives/CARE-Item-Set-and-B-CARE.html>

Additional Testing

RTI performed additional testing of the measure to compare the performance of the measure with finalized changes to the measure as currently specified.³⁷ Testing of the finalized measure, including adding unstageable pressure ulcers to the quality measure, increased performance scores in all settings (with scores increasing by 0.1% in IRF settings and 1.7% in NH/SNF settings) and increased the variability of measures scores. This increased variability of scores across quarters and deciles may improve the ability of the measure to distinguish between high and low performing facilities. RTI

³⁵ Saliba, D., & Buchanan, J. (2008, April). *Development and validation of a revised nursing home assessment tool: MDS 3.0. Appendices*. Contract No. 500-00-0027/Task Order #2. Santa Monica, CA: Rand Corporation. Retrieved from http://www.geronet.med.ucla.edu/centers/borun/Appendix_A-G.pdf

³⁶ Smith, L., Deutsch, A., Hand, L., Etlinger, A., Ross, J., Abbate, J., Gage-Croll, Z., Barch, D., Gage, B. (2012, September). Continuity Assessment Record and Evaluation (CARE) Item Set: Additional Provider-Type Specific Interrater Reliability Analyses. Contract No. HHSM-500-2005-00291. Research Triangle Park, NC: RTI

³⁷ Schwartz, M., Barch, D. H., Kaur, R., Pardasaney, P. K., Seibert, J. H., Kandilov, A. M., Frank, J. M., et al. (2016, January). The development of a cross-setting pressure ulcer measure: Addition of unstageable pressure ulcers and transition to M0300 items. Prepared for Centers for Medicare & Medicaid Services.

presented the results of their findings during the July 18, 2016 TEP. Information regarding this study are also included in the TEP Summary Report.

Testing results by setting are as follows:

- IRF: The mean IRF risk-adjusted score increased from the original measure of 0.9% to 1.0% for reporting period Q1 2015 when we transition to M0300 items and add unstageable pressure ulcer items.
- LTCH: In the mean LTCH risk-adjusted score increased from the original measure of 2.6% to 2.8% for reporting period Q2 2014 when we transition to M0300 items and add unstageable pressure ulcer items.
- In NH/SNFs for reporting period Q1 2012, the mean risk-adjusted score increased from the original measure of 1.8% to 3.5% when we transitioned to M0300 items and added unstageable pressure ulcer items to the measure.

Construct Validity

A TEP meeting was held on July 18, 2016 to discuss potential changes to the measure, including changes in the data elements used to calculate the measure. During the TEP meeting, RTI presented analyses to show the impact of a transition to calculation of the measure using M0300/M1313 items and inclusion of unstageable pressure ulcers in the measure calculation. Overall, the TEP was supportive of the data element changes as well as inclusion of unstageable pressure ulcers in the measure calculation, indicating construct validity.

Specific feedback from TEP members regarding the potential transition to M0300/M1313 items is excerpted here:

Some TEP members expressed preference for the M0300 items over the M0800 items due to differences in wording. The M0800 items collect data on “worsening in pressure ulcer status,” while the M0300 items collect data on “current number of unhealed pressure ulcers.” One TEP member stated a preference for the neutral wording of the M0300 items over the M0800 items, which could potentially be interpreted to assign blame for the worsened pressure ulcers. Another TEP member stated a preference for the perceived clarity of the M0300 items, which collect both the current number of pressure ulcers and the number that were present on admission, over the M0800 items, which require the data abstracter to perform a mental calculation to determine the number of new or worsened pressure ulcers, thus providing an opportunity for error.

None of the TEP members stated preference of the use of M0800 items instead of M0300 items in calculation of the finalized quality measure and none of the members expressed objections to the modification. However, the TEP requested that consistent training across all post-acute care settings be made available to providers to support the measure. The TEP summary report is publicly available and is soon to be available on CMS’ website.³⁸

Also, prior cross-setting TEP meetings held in June and November 2013 yielded support for the inclusion of unstageable pressure ulcers in the quality measure. During these meetings, TEP members concurred that newly-acquired unstageable pressure ulcers, including suspected deep tissue injuries, should be captured in the quality measure for pressure ulcers. The TEP also advised that if a Stage 1 or 2 pressure ulcer becomes unstageable due to slough or eschar, it should be considered worsened in the quality measure for pressure ulcers. CMS and the measure development contractor received additional

³⁸ Seibert, J., Frank, J., Free, L., Waldron, D. (2016, December). Technical Expert Panel Summary Report: Refinement of the Percent of Patients or Residents with Pressure Ulcers that are New or Worsened (Short-Stay) (NQF #0678) Quality Measure for Skilled Nursing Facilities (SNFs), Inpatient Rehabilitation Facilities (IRFs),

feedback from technical and clinical advisors and the National Pressure Ulcer Advisory Panel (NPUAP) in January 2014 supporting inclusion of unstageable pressure ulcers in the measure numerator.

Functional Mobility Risk Adjustment in SNF

Since the IMPACT Act requires submission of standardized assessment data, there is a need to standardize risk adjustment for the measure Changes in Skin Integrity Post-Acute Care: Pressure Ulcer/Injury across settings. In the SNF setting, G0110A1 is used to measure limitations in bed mobility in the pressure ulcer measure, Percent of Residents or Patients with Pressure Ulcers That Are New or Worsened (Short Stay) (NQF #0678). However, in the finalized measure, the risk adjuster item G0110A1. Activities of Daily Living (ADL) Assistance: Bed Mobility Self-Performance will be replaced with the item GG0170C. Mobility: Lying to Sitting on Side of Bed for the SNF setting measure in order to align with the risk adjuster items used in the LTCH and IRF setting measures. Using data from SNF discharges between October 1, 2016 through December 15, 2016, RTI conducted testing on the comparability of analogously coded assessment items G0110A1 and GG0170C. Testing results indicate high concordance for those coded analogously as indicating high risk for limitations in bed mobility using both items at 93.85 percent. Overall concordance for high and low risk for limitations in bed mobility using both items was 89.45 percent. The correlation between the G0110A1 and GG0170C assessment items in the SNF population was found to be of medium effect, according to Cohen's standard (Spearman coefficient=0.324).

Additional testing was conducted to provide a comparison of incidence of new or worsened pressure ulcers according to how residents are characterized using the different bed mobility items: G0110A1 and GG0170C. The percent of individuals who had a new or worsened pressure ulcer and were coded as high risk for limitations in bed mobility using the item G0110A1 was 3.28, while the percent of individuals who had a new or worsened pressure ulcer and were coded as high risk for limitations in bed mobility using the item GG0170C was 3.35. Similar rates of new or worsened pressure ulcers among both groups indicates support for the replacement of G0110A1 with GG0170C to increase harmonization across settings.

Appendix 2

National Stay-Level Incidence of New or Worsened Pressure Ulcers by Stage and Post-Acute Care Setting

Table 1 lists the national stay-level incidence of new or worsened pressure ulcers at different stages. Data for IRFs come from IRF-PAI, data for LTCHs come from LTCH CARE Data Set, and data for SNFs come from MDS.

Table 1. National stay-level incidence of new or worsened pressure ulcers by stage and post-acute care setting

Pressure Ulcer Stage	IRF stays (%)	LTCH stays (%)	SNF stays (%)
Stage 2	0.56	0.95	1.28
Stage 3	0.09	0.65	0.26
Stage 4	0.01	0.48	0.05
Unstageable due to slough and/or eschar	0.14	1.15	0.40
Unstageable due to non-removable dressing/device	0.02	0.05	0.02
Deep tissue injury	0.26	1.01	0.57

SOURCE: RTI analysis of January 1, 2015 – December 31, 2015 IRF-PAI, LTCH CARE Data Set, and MDS

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Appendix 3

Distribution of Observed Scores for Quality Measures: Percent of Residents or Patients with Pressure Ulcers That Are New or Worsened (Short Stay) (NQF #0678) and Changes in Skin Integrity Post-Acute Care: Pressure Ulcer/Injury

Tables 1-3 below list the distributions of observed scores on the Percent of Residents or Patients with Pressure Ulcers That Are New or Worsened (Short Stay) (NQF #0678) quality measure, and the pressure ulcer quality measure finalized for the IRF QRP, LTCH QRP, and SNF QRP beginning with FY 2020, Changes in Skin Integrity Post-Acute Care: Pressure Ulcer/Injury.

Table 1. IRF: Distribution of Observed Scores for Quality Measures: Percent of Residents or Patients with Pressure Ulcers That Are New or Worsened (Short Stay) (NQF #0678) and Changes in Skin Integrity Post-Acute Care: Pressure Ulcer/Injury

	n	Mean (%)	Sd (%)	P10 (%)	P25 (%)	P50 (%)	P75 (%)	P90 (%)	% Perfect Score ¹
Percent of Residents or Patients with Pressure Ulcers That Are New or Worsened (Short Stay) (NQF #0678)	1,106	0.64	1.182	0.00	0.00	0.00	0.95	2.06	62.93
Changes in Skin Integrity Post-Acute Care: Pressure Ulcer/Injury	1,106	1.46	1.933	0.00	0.00	0.94	2.27	3.85	42.86

SOURCE: RTI analysis of October 1, 2016 – December 31, 2016 IRF-PAI

¹ The perfect score column refers to the proportion of facilities with scores of zero for this measure.

Table 2. LTCH: Distribution of Observed Scores for Quality Measures: Percent of Residents or Patients with Pressure Ulcers That Are New or Worsened (Short Stay) (NQF #0678) and Changes in Skin Integrity Post-Acute Care: Pressure Ulcer/Injury

	n	Mean (%)	Sd (%)	P10 (%)	P25 (%)	P50 (%)	P75 (%)	P90 (%)	% Perfect Score ¹
Percent of Residents or Patients with Pressure Ulcers That Are New or Worsened (Short Stay) (NQF #0678)	421	1.95	2.481	0.00	0.53	1.29	2.49	4.17	12.11
Changes in Skin Integrity Post-Acute Care: Pressure Ulcer/Injury	421	3.73	3.216	0.45	1.53	2.97	4.89	8.11	5.46

SOURCE: RTI analysis of January 1, 2015 – December 31, 2015 LTCH CARE Dataset

¹ The perfect score column refers to the proportion of facilities with scores of zero for this measure.

Table 3. Distribution of Observed Scores for Quality Measures: Percent of Residents or Patients with Pressure Ulcers That Are New or Worsened (Short Stay) (NQF #0678) and Changes in Skin Integrity Post-Acute Care: Pressure Ulcer/Injury

	n	Mean (%)	Sd (%)	P10 (%)	P25 (%)	P50 (%)	P75 (%)	P90 (%)	% Perfect Score ¹
Percent of Residents or Patients with Pressure Ulcers That Are New or Worsened (Short Stay) (NQF #0678)	14,153	1.75	2.121	0.00	0.00	1.19	2.53	4.32	29.11
Changes in Skin Integrity Post-Acute Care: Pressure Ulcer/Injury	14,153	2.58	2.655	0.00	0.65	2.00	3.70	5.83	20.32

SOURCE: RTI analysis of October 1, 2015 – September 30, 2016 MDS

¹The perfect score column refers to the proportion of facilities with scores of zero for this measure.

Appendix 4

Data Elements Used in Calculation of Changes in Skin Integrity Post-Acute Care: Pressure Ulcer/Injury

IRF		LTCH		SNF	
M0300 – Current Number of Unhealed Pressure Ulcers/Injuries at Each Stage					
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.		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.		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.	
Enter number <input type="text"/>	1: Number of Stage 2 pressure ulcers. If 0 skip to M0300C, Stage 3	Enter number <input type="text"/>	1: Number of Stage 2 pressure ulcers. If 0 skip to M0300C, Stage 3	Enter number <input type="text"/>	1: Number of Stage 2 pressure ulcers. If 0 skip to M0300C, Stage 3
Enter number <input type="text"/>	2: Number of <u>these</u> Stage 2 pressure ulcers that were present upon admission. Enter how many were noted at the time of admission.	Enter number <input type="text"/>	2: Number of <u>these</u> Stage 2 pressure ulcers that were present upon admission. Enter how many were noted at the time of admission.	Enter number <input type="text"/>	2: Number of <u>these</u> 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.
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.		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.		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.	
Enter number <input type="text"/>	1: Number of Stage 3 pressure ulcers. If 0 skip to M0300D, Stage 4	Enter number <input type="text"/>	1: Number of Stage 3 pressure ulcers. If 0 skip to M0300D, Stage 4	Enter number <input type="text"/>	1: Number of Stage 3 pressure ulcers. If 0 skip to M0300D, Stage 4
Enter number <input type="text"/>	2: Number of <u>these</u> Stage 3 pressure ulcers that were present upon admission. Enter how many were noted at the time of admission.	Enter number <input type="text"/>	2: Number of <u>these</u> Stage 3 pressure ulcers that were present upon admission. Enter how many were noted at the time of admission.	Enter number <input type="text"/>	2: Number of <u>these</u> 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
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.		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.		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.	
Enter number <input type="text"/>	1: Number of Stage 4 pressure ulcers. If 0 skip to M0300E, Unstageable non-removable dressing/device	Enter number <input type="text"/>	1: Number of Stage 4 pressure ulcers. If 0 skip to M0300E, Unstageable non-removable dressing/device	Enter number <input type="text"/>	1: Number of Stage 4 pressure ulcers. If 0 skip to M0300E, Unstageable non-removable dressing/device

(continued)

IRF		LTCH		SNF	
Enter number <input type="text"/>	2: Number of <u>these</u> Stage 4 pressure ulcers that were present upon admission. Enter how many were noted at the time of admission	Enter number <input type="text"/>	2: Number of <u>these</u> Stage 4 pressure ulcers that were present upon admission. Enter how many were noted at the time of admission.	Enter number <input type="text"/>	2: Number of <u>these</u> 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.
E. Unstageable - Non-removable dressing/device: Known but not stageable due to non-removable dressing/device.		E. Unstageable - Non-removable dressing/device: Known but not stageable due to non-removable dressing/device.		E. Unstageable - Non-removable dressing/device: Known but not stageable due to non-removable dressing/device.	
Enter number <input type="text"/>	1: Number of unstageable pressure ulcers/injuries due to non-removable dressing/device. If 0 skip to M0300F, Unstageable – Slough and/or eschar	Enter number <input type="text"/>	1: Number of unstageable pressure ulcers/injuries due to non-removable dressing/device. If 0 skip to M0300F, Unstageable – Slough and/or eschar	Enter number <input type="text"/>	1: Number of unstageable pressure ulcers/injuries due to non-removable dressing/device. If 0 skip to M0300F, Unstageable – Slough and/or eschar
Enter number <input type="text"/>	2: Number of <u>these</u> unstageable pressure ulcers/injuries that were present upon admission. Enter how many were noted at the time of admission.	Enter number <input type="text"/>	2: Number of <u>these</u> unstageable pressure ulcers/injuries that were present upon admission. Enter how many were noted at the time of admission.	Enter number <input type="text"/>	2: Number of <u>these</u> unstageable pressure ulcers/injuries that were present upon admission/ entry or reentry. Enter how many were noted at the time of admission / entry or reentry.
F. Unstageable - slough and/or eschar: Known but not stageable due to coverage of wound bed by slough and/or eschar.		F. Unstageable - slough and/or eschar: Known but not stageable due to coverage of wound bed by slough and/or eschar.		F. Unstageable - slough and/or eschar: Known but not stageable due to coverage of wound bed by slough and/or eschar.	
Enter number <input type="text"/>	1: Number of unstageable pressure ulcers due to coverage of the wound bed by slough and/or eschar. If 0 skip to M0300G, Unstageable – Deep tissue injury	Enter number <input type="text"/>	1: Number of unstageable pressure ulcers due to coverage of the wound bed by slough and/or eschar. If 0 skip to M0300G, Unstageable – Deep tissue injury	Enter number <input type="text"/>	1: Number of unstageable pressure ulcers due to coverage of the wound bed by slough and/or eschar. If 0 skip to M0300G, Unstageable – Deep tissue injury
Enter number <input type="text"/>	2: Number of <u>these</u> unstageable pressure ulcers that were present upon admission. Enter how many were noted at the time of admission.	Enter number <input type="text"/>	2: Number of <u>these</u> unstageable pressure ulcers that were present upon admission. Enter how many were noted at the time of admission.	Enter number <input type="text"/>	2: Number of <u>these</u> unstageable pressure ulcers that were present upon admission/ entry or reentry. Enter how many were noted at the time of admission / entry or reentry.
G. Unstageable - Deep tissue injury		G. Unstageable - Deep tissue injury		G. Unstageable - Deep tissue injury	
Enter number <input type="text"/>	1. Number of unstageable pressure injuries presenting as deep tissue injury. If 0 skip to N2005, Medication Intervention	Enter number <input type="text"/>	1: Number of unstageable pressure injuries presenting as deep tissue injury. If 0 skip to N2005, Medication Intervention	Enter number <input type="text"/>	1. Number of unstageable pressure injuries presenting as deep tissue injury. If 0 skip to M1030, Number of Venous and Arterial Ulcers
Enter number <input type="text"/>	2. Number of <u>these</u> unstageable pressure injuries that were present upon admission. Enter how many were noted at the time of admission.	Enter number <input type="text"/>	2: Number of <u>these</u> unstageable pressure injuries that were present upon admission. Enter how many were noted at the time of admission.	Enter number <input type="text"/>	2. Number of <u>these</u> unstageable pressure injuries that were present upon admission/ entry or reentry. Enter how many were noted at the time of admission / entry or reentry.

Appendix 5
**Pressure Ulcer Quality Measure Item Standardization: Data
Elements Collected for Calculation of Quality Measures used in
IRF, LTCH, and SNF Quality Reporting Programs**

IRF, LTCH, and SNF PAC Settings: Items Collected at Discharge				
Item	Item Description	IRF-PAI v2.0 (effective 10/1/2018)	LTCH CARE Data Set v4.00 (effective 7/1/2018)	MDS 3.0 (effective 10/1/2018)
M0300	Current Number of Unhealed Pressure Ulcers/Injuries at Each Stage			
<i>A</i>	Number of Stage 1 pressure injuries	X	X	X
<i>B1</i>	Number of Stage 2 pressure ulcers	X	X	X
<i>B2</i>	Number of these Stage 2 pressure ulcers that were present upon admission	X	X	X
<i>C1</i>	Number of Stage 3 pressure ulcers	X	X	X
<i>C2</i>	Number of these Stage 3 pressure ulcers that were present upon admission	X	X	X
<i>D1</i>	Number of Stage 4 pressure ulcers	X	X	X
<i>D2</i>	Number of these Stage 4 pressure ulcers that were present upon admission	X	X	X
<i>E1</i>	Number of unstageable pressure ulcers/injuries due to non-removable dressing/device	X	X	X
<i>E2</i>	Number of these unstageable pressure ulcers/injuries that were present upon admission	X	X	X
<i>F1</i>	Number of unstageable pressure ulcers due to coverage of wound bed by slough and/or eschar	X	X	X
<i>F2</i>	Number of these unstageable pressure ulcers that were present upon admission	X	X	X
<i>G1</i>	Number of unstageable pressure injuries presenting as deep tissue injury	X	X	X
<i>G2</i>	Number of these unstageable pressure injuries that were present upon admission	X	X	X

X = Item is present

Appendix 6

Data Elements Used in Risk Adjustment of Changes in Skin Integrity Post-Acute Care: Pressure Ulcer/Injury

IRF Risk Adjustment Covariates	LTCH Risk Adjustment Covariates	SNF Risk Adjustment Covariates
Functional Mobility Admission Performance		
<p>GG0170C. Mobility: Lying to Sitting on Side of Bed: The ability to move from lying on the back to sitting on the side of the bed with feet flat on the floor, and with no back support.</p> <p>06. Independent 05. Setup or clean-up assistance 04. Supervision or touching assistance 03. Partial/moderate assistance 02. Substantial/maximal assistance 01. Dependent</p> <p>If activity was not attempted, code reason:</p> <p>07. Patient refused 09. Not applicable 10. Not attempted due to environmental limitations 88. Not attempted due to medical condition or safety concerns</p>	<p>GG0170C. Mobility: Lying to Sitting on Side of Bed: The ability to move from lying on the back to sitting on the side of the bed with feet flat on the floor, and with no back support.</p> <p>06. Independent 05. Setup or clean-up assistance 04. Supervision or touching assistance 03. Partial/moderate assistance 02. Substantial/maximal assistance 01. Dependent</p> <p>If activity was not attempted, code reason:</p> <p>07. Patient refused 09. Not applicable 10. Not attempted due to environmental limitations 88. Not attempted due to medical condition or safety concerns</p>	<p>GG0170C. Mobility: Lying to Sitting on Side of Bed: The ability to move from lying on the back to sitting on the side of the bed with feet flat on the floor, and with no back support.</p> <p>06. Independent 05. Setup or clean-up assistance 04. Supervision or touching assistance 03. Partial/moderate assistance 02. Substantial/maximal assistance 01. Dependent</p> <p>If activity was not attempted, code reason:</p> <p>07. Resident refused 09. Not applicable 10. Not attempted due to environmental limitations 88. Not attempted due to medical condition or safety concerns</p>
Bowel Continence		
<p>H0400. Bowel Continence</p> <p>0. Always continent 1. Occasionally incontinent 2. Frequently incontinent 3. Always incontinent 9. Not rated</p>	<p>H0400. Bowel Continence</p> <p>0. Always continent 1. Occasionally incontinent 2. Frequently incontinent 3. Always incontinent 9. Not rated</p>	<p>H0400. Bowel Continence</p> <p>0. Always continent 1. Occasionally incontinent 2. Frequently incontinent 3. Always incontinent 9. Not rated</p>
Peripheral Vascular Disease (PVD) / Peripheral Arterial Disease (PAD) or Diabetes		
<p>I0900. Peripheral Vascular Disease (PVD) / Peripheral Arterial Disease (PAD)</p> <p>0. Does not have PVD or PAD 1. Have PVD or PAD</p> <p>I2900 Diabetes Mellitus (DM)</p> <p>0. Does not have DM 1. Has DM</p>	<p>I0900. Peripheral Vascular Disease (PVD) / Peripheral Arterial Disease (PAD)</p> <p>0. Does not have PVD or PAD 1. Have PVD or PAD</p> <p>I2900 Diabetes Mellitus (DM)</p> <p>0. Does not have DM 1. Has DM</p>	<p>I0900. Peripheral Vascular Disease (PVD) / Peripheral Arterial Disease (PAD)</p> <p>0. Did not have PVD or PAD in the last 7 days 1. Had PVD or PAD in the last 7 days</p> <p>I2900 Diabetes Mellitus (DM)</p> <p>0. Did not have DM in the last 7 days 1. Had DM in the last 7 days</p>
Height and Weight (Low Body Mass Index)		
<p>25A (Height); and 26A (Weight).</p>	<p>K0200A (Height); and K0200B (Weight).</p>	<p>K0200A (Height); and K0200B (Weight).</p>

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Appendix 7

Self-Care and Mobility Items Included in Section GG of the IRF-PAI, MDS, and LTCH CARE Data Set to Assess Functional Status – Effective on or before October 1, 2018

Table 1 lists the function items included in Section GG of the IRF-PAI, MDS, and LTCH CARE Data Set that are adopted as standardized data elements in FY 2018 IRF PPS, LTCH PPS and SNF PPS to satisfy the requirement to report standardized patient assessment data under section 1899B(b)(1)(B)(i) of the Act addressing functional status, such as mobility and self-care at admission to a PAC provider and before discharge from a PAC provider.

Table 1. Self-Care and Mobility Items Included in Section GG of the IRF-PAI, LTCH CARE Data Set, and MDS That are Adopted as Standardized Data Elements – Effective October 1, 2018

Item	Inpatient Rehabilitation Facility Patient Assessment Instrument (IRF-PAI) Version 2.0	Long-Term Care Hospital CARE Data Set Version 4.00	Minimum Data Set (MDS) 3.0 Version 1.16.0
Self-Care			
GG0130A Eating*	✓	✓	✓
GG0130B Oral hygiene*	✓	✓	✓
GG0130C Toileting hygiene*	✓	✓	✓
Mobility			
GG0170B Sit to lying*	✓	✓	✓
GG0170C Lying to sitting on side of bed*	✓	✓	✓
GG0170D Sit to stand*	✓	✓	✓
GG0170E Chair/bed-to-chair transfer*	✓	✓	✓
GG0170F Toilet transfer*	✓	✓	✓
GG0170J Walk 50 feet with two turns*	✓	✓	✓
GG0170K Walk 150 feet*	✓	✓	✓
GG0170R Wheel 50 feet with two turns*	✓	✓	✓
GG0170S Wheel 150 feet*	✓	✓	✓

NOTES:

* Items included in cross-setting quality measure, Application of Percent of Long-Term Care Hospital Patients with an Admission and Discharge Functional Assessment and a Care Plan that Addresses Function (NQF #2631) and finalized as standardized data elements in FY 2018 IRF PPS, SNF PPS and LTCH PPS.