Analyses to Inform the Potential Use of Standardized Patient Assessment Data Elements in the Inpatient Rehabilitation Facility Prospective Payment System

Report

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ANALYSES TO INFORM THE POTENTIAL USE OF STANDARDIZED PATIENT ASSESSMENT DATA ELEMENTS IN THE INPATIENT REHABILITATION FACILITY PROSPECTIVE PAYMENT SYSTEM

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EXECUTIVE SUMMARY

The purpose of this report is to provide analyses to inform the potential use of standardized patient assessment data elements collected on admission in the Inpatient Rehabilitation Facility Prospective Payment System (IRF PPS). The report summarizes the use of assessment data in the current IRF PPS, describes the process used to substitute standardized patient assessment data elements collected on admission into the IRF PPS, presents the case-mix groups (CMGs) and payment weights based on those elements, and assesses potential impacts to IRF providers.

The analyses were conducted under the assumption that all other aspects of the inpatient rehabilitation facility (IRF) payment system would remain unchanged, including the rehabilitation impairment category (RIC) structure, the assignment of comorbidity tiers, and the methodology for calculating the payment weights. The only focus of this work was ensuring that the CMGs within RICs would accurately reflect patient costs when using standardized patient assessment data elements collected on admission in place of the current elements, Functional Independence Measure (FIM™) items.

The data used in these analyses were drawn from the Fiscal Year (FY) 2017 Medicare Inpatient National Claims History and Inpatient Rehabilitation Facility Patient Assessment Instrument (IRF-PAI) data files. Consistent with the approach used in the development of the current IRF PPS (Carter et al., 2002), RTI International used Classification and Regression Tree (CART) analysis to develop CMGs using standardized patient assessment data elements collected on admission, including motor function, cognitive function, and age.

The CART models using the standardized patient assessment data elements collected on admission yielded 88 CMGs. There are 92 CMGs in the FY 2017 IRF PPS. Although the overall number of CMGs is similar, the number of CMGs per RIC sometimes shifted. For example, RIC 1 contains 10 CMGs in the FY 2017 IRF PPS, but 6 when using the standardized patient assessment data elements. Motor score emerged as the key function variable in the definition of the CMGs across all RICs. Cognitive function is not used to define the CMGs emerging from the use the standardized patient assessment data elements, though it was included in the CART modeling.

Impact analyses focused on the percent change in mean standardized payment across providers with different characteristics and in different geographic areas to assess whether providers with specific characteristics are disproportionately affected, either negatively or positively, by the use of CMGs based on standardized patient assessment data elements. On average, across all IRF providers, using CMGs based on standardized patient assessment data elements collected at admission is not expected to change the average payment amount. We do, however, estimate some redistribution of payments at the provider level.

IRF providers in rural areas would experience a 2.25% increase in mean payment using the CMGs generated by the standardized patient assessment data elements, but IRF providers in urban areas would experience a slight decrease (0.15%). Freestanding IRFs would see a decrease in mean payment (2.43% for urban, 1.37% for rural), and IRF units would see increases (2.77% for urban, 3.03% for rural). Note that the standardized payment is not the final payment made to providers; the final payment accounts for outlier payments, wage adjustment, rural versus urban status, low-income status, and teaching status. The current analysis assumes that the approach for applying these adjustments remains constant.

SECTION 1 BACKGROUND

1.1 Introduction

The purpose of this report is to provide analyses to inform the potential use of standardized patient assessment data elements collected on admission in the Inpatient Rehabilitation Facility Prospective Payment System (IRF PPS).

The current IRF PPS, implemented in 2002, is based on Functional Independence Measure (FIM^{TM}) items collected in the Inpatient Rehabilitation Facility Patient Assessment Instrument (IRF-PAI). In the current IRF PPS, patients are assigned to one of 87 case-mix groups (CMGs) on the basis of diagnosis requiring rehabilitation, motor function, cognitive function, and age. An additional five CMGs are used if the patient either dies or is discharged in 3 days or less.

Beginning in October 2016, standardized patient assessment data elements that measure functional status were introduced to the IRF-PAI. Collection of these items began as part of the IRF Quality Reporting Program (QRP). The standardized patient assessment data elements were also introduced to the Minimum Data Set, which is the assessment instrument used for skilled nursing facilities, and the Long-Term Care Hospital Continuity Assessment Record and Evaluation (CARE) data set, which is the assessment instrument used for long-term care hospitals.¹ The IRF Quality Reporting Program includes four functional outcome measures related to self-care and mobility that are based on standardized patient assessment data elements. These quality measures were finalized in the Fiscal Year 2016 IRF PPS Final Rule (80 FR 47111 through 47117). Since October 2016, IRF providers have collected both standardized patient assessment data elements and FIM™ items (along with function modifier items that are used to generate FIM™ items).

The next sections of this report summarize the use of assessment data in the current IRF PPS, describe the process RTI International used to substitute standardized patient assessment data elements collected on admission into the IRF PPS, present the CMGs and payment weights based on the use of the standardized patient assessment data elements collected on admission, and assess impacts to IRF providers.

1.2 Overview of the IRF PPS

Under the IRF PPS, Medicare fee-for-service payments are made to IRFs on a per-discharge basis, and patients are assigned to one of 92 CMGs. Of the 92 CMGs, 87 are assigned based on diagnoses requiring rehabilitation, motor function, cognitive function, and age. Five

Note that standardized patient assessment data elements will be collected on the Outcome and Assessment Information Set (OASIS), the home health patient assessment instrument, beginning in January 2019.

CMGs assignments are based on short-stay status or death during the IRF stay. Data on motor function and cognitive function are obtained from IRF-PAI assessments collected by all IRF providers at admission. The Fiscal Year 2017 IRF-PAI can be found in *Appendix A*.

Each of the diagnosis-based rehabilitation impairment categories (RICs), derived from the admission impairment group code on the IRF-PAI, has a RIC-specific set of CMGs based on the characteristics of the patients in that RIC. The number of CMGs can vary by RIC. For example, in the current IRF PPS, there are 10 CMGs for RIC 1, "stroke," but only 4 CMGs for RIC 14, "cardiac." The CMGs reflect differences in costs by different levels of motor function, cognitive function, and age. *Table 1* shows the 23 RICs in the IRF PPS.

Payment weights are based on a combination of CMG and comorbidity tier using an established comorbidity list applicable to all CMGs (with the exception of RIC 50, "short stay," and RIC 51, "expired"). There are four comorbidity tiers, each reflecting an increasing level of severity. Each year, CMS updates a national base payment amount (called a standard payment conversion factor) and payment weights for each CMG and comorbidity tier combination. The IRF PPS CMGs and relative weights for Fiscal Year 2017 are shown in **Appendix B**. To derive payment, the standard payment conversion factor is multiplied by the payment weight associated with each CMG. Payments are also adjusted for geographic differences in wages, by the proportion of each facility's care furnished to low-income individuals, by rural status, and by teaching status, as applicable. Finally, patients who are transferred to another inpatient setting after a below-average length of stay in the IRF (specific to each CMG) are paid for on a per-diem basis.

Table 1. RICs in the IRF PPS

| 1. | Stroke | 13. Rheumatoid, other arthritis |
|----|-----------------------------------|---|
| 2. | Traumatic brain injury | 14. Cardiac |
| 3. | Non-traumatic brain injury | 15. Pulmonary |
| 4. | Traumatic spinal cord injury | 16. Pain syndrome |
| 5. | Non-traumatic spinal cord injury | 17. Major multiple trauma without brain or spinal cord injury |
| 6. | Neurological | 18. Major multiple trauma with brain or spinal cord injury |
| 7. | Fracture of lower extremity | 19. Guillain-Barré |
| 8. | Replacement of lower extremity | 20. Miscellaneous |
| 9. | Other orthopedic | 21. Burns |
| 10 | . Amputation, lower extremity | 50. Short stay |
| 11 | . Amputation, non-lower extremity | 51. Expired |
| 12 | . Osteoarthritis | |

1.3 Use of Assessment Data in the IRF PPS: Motor Function and Cognitive Function

The IRF PPS uses admission FIM™ items from the IRF-PAI to construct a motor score and a cognitive score. These scores in turn are used for CMG assignment. The FIM™ items used to create the motor score are shown in *Table 2*. The IRF PPS uses a weighted motor score that was developed as part of the initial payment system development work by RAND and CMS (Carter et al., 2002). Rather than applying an equal weight to each FIM™ item to generate a motor score, items are weighted to reflect their relative contribution to costs of care. The weights associated with each item in constructing the motor score are reported in *Table 2. Table 3* shows the rating scale for the FIM™ Items. The rating scale reflects a patient's need for assistance and differentiates between total dependence and complete independence. Activities that did not occur, originally coded to "0," are recoded to the most dependent level on the rating scale (Level 1, "Total Assistance"), except for toilet transfer, where "0" is recoded to Level 2, "Maximal Assistance." The range for the motor function score is 12–84 (12 items assessed on a scale of 1–7), with higher scores indicating higher ability.

Table 2. IRF-PAI FIM™ Items Used in IRF PPS Motor Score

| Item | Number | Weight |
|---------------------------------|--------|--------|
| Eating | 39Aa | 0.6 |
| Grooming | 39Ba | 0.2 |
| Bathing | 39Ca | 0.9 |
| Dressing—upper | 39Da | 0.2 |
| Dressing—lower | 39Ea | 1.4 |
| Toileting | 39Fa | 1.2 |
| Bladder | 39Ga | 0.5 |
| Bowel | 39Ha | 0.2 |
| Bed, chair, wheelchair transfer | 39Ia | 2.2 |
| Toilet transfer | 39Ja | 1.4 |
| Walk/wheelchair | 39La | 1.6 |
| Stairs | 39Ma | 1.6 |

SOURCE: IRF-PAI.

Table 3. FIM™ levels

No Helper

- 7 Complete independence (timely, safely)
- 6 Modified independence (device)

Helper-Modified Dependence

- 5 Supervision (subject = 100%)
- 4 Minimal assistance (subject = 75% or more)
- 3 Moderate assistance (subject = 50% or more)

Helper-Complete Dependence

- 2 Maximal assistance (subject = 25% or more)
- 1 Total assistance (subject less than 25%)
- O Activity does not occur; use this code only at admission

SOURCE: IRF-PAI.

Five cognitive function items based on FIM $^{\text{TM}}$ are included in the cognitive score (**Table 4**). To calculate the cognitive score for payment, these items are summed (with equal weighting). The range for the cognitive score is 5–35 (5 items assessed on a scale of 1–7), with higher scores indicating higher ability. The cognitive items use the same rating scale as the motor function items.

Table 4. IRF-PAI FIM™ Items Used in the IRF PPS Cognitive Score

| Item | Number |
|--------------------|--------|
| Comprehension | 39N |
| Expression | 390 |
| Social interaction | 39P |
| Problem solving | 39Q |
| Memory | 39R |

SOURCE: IRF-PAI.

1.4 Standardized Patient Assessment Data Elements

Beginning in October 2016, Medicare required IRFs to complete standardized patient assessment data elements for Hearing, Speech, and Vision (Section B); Cognitive Patterns (Section C); Functional Abilities and Goals (Section GG); and Bladder and Bowel (Section H) on the IRF-PAI. Though the content of the FIM™ items (and the function modifier items that are used to generate the FIM™ items) overlaps with the standardized patient assessment

data elements (e.g., eating, dressing, transfer), the items differ in the specific item definitions and the rating scale used for scoring. Standardized patient assessment data elements and FIM™ items (and the function modifier items that are used to generate the FIM™ items) are both collected within a 3-day period from a patient's admission, but the instructions for assessing patient performance differ. The standardized patient assessment data elements assess a patient's usual performance during the assessment period, in contrast to FIM™ items (and the function modifier items that are used to generate the FIM™ items), which assess a patient's most-dependent status (i.e., lowest score) during the assessment period. The standardized patient assessment data elements use a six-level rating scale for motor function items, whereas FIM™ (and the function modifiers that are used to generate the FIM™ items) uses a seven-level scale.

Tables 5a and **5b** outline the standardized patient assessment data elements used in RTI's current analysis of the IRF PPS, and **Table 6** shows the rating scale for the motor function items. Additional function items are available among the standardized patient assessment data elements on the IRF-PAI (e.g., walking on uneven surfaces, car transfer, picking up object), but not included in the current analyses. The excluded activities are more challenging and less likely to be assessed on admission, as the patient's medical condition or safety concerns may prevent assessment.

Given the differences in the item definitions and rating scales, using the standardized patient assessment data elements in place of FIM™ items would require more than a simple substitution into the current IRF PPS for the purposes of assigning patients to payment groups and computing payments. To incorporate the standardized patient assessment data elements into the payment system analysis, RTI considered the range of available items to construct a motor score and to account for cognition. RTI then generated a revised set of CMGs based on the standardized patient assessment data elements collected on admission to reflect the differences in items, definitions, and rating scales. Section 2 describes the data used and the complete analytic approach.

Table 5a. IRF-PAI Standardized Patient Assessment Data Elements: Motor Score

| Motor Score | |
|-------------|---------------------------------|
| GG0130A1 | Eating |
| GG0130B1 | Oral hygiene |
| GG0130C1 | Toileting hygiene |
| GG0130E1 | Shower/bathe self |
| GG0130F1 | Upper-body dressing |
| GG0130G1 | Lower-body dressing |
| GG0130H1 | Putting on/taking off footwear |
| GG0170A1 | Roll left and right |
| GG0170B1 | Sit to lying |
| GG0170C1 | Lying to sitting on side of bed |
| GG0170D1 | Sit to stand |
| GG0170E1 | Chair/bed-to-chair transfer |
| GG0170F1 | Toilet transfer |
| GG0170I1 | Walk 10 feet |
| GG0170J1 | Walk 50 feet with two turns |
| GG0170K1 | Walk 150 feet |
| GG0170M1 | One-step curb |
| H0350 | Bladder continence |
| H0400 | Bowel continence |

Table 5b. IRF-PAI Standardized Patient Assessment Data Elements: Cognitive Function

| Cognitive Items | |
|-----------------|--|
| BB0700 | Expression of ideas and wants |
| BB0800 | Understanding verbal content |
| C0500 | Brief Interview for Mental Status (BIMS) summary score |

Table 6. Self-Care and Mobility Rating Scale for Standardized Patient Assessment Data Elements

Activities may be completed with or without assistive devices

- 06. Independent
- 05. Setup or clean-up assistance
- 04. Supervision or touching assistance
- 03. Partial/moderate assistance
- 02. Substantial/maximal assistance
- 01. Dependent

If activity was not attempted, code reason

- 07. Patient refused
- 09. Not applicable
- 88. Not attempted because of medical condition or safety concerns

Source: IRF-PAI

SECTION 2 ANALYTIC APPROACH

This section outlines the overall analytic approach for generating case-mix groups (CMGs) and corresponding payment weights using standardized patient assessment data elements collected on admission. The analyses were conducted under the assumption that all other aspects of the inpatient rehabilitation facility (IRF) payment system would remain unchanged, including the rehabilitation impairment category (RIC) structure, the assignment of comorbidity tiers, and the methodology for calculating the payment weights. The only focus of this work was ensuring that the CMGs within RICs would accurately reflect patient costs when using standardized patient assessment data elements collected on admission in place of the Functional Independence Measure (FIMTM) items.

2.1 Data and Sample

The data used in these analyses were drawn from the Fiscal Year (FY) 2017 Medicare Inpatient National Claims History and Inpatient Rehabilitation Facility Patient Assessment Instrument (IRF-PAI) data files. Medicare Cost Report data were used to construct IRF staylevel costs.

The initial set of FY 2017 IRF-PAI assessments included 472,943 observations (data were pulled in November 2017). Assessments were matched to IRF claims where Medicare Part A was the primary payer for the stay and the Medicare Part A payment amount was greater than zero. Claims were matched to IRF-PAI assessments by beneficiary ID (Health Insurance Claim [HIC] number) and admission date. IRF-PAI assessment item 20A (Payment Source) was used to confirm the primary payer. More than 95 percent of assessments coded as Medicare Fee-For-Service on this item were matched to claims.

Figure 1 presents additional sample exclusion criteria. A small number of cases had different discharge dates on the claim and on the IRF-PAI. For these cases, the dates on the claim were used to validate whether the patient was discharged during FY 2017 (N = 4 exclusions). Several claims matched more than one IRF-PAI assessment. Because the Inpatient Rehabilitation Facility Prospective Payment System (IRF PPS) uses the IRF-PAI functional assessment at admission to assign beneficiaries to CMGs, the earliest assessment attributed to the claim was selected. Any subsequent assessments (N = 234) were excluded. IRF stays occurring at critical access hospitals were excluded. The overall analytic sample included 369,684 IRF claims and assessments. **Appendix C** contains descriptive statistics on this sample for all items used in the FY 2017 IRF PPS and for the standardized patient assessment data elements used in the current analyses.

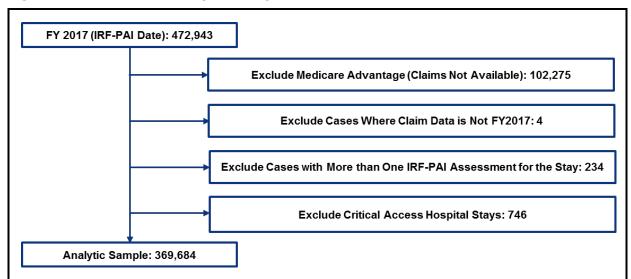


Figure 1. IRF PPS Analytic Sample, FY 2017

2.2 Classification and Regression Tree Analysis: Using Standardized Patient Assessment Data Elements to Generate CMGs

Consistent with the approach used in the development of the current IRF PPS (Carter et al., 2002), RTI International used Classification and Regression Tree (CART) analysis to develop CMGs using standardized patient assessment data elements collected on admission, including motor score, cognitive score, and age. CART uses a stepwise process in which the data are split into "nodes," or groups based on an outcome of interest. In this case, data were grouped using IRF claim costs by identifying the covariate and cut-point at each split that contribute most to the model fit (Morgan, 2014). The CART approach continues to split the sample until the contribution to model fit of any further splitting falls below a user-determined threshold. RTI set CART parameters to require a minimum node size of 100 stays and to require that any additional splits yield an 0.5 percentage point increase in explanatory power. This process results in a "tree" of rules that can be used to assign cases to CMGs.

RTI used a subset of the analytic sample in the CART analysis. The subset is meant to reflect the most-typical cases and therefore excluded beneficiaries who died during the IRF stay (N = 613), those whose stay lasted 3 days or fewer (N = 8,646), and those who were transferred to another inpatient setting (N = 88,637). As previously noted, decedents and short stays have separate CMGs under the IRF PPS, whereas transfers with a below-average length of stay are reimbursed using per diem rates. Stays with excessively high cost amounts (where cost is more than 3 standard deviations from the mean) were also excluded so that a small number of very high costs cases would not drive the results.

Ultimately, RTI used a sample of 270,103 IRF stays to generate the set of CMGs using standardized patient assessment data elements.

The independent variables used in the CART regression included motor score, cognitive function (specifically memory and communication), and age. The specification of these variables based on the standardized patient assessment data elements is described below. The dependent variable in the CART regression was IRF stay costs. The construction of the cost variable is also described in the following sections. CART models were run separately for each RIC, using the same methodology that was used when the IRF payment system was initially developed. This allows for diagnosis-specific splits on motor score, cognitive function, and age to reflect the characteristics and resource use of the patients within each RIC.

2.3 Motor Score Using Standardized Patient Assessment Data Elements

RTI constructed a motor score using the standardized patient assessment data elements collected on admission presented in *Table 5a* (Section 1). Additional function items are available among the standardized patient assessment data elements (e.g., walking on uneven surfaces, car transfer, picking up object) but were not included the motor score calculation. The excluded elements are typically too challenging for patients on admission to IRFs and therefore are less likely to be assessed on admission. The frequency with which these items are not assessed on admission in the IRF decreases their relevance for predicting costs.

Each of the motor function items among the standardized patient assessment data elements is scored on a six-point scale, with higher scores indicating greater independence (*Table 6*). Additional codes can be used to indicate why the activity did not occur. If one of these codes was recorded for the case or a dash was entered or a caret because of a skip pattern, the score for that item was recoded to 1 (Dependent) for all items except GG0170F (Toilet Transfer), which was recoded to 2 (Substantial/Maximal Assistance). This recoding approach is consistent with the current recoding approach in the IRF PPS.

The standardized data elements for bladder (H0350) and bowel (H0400) continence were included in the motor score to be consistent with the current Functional Independence Measure (FIM $^{\text{TM}}$) motor score used in the IRF payment system. Because the higher response codes reflect more impairment and higher resource use would be associated with higher codes (i.e., 0 = Always Continent, 4 = Always Incontinent), scores on the bowel and bladder items were reversed for inclusion in the motor score calculation. Scores were also adjusted so that the minimum score was 1 for bowel and bladder items to be consistent with the minimum score for other items in the motor score.

The item recoding approach for the bowel and bladder items differed from the approach used for the self-care and mobility items. This recoding approach was informed by clinical review and consultation with the IRF-PAI Training Manual. See *Table 7* for a summary of the recoding for H0350 (Bladder Continence) and *Table 8* for a summary of the recoding for H0400 (Bowel Continence). Cases coded as 9 (not applicable, e.g., indwelling catheter) were recoded to "Always Incontinent" for the bladder item and "Frequently Incontinent" for the bowel item, and missing codes (i.e., dash use) were recoded to "Always Continent" for both items. Cases coded as "No Urine Output" (e.g., renal failure) on the bladder item were recoded to "Always Continent." This recoding is consistent with the current approach, because patients who do not void are coded as 7, "Complete Independence," for the FIM Bladder item. We also note that dependence on renal dialysis is accounted for in the comorbidity tiers. Finally, on the bladder item, "Always Continent" and "Stress Incontinence Only" were combined to a single level representing no incontinence.

Table 7. Recoding for IRF-PAI Item H0350: Bladder Continence

| - | | Recode for Use in Motor Score | | | | | |
|------------|-------------------------------|-------------------------------|---|----------------------------|-------------------------|--|--|
| | N | 4—Always Continent | 3– Incontinent Less Than Daily | 2— Incontinent Daily | 1—Always Incontinent | | |
| | 0—Always continent | Χ | | | | | |
| | 1—Stress incontinence only | X | | | | | |
| H0350— | 2—Incontinent less than daily | | X | | _ | | |
| Bladder | 3—Incontinent daily | | | X | | | |
| Continence | 4—Always incontinent | | | | X | | |
| | 5—No urine output | X | | | | | |
| | 9-Not applicable | | | | X | | |
| | Missing | X | | | | | |

Recoded for Use in Motor Score 3. 2-4-Always Occasionally Frequently 1—Always **Continent Incontinent Incontinent Incontinent** Ν 0-Always Χ continent 1-Occasionally Χ incontinent H0400-2—Frequently Χ Bowel incontinent **Continence** 3—Always Χ incontinent 9-Not rated Χ Χ Missing

Table 8. Recoding for IRF-PAI Item H0400: Bowel Continence

The motor score used in the CART model was calculated by summing the scores for each of the 19 items. The range of scores for the motor score is 19 to 110, with a higher score indicating higher functional status and greater level of independence.

2.4 Cognitive Function Using Standardized Patient Assessment Data Elements

Standardized data elements related to cognitive function are collected in Section B and Section C of the IRF-PAI. Section B contains two items pertaining to communication: item BB0700 measures expression of ideas and wants, and Item BB0800 measures understanding verbal content. Section C contains an item measuring memory, the Brief Interview for Mental Status (BIMS). Though the IRF PPS includes a single cognitive score in the current CMG structure, the data elements in Section B and Section C cannot easily be summed. For this reason, two separate variables were used as independent variables in the CART model: first, a sum score of the two communication items in Section B, and second, memory using the BIMS in Section C.

Each of the communication items in Section B is scored on a 4-point scale, with higher scores indicating greater function. These two items were summed to a single communication score for inclusion in the CART model.

Section C of the IRF-PAI assesses memory using the BIMS. The BIMS consists of interview items and responses that sum to an overall score of 0 to 15, with a higher score indicating better memory skills. If the patient cannot complete the BIMS, a Staff Assessment of Mental Status is completed assessing memory. A three-level scale for memory using BIMS or the Staff Assessment of Mental Status was used in the CART model, as described in **Table 9**.

Table 9. Memory Using BIMS and Staff Assessment of Mental Status

| Memory Category | BIMS Score | Staff Assessment Details Recalled |
|-----------------|------------|-----------------------------------|
| 1 | 0-7 | 0-1 |
| 2 | 8-12 | 2 |
| 3 | 13-15 | 3–4 |

2.5 Costs

Costs of care are defined in this analysis as wage-adjusted costs for the IRF stay. IRF costs were calculated in three steps using data from the Medicare Cost Reports and Medicare Provider Analysis and Review claims. First, routine costs for the claim were calculated by multiplying the facility-specific routine cost per day (derived from the Cost Report) by the number of utilization days (length of stay) on the claim. Next, claim ancillary costs were calculated by multiplying a set of 14 ancillary cost to charge ratios (derived from the facility-specific Cost Report) by the claim charges for those cost centers and summing. Finally, total claim cost was calculated as the sum of routine and ancillary costs. Total claim cost was then capped at the 99.9th percentile (Coomer, Ingber, Coots, & Morley, 2017). Wage-adjusted costs were calculated as follows:

$$Wage-Adjusted\ Cost = Claim\ Cost\ /\ (0.293 + 0.707*Wage\ Index)$$

where 0.707 is the labor share of total costs of care (Centers for Medicare & Medicaid Services [CMS], 2017).

2.6 Results of CART Analysis

For each of the 21 RICs, RTI conducted CART analysis using the dependent variable of wage-adjusted cost of care for the stay, and four independent variables: (1) motor score, (2) communication (IRF-PAI Section B), (3) memory (IRF-PAI Section C BIMS), and (4) beneficiary age on the date of admission. CART analysis was conducted using R statistical software. Each regression tree was terminated when the next split would contribute less than 0.005 to model fit (R-squared).

Results of initial regression tree runs for each RIC were reviewed to ensure monotonicity (i.e., that the level of impairment and average cost associated with each node increased across nodes within RIC) and consistency with clinical judgement (i.e., that a split occurred where such a split would be a clinically reasonable predictor of cost).

The CART models using the standardized patient assessment data elements collected on admission resulted in 88 CMGs, including RICs 50 ("short stay," one CMG) and 51 ("expired," four CMGs), which remained unchanged. The CMGs based on the standardized

patient assessment data elements collected on admission and age ranges used to group beneficiaries are presented in *Table 10*. The next section discusses calculation of the payment weights. For reference, the 92 CMGs in the FY 2017 IRF PPS are shown in *Appendix B*.

RTI adjusted the CART-generated trees for two RICs: RIC 16, "pain syndrome," and RIC 17, "major multiple trauma without brain or spinal cord injury." A similar issue was observed in each of these RICs; the communication items emerged as a splitting variable in the CART analysis, but the threshold for the split was very high and not in line with clinical expectations. Specifically, the communication item was distinguishing beneficiaries with no impairment from all others (splitting at 7 out of 8 in RIC 16, and 8 out of 8 in RIC 17) and attributing considerably higher cost for what could amount to a small level of impairment. Because of the very high threshold for this split, the inconsistency with clinical expectations, and the low number of observations in this RIC, the team removed the split from the final CMG definitions.

Although the overall number of CMGs is similar to the FY 2017 CMGs using the standardized patient assessment data elements, the number of CMGs per RIC sometimes shifted. For example, RIC 1 contains 10 CMGs in the FY 2017 IRF PPS, but 6 when using the standardized patient assessment data elements. Each of the final CMGs is monotonic within each RIC. For a model using the CMGs based on the standardized patient assessment data elements and comorbidity tiers to predict wage-adjusted costs of care, the r-squared value is 0.3239; the r-squared value is 0.3040 for the CMGs used in the current IRF PPS. In a model that also controls for the variation between providers, this value increases to 0.5248, compared with 0.5332 using the CMGs from the current IRF PPS. The r-squared value is higher in models controlling for variation between providers. Overall, there is little difference between the model r-squares using the CMGs from the current IRF PPS and the model r-squares using the CMGs based on the standardized patient assessment data elements.

Motor score is the key function variable emerging in the definition of the CMGs across all RICs. Though included in the CART modeling, neither the communication items (IRF-PAI Section B) nor the memory items (IRF-PAI Section C BIMS) are reflected in the final CMG definitions. However, cognitive score is included in the CMG definitions for RIC 1, "stroke, and RIC 2, "traumatic brain injury," in the FY 2017 IRF PPS. Though cognitive status is considered an important factor in resource use, current cognitive status items may not sufficiently measure the complexity of cognitive status, which may contribute to these results. Even without the explicit use of cognitive items in the CMG definitions, the function rating scale for the standardized patient assessment data elements may capture aspects of cognitive status; the scale measures need for assistance, including supervision.

CMG Definitions Using Standardized Patient Assessment Data Elements Table 10.

| | | CMG D | escription | Relative Weight | | | |
|----------------------------------|------|------------|------------|-----------------|--------|--------|--------|
| RIC | CMG | Rule 1 | Rule 2 | Tier 1 | Tier 2 | Tier 3 | None |
| Stroke | 0101 | Motor ≥ 77 | | 1.0570 | 0.9232 | 0.8492 | 0.8050 |
| Stroke | 0102 | Motor < 77 | Motor ≥ 68 | 1.3370 | 1.1678 | 1.0741 | 1.0182 |
| Stroke | 0103 | Motor < 68 | Motor ≥ 55 | 1.6848 | 1.4715 | 1.3535 | 1.2831 |
| Stroke | 0104 | Motor < 55 | Motor ≥ 47 | 2.1484 | 1.8764 | 1.7260 | 1.6361 |
| Stroke | 0105 | Motor < 47 | Age ≥ 85 | 2.4137 | 2.1081 | 1.9391 | 1.8382 |
| Stroke | 0106 | Motor < 47 | Age < 85 | 2.7956 | 2.4417 | 2.2460 | 2.1291 |
| Traumatic brain injury | 0201 | Motor ≥ 73 | | 1.2418 | 1.0426 | 0.9376 | 0.8708 |
| Traumatic brain injury | 0202 | Motor < 73 | Motor ≥ 64 | 1.4929 | 1.2534 | 1.1272 | 1.0468 |
| Traumatic brain injury | 0203 | Motor < 64 | Motor ≥ 51 | 1.7699 | 1.4859 | 1.3363 | 1.2411 |
| Traumatic brain injury | 0204 | Motor < 51 | Motor ≥ 36 | 2.1753 | 1.8263 | 1.6424 | 1.5254 |
| Traumatic brain injury | 0205 | Motor < 36 | | 2.6959 | 2.2634 | 2.0355 | 1.8904 |
| Non-traumatic brain injury | 0301 | Motor ≥ 70 | | 1.2192 | 1.0096 | 0.9348 | 0.8735 |
| Non-traumatic brain injury | 0302 | Motor < 70 | Motor ≥ 57 | 1.5403 | 1.2755 | 1.1810 | 1.1034 |
| Non-traumatic brain injury | 0303 | Motor < 57 | Motor ≥ 45 | 1.8496 | 1.5316 | 1.4182 | 1.3251 |
| Non-traumatic brain injury | 0304 | Motor < 45 | Age ≥ 79 | 2.0666 | 1.7113 | 1.5846 | 1.4806 |
| Non-traumatic brain injury | 0305 | Motor < 45 | Age < 79 | 2.2755 | 1.8843 | 1.7447 | 1.6302 |
| Traumatic spinal cord injury | 0401 | Motor ≥ 64 | | 1.2999 | 1.0952 | 1.0122 | 0.9370 |
| Traumatic spinal cord injury | 0402 | Motor < 64 | Motor ≥ 57 | 1.6630 | 1.4011 | 1.2949 | 1.1987 |
| Traumatic spinal cord injury | 0403 | Motor < 57 | Motor ≥ 46 | 1.9672 | 1.6574 | 1.5318 | 1.4180 |
| Traumatic spinal cord injury | 0404 | Motor < 46 | Motor ≥ 36 | 2.6209 | 2.2082 | 2.0408 | 1.8892 |
| Traumatic spinal cord injury | 0405 | Motor < 36 | Age < 63 | 3.1923 | 2.6895 | 2.4857 | 2.3010 |
| Traumatic spinal cord injury | 0406 | Motor < 36 | Age ≥ 63 | 3.6963 | 3.1142 | 2.8782 | 2.6643 |
| Non-traumatic spinal cord injury | 0501 | Motor ≥ 75 | | 1.1291 | 0.9068 | 0.8382 | 0.7642 |
| Non-traumatic spinal cord injury | 0502 | Motor < 75 | Motor ≥ 63 | 1.4096 | 1.1322 | 1.0464 | 0.9541 |

Table 10. CMG Definitions Using Standardized Patient Assessment Data Elements (continued)

| | | CMG Description | | Relativ | | | |
|--------------------------------------|------|-----------------|------------|---------|--------|--------|--------|
| RIC | СМС | Rule 1 | Rule 2 | Tier 1 | Tier 2 | Tier 3 | None |
| Non-traumatic spinal cord injury | 0503 | Motor < 63 | Motor ≥ 52 | 1.7905 | 1.4381 | 1.3292 | 1.2119 |
| Non-traumatic spinal cord injury | 0504 | Motor < 52 | Motor ≥ 44 | 2.2191 | 1.7823 | 1.6473 | 1.5020 |
| Non-traumatic spinal cord injury | 0505 | Motor < 44 | | 2.8377 | 2.2792 | 2.1065 | 1.9206 |
| Neurological | 0601 | Motor ≥ 69 | | 1.3205 | 1.0500 | 0.9795 | 0.8873 |
| Neurological | 0602 | Motor < 69 | Motor ≥ 57 | 1.6324 | 1.2981 | 1.2109 | 1.0969 |
| Neurological | 0603 | Motor < 57 | Motor ≥ 47 | 1.9170 | 1.5244 | 1.4220 | 1.2882 |
| Neurological | 0604 | Motor < 47 | | 2.2218 | 1.7667 | 1.6481 | 1.4929 |
| Fracture of lower extremity | 0701 | Motor ≥ 67 | | 1.1960 | 0.9851 | 0.9487 | 0.8595 |
| Fracture of lower extremity | 0702 | Motor < 67 | Motor ≥ 55 | 1.5308 | 1.2608 | 1.2142 | 1.1001 |
| Fracture of lower extremity | 0703 | Motor < 55 | Motor ≥ 45 | 1.8510 | 1.5245 | 1.4682 | 1.3302 |
| Fracture of lower extremity | 0704 | Motor < 45 | | 2.0790 | 1.7124 | 1.6491 | 1.4941 |
| Replacement of lower-extremity joint | 0801 | Motor ≥ 67 | | 1.0475 | 0.8892 | 0.8044 | 0.7437 |
| Replacement of lower-extremity joint | 0802 | Motor < 67 | Motor ≥ 56 | 1.2925 | 1.0972 | 0.9926 | 0.9176 |
| Replacement of lower-extremity joint | 0803 | Motor < 56 | Motor ≥ 47 | 1.5469 | 1.3132 | 1.1880 | 1.0982 |
| Replacement of lower-extremity joint | 0804 | Motor < 47 | | 1.8517 | 1.5719 | 1.4220 | 1.3146 |
| Other orthopedic | 0901 | Motor ≥ 69 | | 1.1749 | 0.9376 | 0.8792 | 0.8083 |
| Other orthopedic | 0902 | Motor < 69 | Motor ≥ 55 | 1.5103 | 1.2052 | 1.1302 | 1.0390 |
| Other orthopedic | 0903 | Motor < 55 | Motor ≥ 47 | 1.8117 | 1.4457 | 1.3557 | 1.2463 |
| Other orthopedic | 0904 | Motor < 47 | | 2.0393 | 1.6273 | 1.5261 | 1.4029 |
| Amputation lower extremity | 1001 | Motor ≥ 67 | | 1.3231 | 1.1340 | 1.0276 | 0.9487 |
| Amputation lower extremity | 1002 | Motor < 67 | Motor ≥ 59 | 1.6372 | 1.4032 | 1.2715 | 1.1739 |
| Amputation lower extremity | 1003 | Motor < 59 | Motor ≥ 49 | 1.8961 | 1.6251 | 1.4726 | 1.3596 |
| Amputation lower extremity | 1004 | Motor < 49 | | 2.1617 | 1.8527 | 1.6788 | 1.5500 |
| Amputation non-lower extremity | 1101 | | | 1.8322 | 1.3022 | 1.3022 | 1.0585 |

(continued)

Table 10. CMG Definitions Using Standardized Patient Assessment Data Elements (continued)

| | | CMG Description | | | Relative Weigh | | | |
|---|------|-----------------|------------|--------|----------------|--------|--------|--|
| RIC | CMG | Rule 1 | Rule 2 | Tier 1 | Tier 2 | Tier 3 | None | |
| Osteoarthritis | 1201 | Motor ≥ 65 | | 1.3071 | 1.0757 | 0.9575 | 0.8777 | |
| Osteoarthritis | 1202 | Motor < 65 | Motor ≥ 49 | 1.6787 | 1.3816 | 1.2297 | 1.1273 | |
| Osteoarthritis | 1203 | Motor < 49 | | 1.9145 | 1.5756 | 1.4024 | 1.2857 | |
| Rheumatoid other arthritis | 1301 | Motor ≥ 69 | | 1.1111 | 0.9753 | 0.9076 | 0.8570 | |
| Rheumatoid other arthritis | 1302 | Motor < 69 | Motor ≥ 58 | 1.3176 | 1.1567 | 1.0764 | 1.0164 | |
| Rheumatoid other arthritis | 1303 | Motor < 58 | Age ≥ 72 | 1.6691 | 1.4652 | 1.3635 | 1.2875 | |
| Rheumatoid other arthritis | 1304 | Motor < 58 | Age < 72 | 1.7642 | 1.5487 | 1.4412 | 1.3609 | |
| Cardiac | 1401 | Motor ≥ 70 | | 1.1839 | 0.9920 | 0.8991 | 0.8023 | |
| Cardiac | 1402 | Motor < 70 | Motor ≥ 59 | 1.4635 | 1.2263 | 1.1115 | 0.9918 | |
| Cardiac | 1403 | Motor < 59 | Motor ≥ 51 | 1.7034 | 1.4272 | 1.2936 | 1.1544 | |
| Cardiac | 1404 | Motor < 51 | | 1.9704 | 1.6510 | 1.4964 | 1.3353 | |
| Pulmonary | 1501 | Motor ≥ 84 | | 1.0149 | 0.9214 | 0.8346 | 0.7907 | |
| Pulmonary | 1502 | Motor < 84 | Motor ≥ 74 | 1.2323 | 1.1187 | 1.0133 | 0.9601 | |
| Pulmonary | 1503 | Motor < 74 | Motor ≥ 59 | 1.4557 | 1.3215 | 1.1970 | 1.1341 | |
| Pulmonary | 1504 | Motor < 59 | Motor ≥ 46 | 1.7464 | 1.5853 | 1.4360 | 1.3606 | |
| Pulmonary | 1505 | Motor < 46 | | 2.0273 | 1.8404 | 1.6670 | 1.5794 | |
| Pain syndrome | 1601 | Motor ≥ 70 | | 1.2293 | 0.9242 | 0.8776 | 0.7774 | |
| Pain syndrome | 1602 | Motor < 70 | Motor ≥ 61 | 1.5216 | 1.1439 | 1.0863 | 0.9622 | |
| Pain syndrome | 1603 | Motor < 61 | | 1.8391 | 1.3826 | 1.3129 | 1.1630 | |
| Major multiple trauma without brain or spinal cord injury | 1701 | Motor ≥ 62 | | 1.4355 | 1.1154 | 1.0668 | 0.9504 | |
| Major multiple trauma without brain or spinal cord injury | 1702 | Motor < 62 | Motor ≥ 51 | 1.7939 | 1.3938 | 1.3330 | 1.1876 | |
| Major multiple trauma without brain or spinal cord injury | 1703 | Motor < 51 | Motor ≥ 47 | 2.0059 | 1.5585 | 1.4906 | 1.3280 | |
| Major multiple trauma without brain or spinal cord injury | 1704 | Motor < 47 | Motor ≥ 39 | 2.1848 | 1.6975 | 1.6236 | 1.4465 | |
| Major multiple trauma without brain or spinal cord injury | 1705 | Motor < 39 | | 2.4250 | 1.8841 | 1.8020 | 1.6055 | |

(continued)

Table 10. CMG Definitions Using Standardized Patient Assessment Data Elements (continued)

| | | CMG Description | | | Relative Weight | | | |
|--|------|-----------------|------------|--------|-----------------|--------|--------|--|
| RIC | CMG | Rule 1 | Rule 2 | Tier 1 | Tier 2 | Tier 3 | None | |
| Major multiple trauma with brain or spinal cord injury | 1801 | Motor ≥ 72 | | 1.1980 | 1.0351 | 0.8752 | 0.8233 | |
| Major multiple trauma with brain or spinal cord injury | 1802 | Motor < 72 | Motor ≥ 58 | 1.5335 | 1.3250 | 1.1204 | 1.0539 | |
| Major multiple trauma with brain or spinal cord injury | 1803 | Motor < 58 | Motor ≥ 42 | 2.0608 | 1.7806 | 1.5056 | 1.4162 | |
| Major multiple trauma with brain or spinal cord injury | 1804 | Motor < 42 | | 2.9220 | 2.5248 | 2.1348 | 2.0081 | |
| Guillain-Barré | 1901 | Motor ≥ 54 | | 1.5211 | 1.2331 | 1.1228 | 1.0834 | |
| Guillain-Barré | 1902 | Motor < 54 | | 3.4558 | 2.8014 | 2.5507 | 2.4613 | |
| Miscellaneous | 2001 | Motor ≥ 70 | | 1.2339 | 1.0047 | 0.9349 | 0.8447 | |
| Miscellaneous | 2002 | Motor < 70 | Motor ≥ 58 | 1.5240 | 1.2410 | 1.1547 | 1.0433 | |
| Miscellaneous | 2003 | Motor < 58 | Motor ≥ 49 | 1.7837 | 1.4525 | 1.3515 | 1.2211 | |
| Miscellaneous | 2004 | Motor < 49 | | 2.0373 | 1.6589 | 1.5436 | 1.3947 | |
| Burns | 2101 | | | 1.9058 | 1.5390 | 1.5118 | 1.3015 | |
| Short stay | 5001 | | | - | - | - | 0.1801 | |
| Mortality (orthopedic) LOS ≤ 13 | 5101 | | | _ | - | - | 0.6240 | |
| Mortality (orthopedic) LOS ≥ 14 | 5102 | | | - | - | - | 1.7071 | |
| Mortality (non-orthopedic) LOS ≤ 15 | 5103 | | | - | - | - | 0.6795 | |
| Mortality (non-orthopedic) LOS ≥ 16 | 5104 | | | - | - | - | 2.1069 | |

NOTE: LOS = length of stay.

2.7 Payment Weight Calculations for Standardized Patient Data Element-Based CMGs

After generating new CMGs using the standardized patient assessment data elements collected at admission, RTI calculated payment weights for these groups. Payment weights are calculated for each CMG and comorbidity tier combination. Standardized payment amounts can then be calculated by multiplying the standard payment conversion factor by the relative weight associated with the CMG and comorbidity tier combination. CMS recalibrates these weights on an annual basis using cost report data for IRF stays from the prior year. RTI implemented the same approach to calculating payment weights as CMS uses in the current IRF PPS. The sections below describe the process.

Average Length of Stay

To calculate payment weights, first, the average length of stay (LOS) for every combination of CMG and comorbidity tier was calculated. This is done using an iterative process, where outlier cases with a length of stay more than three standard deviations from the mean are trimmed after each iteration. This process is repeated over five iterations, at which point the average length of stay is stabilized.

Comorbidity-Adjusted Costs

The second step of this process involves removing the effect of comorbidities from the wage-adjusted cost of care for each IRF stay. The effect of comorbidities on cost was estimated using ordinary least squares regression with provider fixed effects. The dependent variable in this analysis was log-transformed, wage-adjusted costs for the IRF stay. The model controlled for RIC, CMG (nested within RIC), and an interaction between RIC and comorbidity tier that accounted for a differential effect of comorbidities across RICs. Short transfers (defined as a transfer with a length of stay less than the average for that CMG and tier) and cases with log-transformed costs of care more than three standard deviations from the overall mean were excluded to reduce the effect of extreme value cases in the model. The cost of care for each case assigned to a comorbidity tier was then divided by the exponentiated regression coefficient for the corresponding RIC-tier combination to estimate what the stay's cost of care would have been without comorbidities (tier-adjusted).

Calculating CMG-Level Relative Weights

The third step of this process estimates the relative payment weight for every CMG using the tier-adjusted costs of care. These weights are calculated using the Hospital-Specific Relative Value (HSRV) methodology described in detail in earlier work (Carter et al., 2002). The HSRV methodology uses an iterative process to determine the relative costliness of the IRF stays assigned to a particular CMG while adjusting for the relative costliness of the providers who cared for those patients. For example, consider two patients assigned to the same CMG with the same total costs of care. If patient A was treated at an IRF with higher

average costs of care than patient B, patient A would have a lower relative cost under the HSRV approach. The case-mix index (CMI), or relative costliness of each provider, is determined by the average cost of care across all of the provider's patients. Short transfers are included in this step and given reduced weight in the calculation.

The weight for each case is set to 1 for all cases except short transfers, where weight equals the following:

Case Weight =
$$(LOS + 0.5)/Average LOS$$

The CMG-level payment weight is initially calculated as follows:

CMI is then calculated for each provider as a function of payment weights and case weights:

The CMG-level payment weight for each stay is then multiplied by the CMI for the provider in which the stay occurred, which yields a new CMG-level average payment weight, and subsequently, a new value for the CMI for each provider. This process is repeated over five iterations, at which point the values for CMG-level payment weight and CMI stabilize. At this stage, the case-weighted average payment weight across all cases is equal to 1.

Calculating Comorbidity-Level Weights

The final step in this process is adjusting the newly calculated payment weight for the effect of comorbidities. Essentially, the process used to remove the effect of comorbidities in the earlier step is reversed. The CMG-level payment weights are multiplied by the exponentiated RIC-Tier-level regression coefficients, which were initially used to estimate the tier-adjusted costs of care, to calculate a payment weight for every combination of CMG and comorbidity tier. The same tier-level multiplier is applied to every CMG within a RIC. For example, the RIC-Tier multiplier for RIC 1 ("stroke") Tier B is approximately 1.31. Therefore, the payment weights for each CMGs under RIC 1 are multiplied by 1.31 to generate payment weights for patients assigned to comorbidity Tier B in each CMG in RIC 1.

Budget Neutrality Adjustment

Because costs of care can vary from year to year, CMS typically adjusts the final payment weights to ensure budget neutrality across years. To make this adjustment, first, the case-weighted average payment weight is calculated across all cases for the new and current payment weights. Next, the new payment weights are multiplied by the ratio of the case-weighted average of the legacy weights to the new weights.

 $Budget\ Neutral\ Factor = \frac{sum(Pmt.\ Weights\ Current)/sum(Case\ Weights\ Current)}{sum(Pmt.\ Weights\ New)/sum(Case\ Weights\ New)}$

Budget Neutral Weight = Pmt. Weight * Budget Neutral Factor

The final list of payment weights by CMG and comorbidity tier is presented in **Table 10**. **Table 11** presents descriptive statistics of the budget-neutral payment weights using standardized patient assessment data elements and the FY17 IRF PPS payment weights at the RIC level. At the RIC level, the changes in mean weight are relatively small.

Table 11. Comparison of RIC-Level Average Payment Weights

| | | Payment Weights Using Standardized Patient Assessment Data Elements | | FY 2017 IRF PPS Payment Weights | | |
|----|---|--|-----------|------------------------------------|-----------|--------|
| | RIC | Mean | Std. Dev. | Mean | Std. Dev. | Obs. |
| 1 | Stroke | 1.555 | 0.496 | 1.551 | 0.521 | 74,640 |
| 2 | Traumatic brain injury | 1.370 | 0.389 | 1.392 | 0.412 | 11,683 |
| 3 | Non-traumatic brain injury | 1.315 | 0.314 | 1.333 | 0.335 | 26,386 |
| 4 | Traumatic spinal cord injury | 1.927 | 0.742 | 1.967 | 0.794 | 2,779 |
| 5 | Non-traumatic spinal cord injury | 1.449 | 0.462 | 1.463 | 0.481 | 14,853 |
| 6 | Neurological | 1.328 | 0.299 | 1.344 | 0.319 | 52,974 |
| 7 | Fracture of lower extremity | 1.335 | 0.255 | 1.336 | 0.260 | 37,564 |
| 8 | Replacement of lower extremity joint | 0.986 | 0.211 | 0.966 | 0.214 | 15,981 |
| 9 | Other orthopedic | 1.182 | 0.239 | 1.187 | 0.258 | 29,037 |
| 10 | Amputation lower extremity | 1.497 | 0.339 | 1.464 | 0.318 | 9,378 |
| 11 | Amputation non-lower extremity | 1.413 | 0.278 | 1.396 | 0.324 | 409 |
| 12 | Osteoarthritis | 1.148 | 0.191 | 1.180 | 0.194 | 748 |
| 13 | Rheumatoid other arthritis | 1.187 | 0.226 | 1.240 | 0.265 | 917 |
| 14 | Cardiac | 1.166 | 0.262 | 1.159 | 0.256 | 20,999 |
| 15 | Pulmonary | 1.259 | 0.254 | 1.239 | 0.263 | 7,514 |
| 16 | Pain syndrome | 1.089 | 0.204 | 1.082 | 0.222 | 1,220 |
| 17 | Major multiple trauma without brain or spinal cord injury | 1.374 | 0.287 | 1.377 | 0.301 | 6,616 |
| 18 | Major multiple trauma with brain or spinal cord injury | 1.593 | 0.535 | 1.636 | 0.525 | 1,797 |

(continued)

Table 11. Comparison of RIC-Level Average Payment Weights (continued)

| | | Payment Weights Using Standardized Patient Assessment Data Elements | | FY 2017 IRF PPS Payment Weights | | |
|------|----------------|--|-----------|------------------------------------|-----------|---------|
| | RIC | Mean | Std. Dev. | Mean | Std. Dev. | Obs. |
| 19 | Guillain-Barré | 2.011 | 0.797 | 1.979 | 0.788 | 689 |
| 20 | Miscellaneous | 1.235 | 0.269 | 1.229 | 0.281 | 44,037 |
| 21 | Burns | 1.451 | 0.160 | 1.498 | 0.123 | 204 |
| 50 | Short stay | 0.180 | 0.000 | 0.159 | 0.000 | 8,646 |
| 51 | Mortality | 0.846 | 0.458 | 0.944 | 0.424 | 613 |
| Tota | al | 1.314 | 0.420 | 1.314 | 0.437 | 369,684 |

SECTION 3 IMPACT ANALYSES

This section presents the results of impact analyses of the percent change in mean standardized payment across providers with different characteristics and in different geographic areas. The purpose of this analysis is to examine whether providers with specific characteristics are disproportionately affected, negatively or positively, by the use of casemix groups (CMGs) based on standardized patient assessment data elements.

3.1 Impact Analysis Sample and Provider Characteristics

The impact analyses were conducted using the same sample of inpatient rehabilitation facility (IRF) stays used to generate the revised payment weights. Note that this sample includes transfers to another institutional setting with a length of stay less than the CMG-Tier-level average; however, these cases are paid on a per-diem basis if the length of stay exceeds 3 days. These cases would not be affected by the changes to the CMG structure, but are included in the sample because they are included in the weight calculations.

The key outcome examined in the impact analysis was percent change in mean standardized payment. The standardized payment is the weight for each comorbidity tier within each CMG multiplied by the Fiscal Year (FY) 2017 standard payment conversion factor of \$15,708. The standardized payment is not the final payment made to providers; the final payment accounts for outlier payments, wage adjustment, rural versus urban status, low-income status, and teaching status. This analysis assumes that the approach for applying these adjustments remains constant, however. Therefore, those adjustments were not applied. Only standardized payments were used to assess the effect of the changes to the CMGs based on the use of the standardized patient assessment data elements collected on admission.

Provider characteristics considered in the impact analyses included urban versus rural location, for-profit versus nonprofit versus government ownership status, region, teaching status, and bed size. Provider characteristics were determined through analysis of the 2017 Provider of Services File.

3.2 Results of Impact Analyses

On average, across all IRF providers, the use of CMGs based on standardized patient assessment data elements collected at admission is not expected to change the average payment amount. We do, however, estimate some redistribution of payments at the provider level. Understanding how these changes affect providers with different characteristics is an important aspect of understanding the potential impact of changes to the IRF industry. Impacts by IRF provider characteristic are shown in **Table 12**. We

estimate that IRF providers in rural areas would experience a 2.25% increase in mean payment using the CMGs generated by the standardized patient assessment data elements, but IRF providers in urban areas would experience a slight decrease (0.15%). Freestanding IRFs would see a decrease in mean payment (2.43% for urban, 1.37% for rural), and IRF units would see increases (2.77% for urban, 3.03% for rural). Urban for-profit providers would see decreases in mean payment (2.10%), but rural for-profit providers, as well as all nonprofit and government hospitals, would see increases. Teaching hospitals would see increased mean payments of 2.46%, but non-teaching settings would see a smaller decrease (0.52%). Breakdowns by census region are also presented in *Table 12*. For urban providers, those in New England would experience the greatest decrease in mean payment (2.15%), and those in the Pacific region would experience the greatest increase (3.77%). For rural providers, New England would experience the greatest decrease (5.60%), and East South Central would experience the greatest increase (4.29%). Finally, hospitals with fewer than 50 beds would see increases in mean payment, but larger hospitals would see decreases. This likely correlates with the differences observed between freestanding IRFs and IRF units, as units tend to have fewer beds than freestanding facilities.

Table 12. Impact Analysis by IRF Provider Characteristic

| Provider Characteristic | Number of IRFs | Number of Cases | % Change in Mean Standardized Payment |
|-------------------------|-------------------|--------------------|---|
| (1) | (2) | (3) | (4) |
| Total | 1,111 | 369,684 | 0.00% |
| Urban unit | 702 | 155,121 | 2.77% |
| Rural unit | 133 | 20,074 | 3.03% |
| Urban hospital | 265 | 190,431 | -2.43% |
| Rural hospital | 11 | 4,058 | -1.37% |
| Urban for-profit | 339 | 185,702 | -2.10% |
| Rural for-profit | 37 | 7,388 | 1.56% |
| Urban nonprofit | 529 | 137,321 | 2.10% |
| Rural nonprofit | 84 | 13,338 | 2.15% |
| Urban government | 99 | 22,529 | 2.74% |
| Rural government | 23 | 3,406 | 4.20% |
| Urban | 967 | 345,552 | -0.15% |
| Rural | 144 | 24,132 | 2.25% |

(continued)

Table 12. Impact Analysis by IRF Provider Characteristic (continued)

| Provider Characteristic | Number of IRFs | Number of Cases | % Change in Mean Payment |
|--------------------------|----------------|--------------------|-----------------------------|
| (1) | (2) | (3) | (4) |
| Urban by Region | | | |
| Urban New England | 29 | 15,514 | -2.15% |
| Urban Middle Atlantic | 134 | 48,194 | -1.80% |
| Urban South Atlantic | 144 | 69,040 | -0.24% |
| Urban East North Central | 173 | 46,132 | 2.61% |
| Urban East South Central | 56 | 24,250 | -0.95% |
| Urban West North Central | 73 | 18,333 | 0.07% |
| Urban West South Central | 180 | 75,717 | -0.69% |
| Urban Mountain | 81 | 26,683 | -1.37% |
| Urban Pacific | 97 | 21,689 | 3.77% |
| Rural by Region | | | |
| Rural New England | 4 | 1,048 | -5.60% |
| Rural Middle Atlantic | 11 | 1,244 | 2.91% |
| Rural South Atlantic | 16 | 3,491 | -0.59% |
| Rural East North Central | 21 | 3,599 | 2.33% |
| Rural East South Central | 21 | 4,174 | 4.29% |
| Rural West North Central | 21 | 2,829 | 1.92% |
| Rural West South Central | 40 | 6,765 | 3.67% |
| Rural Mountain | 7 | 722 | 4.08% |
| Rural Pacific | 3 | 260 | 1.74% |
| Teaching Status | | | |
| Non-teaching | 842 | 303,102 | -0.52% |
| Teaching | 269 | 66,582 | 2.46% |
| Bed Size | | | |
| < 25 | 563 | 85,835 | 2.52% |
| 25-49 | 314 | 107,858 | 0.66% |
| 50-74 | 134 | 134 85,923 | |
| 75-99 | 58 | 48,564 -2.06 | |
| 100-124 | 19 | 14,527 -1.91% | |
| 125+ | 23 | 3 26,977 -1 | |

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APPENDIX A IRF PATIENT ASSESSMENT INSTRUMENT

PRA Disclosure Statement*

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is **0938-0842**. The time required to complete this information collection is estimated to average **54.5 minutes** per response, including the time to review instructions, search existing data resources, gather the data needed, and complete and review the information collection. If you have comments concerning the accuracy of the time estimate(s) or suggestions for improving this form, please write to: CMS, 7500 Security Boulevard, Attn: PRA Reports Clearance Officer, Mail Stop C4-26-05, Baltimore, Maryland 21244-1850.

^{*}This statement applies to the 2015 release of the IRF-PAI (version 1.3) and not to any additional burden related to the addition of new data elements added for the purpose of informating CMS' newly adopted measures, which were finalized through the FY 2016 IRF PPS Final Rule, including those quality measures related to the IMPACT Act of 2014.

INPATIENT REHABILITATION FACILITY - PATIENT ASSESSMENT INSTRUMENT

| | Identification Information* | | Payer Information* |
|------|---|------------|--|
| 1. | Facility Information A. Facility Name | 20. | Payment Source (02 - Medicare Fee For Service; 51- Medicare-Medicare Advantage; 99 - Not Listed) |
| | | | A. Primary Source |
| | | | B. Secondary Source |
| | | | Medical Information* |
| | | 21. | Impairment Group |
| | B. Facility Medicare Provider Number | | Admission Discharge |
| 2. | Patient Medicare Number | | Condition requiring admission to rehabilitation; code according to Appendix |
| 3. | Patient Medicaid Number | | A. |
| 4. | Patient First Name | 22. | Etiologic Diagnosis (Use ICD codes to indicate the etiologic problem A B |
| 5A. | Patient Last Name | | that led to the condition for which the patient is receiving C |
| 5B. | Patient Identification Number | 22 | rehabilitation) |
| 6. | Birth Date $\frac{///}{MM/DD/YYYY}$ | 23. | $\overline{\mathrm{MM}}/\overline{\mathrm{DD}}/\overline{\mathrm{YYYY}}$ |
| 7. | Social Security Number | 24. | |
| 8. | Gender (1 - Male; 2 - Female) | | Use ICD codes to enter comorbid medical conditions |
| 9. | Race/Ethnicity (Check all that apply) | | A J S B. K. T. |
| | American Indian or Alaska Native A | | |
| | Asian B | | C. L. U. U. D. W. V. |
| | Black or African American C. | | E N W |
| | Hispanic or Latino D. | | F. O. X. |
| | | | G. P. Y. |
| | Native Hawaiian or Other Pacific Islander E. | | Н Q |
| | White F | | I R |
| 10. | Marital Status | | |
| | (1 - Never Married; 2 - Married; 3 - Widowed; 4 - Separated; 5 - Divorced) | 24A | A. Are there any arthritis conditions recorded in items #21, #22, or #24 that meet all of the regulatory requirements for IRF classification (in 42 CFR |
| | 1 | | 412.29(b)(2)(x), (xi), and (xii))? (0 - No; 1 - Yes) |
| 12. | Admission Date $\frac{/}{MM/DD/YYYY}$ | 25 | DELETED |
| 13. | Assessment Reference Date / / | | DELETED |
| | $\overline{\mathrm{MM}}/\overline{\mathrm{DD}}/\overline{\mathrm{YYY}}\mathrm{Y}$ | 20. | Height and Weight |
| 14. | Admission Class | | (While measuring if the number is X.1-X.4 round down, X.5 or greater round |
| | (1 - Initial Rehab; 2 - Evaluation; 3 - Readmission; 4 - Unplanned Discharge; 5 - Continuing Rehabilitation) | | up) |
| 15A. | . Admit From | 25A | . Height on admission (in inches) |
| | (01- Home (private home/apt., board/care, assisted living, group home, transitional living); 02- Short-term General Hospital; 03 - Skilled Nursing Facility (SNF); 04 - Intermediate care; 06 - Home under care of organized home health service organization; 50 - Hospice (home); 51 - Hospice (institutional facility); 61 - Swing bed; 62 - Another Inpatient Rehabilitation Facility; 63 - Long-Term Care Hospital (LTCH); | 26A 27. | Meight on admission (in pounds) Measure weight consistently, according to standard facility practice (e.g., in a.m. after voiding, with shoes off, etc.) Swallowing Status |
| | 64 - Medicaid Nursing Facility; 65 - Inpatient Psychiatric Facility; 66 - Critical Access Hospital; 99 - Not Listed) | | Admission Discharge 3- <u>Regular Food</u> : solids and liquids swallowed safely without supervision or |
| 16A. | Pre-hospital Living Setting Use codes from 15A. Admit From | | modified food consistency 2- <u>Modified Food Consistency/Supervision:</u> subject requires modified food |
| 17. | Pre-hospital Living With (Code only if item 16A is 01- Home: Code using 01 - Alone; 02 - Family/Relatives; 03 - Friends; 04 - Attendant; 05 - Other) | | consistency and/or needs supervision for safety 1- <u>Tube/Parenteral Feeding:</u> tube/parenteral feeding used wholly or partially as a means of sustenance |
| 18. | DELETED | 28. | DELETED |
| 19. | DELETED | | |

| Function Modifiers* | | | | | 39. FIM TM Instrument* | | | | |
|--|---|---------------------------------------|--|---|---|--|------------------------|------|--|
| Complete the following specific functional items prior to scoring the | | | | | | Admission | Discharge | Goal | |
| FIM | TM Instrument: | | | SELF | -CARE | | | | |
| | | Admission | Discharge | A. | Eating | | | | |
| 29. | Bladder Level of Assistance | | | B. | Grooming | | | | |
| | (Score using FIM Levels 1 - 7) | _ | _ | C. | Bathing | | | | |
| 30. | Bladder Frequency of Accidents | Ц | Ш | D. | Dressing - Upper | | | | |
| | (Score as below) 7 - No accidents | | | E. | Dressing - Lower | | | | |
| | 6 - No accidents; uses device such as a | catheter | | F. | Toileting | | | | |
| | 5 - One accident in the past 7 days4 - Two accidents in the past 7 days | | | SPHII | NCTER CONTROL | | | | |
| | 3 - Three accidents in the past 7 days2 - Four accidents in the past 7 days | | | G. | Bladder | | | | |
| | 1 - Five or more accidents in the past 7 | days | | H. | Bowel | | | | |
| | Enter in Item 39G (Bladder) the lower and 30 above | (more depender | nt) score from Items 29 | TRAN | NSFERS | | | | |
| | unu 30 uoore | Admission | Discharge | I. | Bed, Chair, Wheelchair | | | | |
| 31. | Bowel Level of Assistance | | | J. | Toilet | | | | |
| 31. | (Score using FIM Levels 1 - 7) | _ | _ | K. | Tub, Shower | | | | |
| 32. | Bowel Frequency of Accidents | | | | | | V - Walk | | |
| | (Score as below) | | | LOCG | OMOTION | | Wheelchair B - Both | | |
| | 7 - No accidents6 - No accidents; uses device such as a | ostomy | | L. | Walk/Wheelchair | | | | |
| | 5 - One accident in the past 7 days | | | M. | Stairs | | | | |
| | 4 - Two accidents in the past 7 days3 - Three accidents in the past 7 days | | | | | Α. | - Auditory | | |
| | 2 - Four accidents in the past 7 days1 - Five or more accidents in the past 7 | davs | | COM | MINICATION | \[\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | - Visual | | |
| | Enter in Item 39H (Bowel) the lower (n | - | score of Items 31 and 32 | N. | MUNICATION Comprehension | | B - Both | П | |
| | above. | | | O. | Expression | | | | |
| | | Admission | Discharge | 0. | Expression | $-\top$ | 7 - Vocal | _ | |
| 33. | Tub Transfer | | | | | | · Nonvocal B - Both | | |
| 34. | Shower Transfer | Ц | Ш | SOCI | AL COGNITION | | | | |
| | (Score Items 33 and 34 using FIM Lev occur) See training manual for scoring | vels 1 - 7; use 0 g of Item 39K (7 | if activity does not Tub/Shower Transfer) | P. | Social Interaction | | | | |
| | | Admission | Discharge | Q. | Problem Solving | | | | |
| 35. | Distance Walked | | | R. | Memory | | | | |
| 36. | Distance Traveled in Wheelchair | | | | | | | | |
| | (Code items 35 and 36 using: 3 - 150 f 1 - Less than 50 feet; 0 - activity does n | | 19 feet; | FIM | LEVELS | | | | |
| | , | Admission | Discharge | No H | Telper | | | | |
| 37. | Walk | | | 7 | Complete Independence | | | | |
| 38. | Wheelchair | | | 6 Helpe | Modified Independence (er - Modified Dependence | Device) | | | |
| (Score Items 37 and 38 using FIM Levels 1 - 7; 0 if activity does not occur) See training manual for scoring of Item 39L (Walk/Wheelchair) | | | 5 | Supervision (Subject = 1 | , | | | | |
| | | | 4 Minimal Assistance (Subject = 75% or more) | | | | | | |
| | * The FIM data set, measurement scale and impairment codes incorporated or referenced herein are the property of U B Foundation Activities, Inc. ©1993, | | | 3 Moderate Assistance (Subject = 50% or more) Helper - Complete Dependence | | | | | |
| | of the property of UB 1001 UB Foundation Activities, Inc. The | | | 2 Maximal Assistance (Subject = 25% or more) | | | | | |
| | | | | 1 | Total Assistance (Subject | t less than 25%) | | | |
| | | | | 0 | Activity does not occur; | Use this code on | ly at admission | | |

| | Discharge Information* | Therapy Information | | |
|------|--|--|--|--|
| 40. | Discharge Date//_ | O0401. Week 1: Total Number of Minutes Provided | | |
| | MM / DD / YYYY | O0401A: Physical Therapy | | |
| 41. | Patient discharged against medical advice? | a. Total minutes of individual therapy | | |
| | (0 - No; 1 - Yes) | b. Total minutes of concurrent therapy | | |
| 42. | Program Interruption(s) | c. Total minutes of group therapy | | |
| 42. | (0 - No; 1 - Yes) | d. Total minutes of co-treatment therapy | | |
| 13 | Program Interruption Dates | | | |
| ٦٥. | (Code only if item 42 is 1 - Yes) | O0401B: Occupational Therapy | | |
| | A. 1st Interruption Date B. 1st Return Date | a. Total minutes of individual therapy | | |
| | A. 1st interruption Date B. 1 Return Date | b. Total minutes of concurrent therapy | | |
| | MM / DD / YYYY MM / DD / YYYY | c. Total minutes of group therapy | | |
| | | d. Total minutes of co-treatment therapy | | |
| | C. 2 nd Interruption Date D. 2 nd Return Date | OMOTO: Speech Language Pothelogy | | |
| | MM / DD / YYYY MM / DD / YYYY | O0401C: Speech-Language Pathology a. Total minutes of individual therapy | | |
| | MMI/DD/YYYY MMI/DD/YYYY | b. Total minutes of concurrent therapy | | |
| | E. 3 rd Interruption Date F. 3 rd Return Date | c. Total minutes of group therapy | | |
| | | d. Total minutes of co-treatment therapy | | |
| | MM / DD / YYYY MM / DD / YYYY | | | |
| | W. d. of the late of | O0402. Week 2: Total Number of Minutes Provided | | |
| 44C | . Was the patient discharged alive? (0 - No; 1 - Yes) | O0402A: Physical Therapy | | |
| 44D | | a. Total minutes of individual therapy | | |
| 441) | Patient's discharge destination/living setting, using codes below: (answer only if $44C = 1$; if $44C = 0$, skip to item 46) | b. Total minutes of concurrent therapy | | |
| | · — — — — — — — — — — — — — — — — — — — | c. Total minutes of group therapy | | |
| | (01- Home (private home/apt., board/care, assisted living, group home, | d. Total minutes of co-treatment therapy | | |
| | transitional living); 02- Short-term General Hospital; 03 - Skilled Nursing Facility (SNF); 04 - Intermediate care; 06 - Home under care of | 001047 | | |
| | organized home health service organization; 50 - Hospice (home); | O0402B: Occupational Therapy | | |
| | 51 - Hospice (institutional facility); 61 - Swing bed; 62 - Another Inpatient Rehabilitation Facility; 63 - Long-Term Care Hospital (LTCH); | a. Total minutes of individual therapy | | |
| | 64 - Medicaid Nursing Facility; 65 - Inpatient Psychiatric Facility; | b. Total minutes of concurrent therapy | | |
| | 66 - Critical Access Hospital; 99 - Not Listed) | c. Total minutes of group therapy d. Total minutes of co-treatment therapy | | |
| 45. | Discharge to Living With | d. Total infinites of co-treatment incrapy | | |
| | (Code only if item 44C is 1 - Yes and 44D is 01 - Home; Code using 1 - | O0402C: Speech-Language Pathology | | |
| | Alone; 2 - Family / Relatives; 3 - Friends; 4 - Attendant; | a. Total minutes of individual therapy | | |
| | 5 - Other) | b. Total minutes of concurrent therapy | | |
| 46. | Diagnosis for Interruption or Death | c. Total minutes of group therapy | | |
| | (Code using ICD code) | d. Total minutes of co-treatment therapy | | |
| 47. | Complications during rehabilitation stay | | | |
| | (Use ICD codes to specify up to six conditions that began with this rehabilitation stay) | | | |
| | A B | | | |
| | C D | | | |
| | E F | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| * T | he FIM data set, measurement scale and impairment codes incorporated or | | | |
| re | eferenced herein are the property of U B Foundation Activities, Inc. © 1993, | | | |
| 2 | 001 U B Foundation Activities, Inc. The FIM mark is owned by UBFA, Inc. | | | |

INPATIENT REHABILITATION FACILITY - PATIENT ASSESSMENT INSTRUMENT QUALITY INDICATORS

ADMISSION

Section B

Hearing, Speech, and Vision

BB0700. Expression of Ideas and Wants (3-day assessment period)

Enter Cod

Expression of Ideas and Wants (consider both verbal and non-verbal expression and excluding language barriers)

- 4. Expresses complex messages without difficulty and with speech that is clear and easy to understand
- 3. Exhibits some difficulty with expressing needs and ideas (e.g., some words or finishing thoughts) or speech is not clear
- 2. **Frequently** exhibits difficulty with expressing needs and ideas
- 1. Rarely/Never expresses self or speech is very difficult to understand

BB0800. Understanding Verbal Content (3-day assessment period)

Enter Code

Understanding Verbal Content (with hearing aid or device, if used and excluding language barriers)

- 4. **Understands:** Clear comprehension without cues or repetitions
- 3. Usually Understands: Understands most conversations, but misses some part/intent of message. Requires cues at times to understand
- 2. Sometimes Understands: Understands only basic conversations or simple, direct phrases. Frequently requires cues to understand
- 1. Rarely/Never Understands

Section C

Cognitive Patterns

C0100. Should Brief Interview for Mental Status (C0200-C0500) be conducted? (3-day assessment period)

Attempt to conduct interview with all patients.

Enter Code

- 0. **No** (patient is rarely/never understood) → Skip to C0900. Memory/Recall Ability
- 1. **Yes** → Continue to C0200. Repetition of Three Words

Brief Interview for Mental Status (BIMS)

C0200. Repetition of Three Words

Ask patient: "I am going to say three words for you to remember. Please repeat the words after I have said all three. The words are: **sock, blue** and bed. Now tell me the three words."

Enter Code

Number of words repeated by patient after first attempt:

- 3. Three
- 2. **Two**
- 1. **One**
- 0. None

After the patient's first attempt say: "I will repeat each of the three words with a cue and ask you about them later: sock, something to wear; blue, a color; bed, a piece of furniture." You may repeat the words up to two more times.

| Section | n C | Cognitive Patterns | | | | |
|---|---|--|--|--|--|--|
| Brief Inte | Brief Interview for Mental Status (BIMS) - Continued | | | | | |
| C0300. Temporal Orientation: Year, Month, Day | | | | | | |
| Enter Code | A. Ask patient: "Please tell me what year it is right now." Patient's answer is: 3. Correct 2. Missed by 1 year 1. Missed by 2 to 5 years 0. Missed by more than 5 years or no answer | | | | | |
| Enter Code | Patient's answer 2. Accurate wit 1. Missed by 6 | • • | | | | |
| Enter Code | C. Ask patient: "Wheeleast Patient's answer 1. Correct 0. Incorrect or 1. | | | | | |
| C0400. R | Recall | | | | | |
| Enter Code | A. Recalls "sock?" 2. Yes, no cue r | | | | | |
| | 0. No , could no | eing ("something to wear") It recall | | | | |
| Enter Code | B. Recalls "blue?" 2. Yes, no cue re 1. Yes, after cue 0. No, could no | eing ("a color") | | | | |
| Enter Code | C. Recalls "bed?" 2. Yes, no cue ro 1. Yes, after cue 0. No, could no | eing ("a piece of furniture") | | | | |
| C0500. B | BIMS Summary Sco | re | | | | |
| Enter Score | | estions C0200-C0400 and fill in total score (00-15) tient was unable to complete the interview | | | | |
| C0600. S | Should the Staff As | sessment for Mental Status (C0900) be Conducted? | | | | |
| Enter Code | 1 | as able to complete Brief Interview for Mental Status) Skip to GG0100. Prior Functioning: Everyday Activities vas unable to complete Brief Interview for Mental Status) Continue to C0900. Memory/Recall Ability | | | | |
| Staff Ass | essment for Menta | l Status | | | | |
| Do not cor | nduct if Brief Interview | for Mental Status (C0200-C0500) was completed. | | | | |
| C0900. N | Memory/Recall Abi | lity | | | | |
| ↓ Che | | nt was normally able to recall | | | | |
| | A. Current season | | | | | |
| | B. Location of own | | | | | |
| | C. Staff names and | faces | | | | |
| | E. That he or she is | in a hospital/hospital unit | | | | |
| | Z. None of the abo | ve were recalled | | | | |

| Section GG Functional Abilities and Goals | | | | | |
|---|---|--|--|--|--|
| GG0100. Prior Functioning: Everyday Activities. Indicate the patient's usual ability with everyday activities prior to the current | | | | | |
| illness, exacerbation, or injury. | | | | | |
| | ↓ Enter Codes in Boxes | | | | |
| Independent - Patient completed the activities by him/herself, with or without an assistive device, | A. Self-Care: Code the patient's need for assistance with bathing, dressing, using the toilet, or eating prior to the current illness, exacerbation, or injury. | | | | |
| with no assistance from a helper. 2. Needed Some Help - Patient needed partial assistance from another person to complete | B. Indoor Mobility (Ambulation): Code the patient's need for assistance with walking from room to room (with or without a device such as cane, crutch, or walker) prior to the current illness, exacerbation, or injury. | | | | |
| activities.1. Dependent - A helper completed the activities for the patient.8. Unknown | C. Stairs: Code the patient's need for assistance with internal or external stairs (with or without a device such as cane, crutch, or walker) prior to the current illness, exacerbation, or injury. | | | | |
| 9. Not Applicable | D. Functional Cognition: Code the patient's need for assistance with planning regular tasks, such as shopping or remembering to take medication prior to the current illness, exacerbation, or injury. | | | | |
| GG0110. Prior Device Use. Indicate devices and | d aids used by the patient prior to the current illness, exacerbation, or injury. | | | | |
| ↓ Check all that apply | | | | | |
| A. Manual wheelchair | A. Manual wheelchair | | | | |
| B. Motorized wheelchair or scooter | B. Motorized wheelchair or scooter | | | | |
| C. Mechanical lift | C. Mechanical lift | | | | |
| D. Walker | D. Walker | | | | |
| E. Orthotics/Prosthetics | E. Orthotics/Prosthetics | | | | |
| Z. None of the above | | | | | |

Section GG

Functional Abilities and Goals

GG0130. Self-Care (3-day assessment period)

Code the patient's usual performance at admission for each activity using the 6-point scale. If activity was not attempted at admission, code the reason. Code the patient's discharge goal(s) using the 6-point scale. Do not use codes 07, 09, or 88 to code discharge goal(s).

CODING:

Safety and **Quality of Performance** - If helper assistance is required because patient's performance is unsafe or of poor quality, score according to amount of assistance provided.

Activities may be completed with or without assistive devices.

- 06. **Independent** Patient completes the activity by him/herself with no assistance from a helper.
- 05. Setup or clean-up assistance Helper SETS UP or CLEANS UP; patient completes activity. Helper assists only prior to or following the activity.
- 04. **Supervision or touching assistance** Helper provides VERBAL CUES or TOUCHING/STEADYING assistance as patient completes activity. Assistance may be provided throughout the activity or intermittently.
- 03. **Partial/moderate assistance** Helper does LESS THAN HALF the effort. Helper lifts, holds or supports trunk or limbs, but provides less than half the effort.
- 02. **Substantial/maximal assistance** Helper does MORE THAN HALF the effort. Helper lifts or holds trunk or limbs and provides more than half the effort.
- 01. **Dependent** Helper does ALL of the effort. Patient does none of the effort to complete the activity. Or, the assistance of 2 or more helpers is required for the patient to complete the activity.

- 07. Patient refused
- 09. Not applicable
- 88. Not attempted due to medical condition or safety concerns

| 1. Admission Performance | 2. Discharge Goal | |
|--------------------------------|-------------------------|--|
| ↓ Enter Code | s in Boxes 👃 | |
| | | A. Eating: The ability to use suitable utensils to bring food to the mouth and swallow food once the meal is presented on a table/tray. Includes modified food consistency. |
| | | B. Oral hygiene: The ability to use suitable items to clean teeth. [Dentures (if applicable): The ability to remove and replace dentures from and to the mouth, and manage equipment for soaking and rinsing them.] |
| | | C. Toileting hygiene: The ability to maintain perineal hygiene, adjust clothes before and after using the toilet, commode, bedpan or urinal. If managing an ostomy, include wiping the opening but not managing equipment. |
| | | E. Shower/bathe self: The ability to bathe self in shower or tub, including washing, rinsing, and drying self. Does not include transferring in/out of tub/shower. |
| | | F. Upper body dressing: The ability to put on and remove shirt or pajama top; includes buttoning, if applicable. |
| | | G. Lower body dressing: The ability to dress and undress below the waist, including fasteners; does not include footwear. |
| | | H. Putting on/taking off footwear: The ability to put on and take off socks and shoes or other footwear that is appropriate for safe mobility. |

Section GG Functional Abilities and Goals

GG0170. Mobility (3-day assessment period)

Code the patient's usual performance at admission for each activity using the 6-point scale. If activity was not attempted at admission, code the reason. Code the patient's discharge goal(s) using the 6-point scale. Do not use codes 07, 09, or 88 to code discharge goal(s).

CODING:

Safety and **Quality of Performance** - If helper assistance is required because patient's performance is unsafe or of poor quality, score according to amount of assistance provided.

Activities may be completed with or without assistive devices.

- 06. Independent Patient completes the activity by him/herself with no assistance from a helper.
- 05. **Setup or clean-up assistance** Helper SETS UP or CLEANS UP; patient completes activity. Helper assists only prior to or following the activity.
- 04. **Supervision or touching assistance** Helper provides VERBAL CUES or TOUCHING/STEADYING assistance as patient completes activity. Assistance may be provided throughout the activity or intermittently.
- 03. **Partial/moderate assistance** Helper does LESS THAN HALF the effort. Helper lifts, holds or supports trunk or limbs, but provides less than half the effort.
- 02. **Substantial/maximal assistance** Helper does MORE THAN HALF the effort. Helper lifts or holds trunk or limbs and provides more than half the effort.
- 01. **Dependent** Helper does ALL of the effort. Patient does none of the effort to complete the activity. Or, the assistance of 2 or more helpers is required for the patient to complete the activity.

- 07. Patient refused
- 09. Not applicable
- 88. Not attempted due to medical condition or safety concerns

| 1. Admission Performance | 2. Discharge Goal | | | |
|---|--|--|--|--|
| ↓ Enter Code | s in Boxes ↓ | | | |
| | | A. Roll left and right: The ability to roll from lying on back to left and right side, and return to lying on back. | | |
| | | B. Sit to lying: The ability to move from sitting on side of bed to lying flat on the bed. | | |
| | | C. Lying to sitting on side of bed: The ability to safely 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. | | |
| | | D. Sit to stand: The ability to safely come to a standing position from sitting in a chair or on the side of the bed. | | |
| | E. Chair/bed-to-chair transfer: The ability to safely transfer to and from a bed to a chair (or wheelchair). | | | |
| | | F. Toilet transfer: The ability to safely get on and off a toilet or commode. | | |
| | | G. Car transfer: The ability to transfer in and out of a car or van on the passenger side. Does not include the ability to open/close door or fasten seat belt. | | |
| | | H1. Does the patient walk? | | |
| | | 0. No, and walking goal is not clinically indicated → <i>Skip to GG0170Q1. Does the patient use a wheelchair/scooter?</i> | | |
| 1. No, and walking goal is clinically indicated → Code the patient's discharge goal(s) for GG0170I, J, K, L, M, N, O, and P. For adaperformance, skip to GG0170Q1. Does patient use a wheelchair/scooter? | | | | |
| | | 2. Yes → Continue to GG01701. Walk 10 feet | | |
| | | I. Walk 10 feet: Once standing, the ability to walk at least 10 feet in a room, corridor or similar space. | | |
| | | J. Walk 50 feet with two turns: Once standing, the ability to walk at least 50 feet and make two turns. | | |
| | | K. Walk 150 feet: Once standing, the ability to walk at least 150 feet in a corridor or similar space. | | |

Section GG Functional Abilities and Goals

GG0170. Mobility (3-day assessment period) - Continued

Code the patient's usual performance at admission for each activity using the 6-point scale. If activity was not attempted at admission, code the reason. Code the patient's discharge goal(s) using the 6-point scale. Do not use codes 07, 09, or 88 to code discharge goal(s).

CODING:

Safety and **Quality of Performance** - If helper assistance is required because patient's performance is unsafe or of poor quality, score according to amount of assistance provided.

Activities may be completed with or without assistive devices.

- 06. Independent Patient completes the activity by him/herself with no assistance from a helper.
- 05. **Setup or clean-up assistance** Helper SETS UP or CLEANS UP; patient completes activity. Helper assists only prior to or following the activity.
- 04. **Supervision or touching assistance** Helper provides VERBAL CUES or TOUCHING/STEADYING assistance as patient completes activity. Assistance may be provided throughout the activity or intermittently.
- 03. **Partial/moderate assistance** Helper does LESS THAN HALF the effort. Helper lifts, holds or supports trunk or limbs, but provides less than half the effort.
- 02. **Substantial/maximal assistance** Helper does MORE THAN HALF the effort. Helper lifts or holds trunk or limbs and provides more than half the effort.
- 01. **Dependent** Helper does ALL of the effort. Patient does none of the effort to complete the activity. Or, the assistance of 2 or more helpers is required for the patient to complete the activity.

- 07. Patient refused
- 09. **Not applicable**
- 88. Not attempted due to medical condition or safety concerns

| 1. | 2. | | | |
|-----------------------|-------------------|--|--|--|
| Admission Performance | Discharge Goal | | | |
| ↓ Enter Code | es in Boxes 🗼 | | | |
| | | L. Walking 10 feet on uneven surfaces: The ability to walk 10 feet on uneven or sloping surfaces, such as grass or gravel. | | |
| | | M. 1 step (curb): The ability to step over a curb or up and down one step. | | |
| | | N. 4 steps: The ability to go up and down four steps with or without a rail. | | |
| | | O. 12 steps: The ability to go up and down 12 steps with or without a rail. | | |
| | | P. Picking up object: The ability to bend/stoop from a standing position to pick up a small object, such as a spoon, from the floor. | | |
| | | Q1. Does the patient use a wheelchair/scooter? 0. No → Skip to H0350. Bladder Continence | | |
| | | 1. Yes → Continue to GG0170R. Wheel 50 feet with two turns | | |
| | | R. Wheel 50 feet with two turns: Once seated in wheelchair/scooter, the ability to wheel at least 50 feet and make two turns. | | |
| | | RR1. Indicate the type of wheelchair/scooter used. 1. Manual 2. Motorized | | |
| | | S. Wheel 150 feet: Once seated in wheelchair/scooter, the ability to wheel at least 150 feet in a corridor or similar space. | | |
| | | SS1. Indicate the type of wheelchair/scooter used. 1. Manual 2. Motorized | | |

Patient Identifier Section H **Bladder and Bowel** H0350. Bladder Continence (3-day assessment period) **Bladder continence -** Select the one category that best describes the patient. **Enter Code** 0. Always continent (no documented incontinence) 1. Stress incontinence only 2. Incontinent less than daily (e.g., once or twice during the 3-day assessment period) 3. Incontinent daily (at least once a day) 4. Always incontinent 5. **No urine output** (e.g., renal failure) 9. Not applicable (e.g., indwelling catheter) **H0400.** Bowel Continence (3-day assessment period) **Bowel continence -** Select the one category that best describes the patient. **Enter Code** 0. Always continent 1. **Occasionally incontinent** (one episode of bowel incontinence) 2. Frequently incontinent (2 or more episodes of bowel incontinence, but at least one continent bowel movement) 3. Always incontinent (no episodes of continent bowel movements) 9. Not rated, patient had an ostomy or did not have a bowel movement for the entire 3 days **Section I Active Diagnoses** Comorbidities and Co-existing Conditions Check all that apply 10900. Peripheral Vascular Disease (PVD) or Peripheral Arterial Disease (PAD) 12900. Diabetes Mellitus (DM) (e.g., diabetic retinopathy, nephropathy, and neuropathy) 17900. None of the above Section J **Health Conditions** J1750. History of Falls Has the patient had two or more falls in the past year or any fall with injury in the past year? **Enter Code** 0. **No** 1. **Yes** 8. Unknown J2000. Prior Surgery Did the patient have major surgery during the 100 days prior to admission? **Enter Code** 0. **No** 1. **Yes** 8. Unknown **Section K Swallowing/Nutritional Status** K0110. Swallowing/Nutritional Status (3-day assessment period) Indicate the patient's usual ability to swallow. Check all that apply A. Regular food - Solids and liquids swallowed safely without supervision or modified food or liquid consistency. B. Modified food consistency/supervision - Patient requires modified food or liquid consistency and/or needs supervision during eating for safety. C. Tube/parenteral feeding - Tube/parenteral feeding used wholly or partially as a means of sustenance.

Section M

Skin Conditions

Report based on highest stage of existing ulcer(s) at its worst; do not "reverse" stage

| M0210. Unhealed Pressure Ulcer(s) | | | | | | |
|---|--|--|--|--|--|--|
| Enter Code | Do | es this patient have one or more unhealed pressure ulcer(s) at Stage 1 or higher? 0. No → Skip to O0100. Special Treatments, Procedures, and Programs 1. Yes → Continue to M0300. Current Number of Unhealed Pressure Ulcers at Each Stage | | | | |
| M0300. | Cur | rent Number of Unhealed Pressure Ulcers at Each Stage | | | | |
| Enter Number | A. | 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. | | | | |
| | | Number of Stage 1 pressure ulcers | | | | |
| Enter Number | В. | 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 | | | | |
| 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 | | | | |
| 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 | | | | |
| 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 | | | | |
| 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 | | | | |
| 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 | | | | |
| Sectio | Section O Special Treatments, Procedures, and Programs | | | | | |
| O0100. Special Treatments, Procedures, and Programs | | | | | | |
| ↓ Che | ↓ Check if treatment applies at admission | | | | | |
| | Ν. | Total Parenteral Nutrition | | | | |

DISCHARGE

Section GG Functional Abilities and Goals

GG0130. Self-Care (3-day assessment period)

Code the patient's usual performance at discharge for each activity using the 6-point scale. If activity was not attempted at discharge, code the reason.

CODING:

Safety and **Quality of Performance** - If helper assistance is required because patient's performance is unsafe or of poor quality, score according to amount of assistance provided.

Activities may be completed with or without assistive devices.

- 06. **Independent** Patient completes the activity by him/herself with no assistance from a helper.
- 05. **Setup or clean-up assistance** Helper SETS UP or CLEANS UP; patient completes activity. Helper assists only prior to or following the activity.
- 04. **Supervision or touching assistance** Helper provides VERBAL CUES or TOUCHING/STEADYING assistance as patient completes activity. Assistance may be provided throughout the activity or intermittently.
- 03. **Partial/moderate assistance** Helper does LESS THAN HALF the effort. Helper lifts, holds or supports trunk or limbs, but provides less than half the effort.
- 02. **Substantial/maximal assistance** Helper does MORE THAN HALF the effort. Helper lifts or holds trunk or limbs and provides more than half the effort.
- 01. **Dependent** Helper does ALL of the effort. Patient does none of the effort to complete the activity. Or, the assistance of 2 or more helpers is required for the patient to complete the activity.

- 07. Patient refused
- 09. Not applicable
- 88. Not attempted due to medical condition or safety concerns

| 3. Discharge | |
|------------------------|--|
| Performance | |
| Enter Codes in Boxes ↓ | |
| | A. Eating: The ability to use suitable utensils to bring food to the mouth and swallow food once the meal is presented on a table/tray. Includes modified food consistency. |
| | B. Oral hygiene: The ability to use suitable items to clean teeth. [Dentures (if applicable): The ability to remove and replace dentures from and to the mouth, and manage equipment for soaking and rinsing them.] |
| | C. Toileting hygiene: The ability to maintain perineal hygiene, adjust clothes before and after using the toilet, commode, bedpan or urinal. If managing an ostomy, include wiping the opening but not managing equipment. |
| | E. Shower/bathe self: The ability to bathe self in shower or tub, including washing, rinsing, and drying self. Does not include transferring in/out of tub/shower. |
| | F. Upper body dressing: The ability to put on and remove shirt or pajama top; includes buttoning, if applicable. |
| | G. Lower body dressing: The ability to dress and undress below the waist, including fasteners; does not include footwear. |
| | H. Putting on/taking off footwear: The ability to put on and take off socks and shoes or other footwear that is appropriate for safe mobility. |

Section GG Functional Abilities and Goals

GG0170. Mobility (3-day assessment period)

Code the patient's usual performance at discharge for each activity using the 6-point scale. If activity was not attempted at discharge, code the reason.

CODING:

Safety and **Quality of Performance** - If helper assistance is required because patient's performance is unsafe or of poor quality, score according to amount of assistance provided.

Activities may be completed with or without assistive devices.

- 06. **Independent** Patient completes the activity by him/herself with no assistance from a helper.
- 05. **Setup or clean-up assistance** Helper SETS UP or CLEANS UP; patient completes activity. Helper assists only prior to or following the activity.
- 04. **Supervision or touching assistance** Helper provides VERBAL CUES or TOUCHING/STEADYING assistance as patient completes activity. Assistance may be provided throughout the activity or intermittently.
- 03. **Partial/moderate assistance** Helper does LESS THAN HALF the effort. Helper lifts, holds or supports trunk or limbs, but provides less than half the effort.
- 02. **Substantial/maximal assistance** Helper does MORE THAN HALF the effort. Helper lifts or holds trunk or limbs and provides more than half the effort.
- 01. **Dependent** Helper does ALL of the effort. Patient does none of the effort to complete the activity. Or, the assistance of 2 or more helpers is required for the patient to complete the activity.

- 07. Patient refused
- 09. Not applicable
- 88. Not attempted due to medical condition or safety concerns

| 3. Discharge Performance | | | |
|--------------------------------|--|--|--|
| Enter Codes in Boxes ↓ | | | |
| | A. Roll left and right: The ability to roll from lying on back to left and right side, and return to lying on back. | | |
| | B. Sit to lying: The ability to move from sitting on side of bed to lying flat on the bed. | | |
| | C. Lying to sitting on side of bed: The ability to safely 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. | | |
| | D. Sit to stand: The ability to safely come to a standing position from sitting in a chair or on the side of the bed. | | |
| | E. Chair/bed-to-chair transfer: The ability to safely transfer to and from a bed to a chair (or wheelchair). | | |
| | F. Toilet transfer: The ability to safely get on and off a toilet or commode. | | |
| | G. Car transfer: The ability to transfer in and out of a car or van on the passenger side. Does not include the ability to open/close door or fasten seat belt. | | |
| | H3. Does the patient walk? 0. No → Skip to GG0170Q3. Does the patient use a wheelchair/scooter? 2. Yes → Continue to GG0170I. Walk 10 feet | | |
| | I. Walk 10 feet: Once standing, the ability to walk at least 10 feet in a room, corridor or similar space | | |
| | J. Walk 50 feet with two turns: Once standing, the ability to walk at least 50 feet and make two turns | | |
| | K. Walk 150 feet: Once standing, the ability to walk at least 150 feet in a corridor or similar space | | |

Section GG

Functional Abilities and Goals

GG0170. Mobility (3-day assessment period) - Continued

Code the patient's usual performance at discharge for each activity using the 6-point scale. If activity was not attempted at discharge, code the reason.

CODING:

Safety and **Quality of Performance** - If helper assistance is required because patient's performance is unsafe or of poor quality, score according to amount of assistance provided.

Activities may be completed with or without assistive devices.

- 06. Independent Patient completes the activity by him/herself with no assistance from a helper.
- 05. Setup or clean-up assistance Helper SETS UP or CLEANS UP; patient completes activity. Helper assists only prior to or following the activity.
- 04. **Supervision or touching assistance** Helper provides VERBAL CUES or TOUCHING/STEADYING assistance as patient completes activity. Assistance may be provided throughout the activity or intermittently.
- 03. **Partial/moderate assistance** Helper does LESS THAN HALF the effort. Helper lifts, holds or supports trunk or limbs, but provides less than half the effort.
- 02. **Substantial/maximal assistance** Helper does MORE THAN HALF the effort. Helper lifts or holds trunk or limbs and provides more than half the effort.
- 01. **Dependent** Helper does ALL of the effort. Patient does none of the effort to complete the activity. Or, the assistance of 2 or more helpers is required for the patient to complete the activity.

- 07. Patient refused
- 09. Not applicable
- 88. Not attempted due to medical condition or safety concerns

| 3. Discharge Performance | | | |
|--|--|--|--|
| Enter Codes in Boxes \$\displaystyle{\psi}\$ | | | |
| | L. Walking 10 feet on uneven surfaces: The ability to walk 10 feet on uneven or sloping surfaces, such as grass or gravel. | | |
| | M. 1 step (curb): The ability to step over a curb or up and down one step. | | |
| | N. 4 steps: The ability to go up and down four steps with or without a rail. | | |
| | O. 12 steps: The ability to go up and down 12 steps with or without a rail. | | |
| | P. Picking up object: The ability to bend/stoop from a standing position to pick up a small object, such as a spoon, from the floor. | | |
| | Q3. Does the patient use a wheelchair/scooter? 0. No → Skip to J1800. Any Falls Since Admission 1. Yes → Continue to GG0170R. Wheel 50 feet with two turns | | |
| | R. Wheel 50 feet with two turns: Once seated in wheelchair/scooter, the ability to wheel at least 50 feet and make two turns. | | |
| | RR3. Indicate the type of wheelchair/scooter used. 1. Manual 2. Motorized | | |
| | S. Wheel 150 feet: Once seated in wheelchair/scooter, the ability to wheel at least 150 feet in a corridor or similar space. | | |
| | SS3. Indicate the type of wheelchair/scooter used. 1. Manual 2. Motorized | | |

| Section J | Health | Conditions |
|-----------|----------|------------|
| Section 5 | licaitii | Collabora |

| J1800. Any | 1800. Any Falls Since Admission | | | | | | |
|-------------------|--|-----------|--|--|--|--|--|
| Enter Code | Has the patient had any falls since admission? 0. No → Skip to M0210. Unhealed Pressure Ulcer(s) 1. Yes → Continue to J1900. Number of Falls Since Admission | | | | | | |
| J1900. Nur | mber of Fall | s Since A | dmission | | | | |
| CODING: | | ↓ En | ter Codes in Boxes | | | | |
| 0. None 1. One | | | 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 patient; no change in the patient's behavior is noted after the fall | | | | |
| 2. Two or | more | | B. Injury (except major): Skin tears, abrasions, lacerations, superficial bruises, hematomas and sprains; or any fall-related injury that causes the patient to complain of pain | | | | |
| | | | C. Major injury: Bone fractures, joint dislocations, closed head injuries with altered consciousness, subdural hematoma | | | | |

Section M Skin Conditions

Report based on highest stage of existing ulcer(s) at its worst; do not "reverse" stage

| M0210. | Unh | ealed Pressure Ulcer(s) |
|---------------|-----|--|
| Enter Code | Do | es this patient have one or more unhealed pressure ulcer(s) at Stage 1 or higher? |
| | | No → Skip to M0900A. Healed Pressure Ulcer(s) Yes → Continue to M0300. Current Number of Unhealed Pressure Ulcers at Each Stage |
| M0300. | Cur | rent Number of Unhealed Pressure Ulcers at Each Stage |
| Enter Number | A. | 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. |
| | | Number of Stage 1 pressure ulcers |
| Enter Number | В. | 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 |
| Enter Number | | 2. Number of these Stage 2 pressure ulcers that were present upon admission - enter how many were noted at the time of admission |
| 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. |
| Litter Number | | 1. Number of Stage 3 pressure ulcers If 0 → Skip to M0300D. Stage 4 |
| Enter Number | | 2. Number of these Stage 3 pressure ulcers that were present upon admission - enter how many were noted at the time of admission |

| Section M | Skin | Conditions |
|-----------|------|-------------------|
| | | |

| M0300. | Cur | rent Number of Unhealed Pressure Ulcers at Each Stage - Continued |
|--------------|-----|--|
| 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. |
| Enter Number | | 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 - enter how many were noted at the time of admission |
| Enter Number | E. | Unstageable - Non-removable dressing: Known but not stageable due to non-removable dressing/device |
| | | Number of unstageable pressure ulcers due to non-removable dressing/device If 0 → Skip to M0300F. Unstageable - Slough and/or eschar |
| Enter Number | | 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 | F. | Unstageable - Slough and/or eschar: Known but not stageable due to coverage of wound bed by slough and/or eschar |
| | | Number of unstageable pressure ulcers due to coverage of wound bed by slough and/or eschar If 0 → Skip to M0300G. Unstageable - Deep tissue injury |
| Enter Number | | 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 | G. | Unstageable - Deep tissue injury: Suspected deep tissue injury in evolution |
| | | Number of unstageable pressure ulcers with suspected deep tissue injury in evolution If 0 → Skip to M0800. Worsening in Pressure Ulcer Status Since Admission |
| Enter Number | | 2. Number of these unstageable pressure ulcers that were present upon admission - enter how many were noted at the time of admission |
| M0800. \ | Wo | rsening in Pressure Ulcer Status Since Admission |
| | | umber of current pressure ulcers that were not present or were at a lesser stage on admission. ressure ulcer at a given stage, enter 0. |
| Enter Numbe | | A. Stage 2 |
| Enter Numbe | | B. Stage 3 |
| Enter Numbe | | C. Stage 4 |
| Enter Numbe | | D. Unstageable - Non-removable dressing |
| Enter Numbe | ı | E. Unstageable - Slough and/or eschar |
| Enter Numbe | | F. Unstageable - Deep tissue injury |

| Section M | Skin | Con | dition | 9 |
|-----------|------|-----|--------|---|
| | | | | - |

| M0900. He | M0900. Healed Pressure Ulcer(s) | | | | |
|--------------|---|--|--|--|--|
| | Indicate the number of pressure ulcers that were: (a) present on Admission ; and (b) have completely closed (resurfaced with epithelium) upon Discharge. If there are no healed pressure ulcers noted at a given stage, enter 0. | | | | |
| Enter Number | A. Stage 1 | | | | |
| Enter Number | B. Stage 2 | | | | |
| Enter Number | C. Stage 3 | | | | |
| Enter Number | D. Stage 4 | | | | |

Section O Special Treatments, Procedures, and Programs

| O0250. Influenza Vaccine - Refer to current version of IRF-PAI Training Manual for current influenza vaccination season and |
|---|
| reporting period. |

A. Did the patient receive the influenza vaccine in this facility for this year's influenza vaccination season? Enter Code 0. **No** → Skip to O0250C. If influenza vaccine not received, state reason 1. **Yes** → Continue to O0250B. Date influenza vaccine received **B.** Date influenza vaccine received → Complete date and skip to Z0400A. Signature of Persons Completing the Assessment ΥΥ М М D D Υ Υ C. If influenza vaccine not received, state reason: **Enter Code** 1. Patient not in this facility during this year's influenza vaccination season 2. Received outside of this facility 3. Not eligible - medical contraindication 4. Offered and declined 5. Not offered 6. Inability to obtain influenza vaccine due to a declared shortage 9. None of the above

Item Z0400A. Signature of Persons Completing the Assessment*

I certify that the accompanying information accurately reflects patient assessment information for this patient and that I collected or coordinated collection of this information on the dates specified. To the best of my knowledge, this information was collected in accordance with applicable Medicare and Medicaid requirements. I understand that this information is used as a basis for ensuring that patients receive appropriate and quality care, and as a basis for payment from federal funds. I further understand that payment of such federal funds and continued participation in the government-funded health care programs is conditioned on the accuracy and truthfulness of this information, and that I may be personally subject to or may subject my organization to substantial criminal, civil, and/or administrative penalties for submitting false information.

| Signature | Title | Date Information is Provided | Time |
|-----------|-------|------------------------------|------|
| A | | | |
| В. | | | |
| C. | | | |
| D. | | | |
| E. | | | |
| F. | | | |
| G. | | | |
| H. | | | |
| I. | | | |
| J. | | | |
| K. | | | |
| L. | | | |

APPENDIX B
FY 2017 IRF PPS CMGS AND PAYMENT WEIGHTS

| | CMG Description | Relative Weight | | | |
|------|---|-----------------|--------|--------|--------|
| CMG | CMG Description (M = motor, C = cognitive, A = age) | Tier 1 | Tier 2 | Tier 3 | None |
| 0101 | Stroke M > 51.05 | 0.7992 | 0.7117 | 0.6511 | 0.6215 |
| 0102 | Stroke M > 44.45 and M < 51.05 and C > 18.5 | 1.0130 | 0.9020 | 0.8252 | 0.7877 |
| 0103 | Stroke M > 44.45 and M < 51.05 and C < 18.5 | 1.1836 | 1.0540 | 0.9642 | 0.9204 |
| 0104 | Stroke M > 38.85 and M < 44.45 | 1.2598 | 1.1218 | 1.0263 | 0.9796 |
| 0105 | Stroke M > 34.25 and M < 38.85 | 1.4572 | 1.2976 | 1.1871 | 1.1331 |
| 0106 | Stroke M > 30.05 and M < 34.25 | 1.6296 | 1.4511 | 1.3275 | 1.2671 |
| 0107 | Stroke M > 26.15 and M < 30.05 | 1.8187 | 1.6195 | 1.4815 | 1.4142 |
| 0108 | Stroke M < 26.15 and A > 84.5 | 2.2893 | 2.0386 | 1.8649 | 1.7801 |
| 0109 | Stroke M > 22.35 and M < 26.15 and A < 84.5 | 2.0584 | 1.8329 | 1.6768 | 1.6005 |
| 0110 | Stroke M < 22.35 and A < 84.5 | 2.7320 | 2.4327 | 2.2255 | 2.1243 |
| 0201 | Traumatic brain injury M > 53.35 and C > 23.5 | 0.7753 | 0.6341 | 0.5715 | 0.5343 |
| 0202 | Traumatic brain injury $M > 44.25$ and $M < 53.35$ and $M < 23.5$ | 1.0945 | 0.8951 | 0.8067 | 0.7542 |
| 0203 | Traumatic brain injury $M > 44.25$ and $C < 23.5$ | 1.2173 | 0.9955 | 0.8973 | 0.8388 |
| 0204 | Traumatic brain injury $M > 40.65$ and $M < 44.25$ | 1.3455 | 1.1003 | 0.9918 | 0.9272 |
| 0205 | Traumatic brain injury $M > 28.75$ and $M < 40.65$ | 1.6224 | 1.3269 | 1.1959 | 1.1181 |
| 0206 | Traumatic brain injury $M > 22.05$ and $M < 28.75$ | 1.9239 | 1.5734 | 1.4182 | 1.3258 |
| 0207 | Traumatic brain injury M < 22.05 | 2.5284 | 2.0678 | 1.8637 | 1.7424 |
| 0301 | Non-traumatic brain injury M > 41.05 | 1.1424 | 0.9432 | 0.8571 | 0.8002 |
| 0302 | Non-traumatic brain injury $M > 35.05$ and $M < 41.05$ | 1.4063 | 1.1610 | 1.0551 | 0.9850 |

| | CMG Description - (M = motor, C = cognitive, A = age) | Relative Weight | | | |
|------|--|-----------------|--------|--------|--------|
| CMG | | Tier 1 | Tier 2 | Tier 3 | None |
| 0303 | Non-traumatic brain injury M > 26.15 and M < 35.05 | 1.6490 | 1.3614 | 1.2372 | 1.1550 |
| 0304 | Non-traumatic brain injury M < 26.15 | 2.1336 | 1.7614 | 1.6007 | 1.4944 |
| 0401 | Traumatic spinal cord injury M > 48.45 | 0.9799 | 0.8616 | 0.7947 | 0.7213 |
| 0402 | Traumatic spinal cord injury $M > 30.35$ and $M < 48.45$ | 1.4052 | 1.2357 | 1.1396 | 1.0344 |
| 0403 | Traumatic spinal cord injury $M > 16.05$ and $M < 30.35$ | 2.2165 | 1.9492 | 1.7976 | 1.6316 |
| 0404 | Traumatic spinal cord injury $M < 16.05$ and $A > 63.5$ | 3.8702 | 3.4033 | 3.1387 | 2.8489 |
| 0405 | Traumatic spinal cord injury $M < 16.05$ and $A < 63.5$ | 3.4395 | 3.0246 | 2.7894 | 2.5319 |
| 0501 | Non-traumatic spinal cord injury M > 51.35 | 0.8524 | 0.6715 | 0.6395 | 0.5751 |
| 0502 | Non-traumatic spinal cord injury $M > 40.15$ and $M < 51.35$ | 1.1600 | 0.9139 | 0.8703 | 0.7827 |
| 0503 | Non-traumatic spinal cord injury $M > 31.25$ and $M < 40.15$ | 1.4557 | 1.1469 | 1.0921 | 0.9822 |
| 0504 | Non-traumatic spinal cord injury $M > 29.25$ and $M < 31.25$ | 1.7087 | 1.3462 | 1.2819 | 1.1529 |
| 0505 | Non-traumatic spinal cord injury $M > 23.75$ and $M < 29.25$ | 1.9607 | 1.5447 | 1.4709 | 1.3229 |
| 0506 | Non-traumatic spinal cord injury M < 23.75 | 2.7151 | 2.1391 | 2.0369 | 1.8320 |
| 0601 | Neurological M > 47.75 | 1.0352 | 0.8205 | 0.7577 | 0.6939 |
| 0602 | Neurological M > 37.35 and M < 47.75 | 1.3322 | 1.0560 | 0.9751 | 0.8930 |
| 0603 | Neurological M > 25.85 and M < 37.35 | 1.6411 | 1.3008 | 1.2012 | 1.1001 |
| 0604 | Neurological M < 25.85 | 2.1752 | 1.7241 | 1.5922 | 1.4581 |
| 0701 | Fracture of lower extremity M > 42.15 | 0.9991 | 0.8136 | 0.7767 | 0.7052 |
| 0702 | Fracture of lower extremity $M > 34.15$ and $M < 42.15$ | 1.2759 | 1.0390 | 0.9919 | 0.9006 |
| 0703 | Fracture of lower extremity M > 28.15 and M < 34.15 | 1.5383 | 1.2527 | 1.1958 | 1.0858 |
| 0704 | Fracture of lower extremity M < 28.15 | 1.9943 | 1.6240 | 1.5503 | 1.4076 |

| | CMG Description - (M = motor, C = cognitive, A = age) | Relative Weight | | | |
|------|---|-----------------|--------|--------|--------|
| CMG | | Tier 1 | Tier 2 | Tier 3 | None |
| 0801 | Replacement of lower extremity joint M > 49.55 | 0.7983 | 0.6443 | 0.5958 | 0.5476 |
| 0802 | Replacement of lower extremity joint $M > 37.05$ and $M < 49.55$ | 1.0333 | 0.8340 | 0.7713 | 0.7089 |
| 0803 | Replacement of lower extremity joint $M > 28.65$ and $M < 37.05$ and $A > 83.5$ | 1.3823 | 1.1156 | 1.0317 | 0.9482 |
| 0804 | Replacement of lower extremity joint $M > 28.65$ and $M < 37.05$ and $A < 83.5$ | 1.2445 | 1.0044 | 0.9289 | 0.8537 |
| 0805 | Replacement of lower extremity joint $M > 22.05$ and $M < 28.65$ | 1.4806 | 1.1949 | 1.1051 | 1.0157 |
| 0806 | Replacement of lower extremity joint $M < 22.05$ | 1.7987 | 1.4517 | 1.3425 | 1.2339 |
| 0901 | Other orthopedic M > 44.75 | 0.9839 | 0.7940 | 0.7356 | 0.6693 |
| 0902 | Other orthopedic $M > 34.35$ and $M < 44.75$ | 1.2583 | 1.0155 | 0.9408 | 0.8560 |
| 0903 | Other orthopedic $M > 24.15$ and $M < 34.35$ | 1.5810 | 1.2760 | 1.1821 | 1.0755 |
| 0904 | Other orthopedic M < 24.15 | 2.0014 | 1.6153 | 1.4965 | 1.3615 |
| 1001 | Amputation, lower extremity M > 47.65 | 1.0715 | 0.9448 | 0.8199 | 0.7400 |
| 1002 | Amputation, lower extremity $M > 36.25$ and $M < 47.65$ | 1.3906 | 1.2261 | 1.0641 | 0.9604 |
| 1003 | Amputation, lower extremity M < 36.25 | 1.9639 | 1.7317 | 1.5029 | 1.3564 |
| 1101 | Amputation, non-lower extremity M > 36.35 | 1.3222 | 1.1985 | 0.9739 | 0.8842 |
| 1102 | Amputation, non-lower extremity M < 36.35 | 1.8953 | 1.7181 | 1.3961 | 1.2676 |
| 1201 | Osteoarthritis M > 37.65 | 1.0379 | 1.0241 | 0.9306 | 0.8231 |
| 1202 | Osteoarthritis $M > 30.75$ and $M < 37.65$ | 1.2061 | 1.1900 | 1.0813 | 0.9564 |
| 1203 | Osteoarthritis M < 30.75 | 1.5370 | 1.5165 | 1.3780 | 1.2188 |
| 1301 | Rheumatoid, other arthritis M > 36.35 | 1.1939 | 0.9393 | 0.8690 | 0.8007 |
| 1302 | Rheumatoid, other arthritis $M > 26.15$ and $M < 36.35$ | 1.6397 | 1.2900 | 1.1935 | 1.0997 |
| 1303 | Rheumatoid, other arthritis M < 26.15 | 2.0215 | 1.5904 | 1.4715 | 1.3558 |

| | CMG Description – (M = motor, C = cognitive, A = age) | Relative Weight | | | |
|------|---|-----------------|--------|--------|--------|
| CMG | | Tier 1 | Tier 2 | Tier 3 | None |
| 1401 | Cardiac M > 48.85 | 0.8666 | 0.7324 | 0.6639 | 0.6025 |
| 1402 | Cardiac M > 38.55 and M < 48.85 | 1.1810 | 0.9981 | 0.9047 | 0.8211 |
| 1403 | Cardiac M > 31.15 and M < 38.55 | 1.4079 | 1.1899 | 1.0785 | 0.9788 |
| 1404 | Cardiac M < 31.15 | 1.7805 | 1.5048 | 1.3640 | 1.2379 |
| 1501 | Pulmonary M > 49.25 | 1.0089 | 0.8543 | 0.7888 | 0.7436 |
| 1502 | Pulmonary M > 39.05 and M < 49.25 | 1.2746 | 1.0793 | 0.9966 | 0.9394 |
| 1503 | Pulmonary M > 29.15 and M < 39.05 | 1.5543 | 1.3162 | 1.2153 | 1.1456 |
| 1504 | Pulmonary M < 29.15 | 1.9370 | 1.6402 | 1.5145 | 1.4276 |
| 1601 | Pain syndrome M > 37.15 | 0.9889 | 0.8933 | 0.8321 | 0.7677 |
| 1602 | Pain syndrome M > 26.75 and M < 37.15 | 1.2901 | 1.1654 | 1.0855 | 1.0015 |
| 1603 | Pain syndrome M < 26.75 | 1.6155 | 1.4592 | 1.3592 | 1.2540 |
| 1701 | Major multiple trauma without brain or spinal cord injury M > 39.25 | 1.1345 | 0.9258 | 0.8520 | 0.7671 |
| 1702 | Major multiple trauma without brain or spinal cord injury $M > 31.05$ and $M < 39.25$ | 1.4253 | 1.1631 | 1.0704 | 0.9637 |
| 1703 | Major multiple trauma without brain or spinal cord injury $M > 25.55$ and $M < 31.05$ | 1.6987 | 1.3862 | 1.2758 | 1.1486 |
| 1704 | Major multiple trauma without brain or spinal cord injury $M < 25.55$ | 2.1821 | 1.7806 | 1.6387 | 1.4753 |
| 1801 | Major multiple trauma with brain or spinal cord injury M > 40.85 | 1.2932 | 1.0595 | 0.9203 | 0.8254 |
| 1802 | Major multiple trauma with brain or spinal cord injury $M > 23.05$ and $M < 40.85$ | 1.8234 | 1.4939 | 1.2976 | 1.1639 |
| 1803 | Major multiple trauma with brain or spinal cord injury $M < 23.05$ | 2.8692 | 2.3507 | 2.0419 | 1.8314 |

| | CMG Description | | Relative | Weight | |
|------|---|--------|----------|--------|--------|
| СМС | (M = motor, C = cognitive, A = age) | Tier 1 | Tier 2 | Tier 3 | None |
| 1901 | Guillain-Barré M > 35.95 | 1.2267 | 1.0516 | 0.9270 | 0.9134 |
| 1902 | Guillain-Barré M > 18.05 and M < 35.95 | 2.2288 | 1.9106 | 1.6843 | 1.6595 |
| 1903 | Guillain-Barré M < 18.05 | 3.6684 | 3.1447 | 2.7722 | 2.7315 |
| 2001 | Miscellaneous M > 49.15 | 0.9225 | 0.7562 | 0.6942 | 0.6285 |
| 2002 | Miscellaneous $M > 38.75$ and $M < 49.15$ | 1.2097 | 0.9916 | 0.9104 | 0.8241 |
| 2003 | Miscellaneous $M > 27.85$ and $M < 38.75$ | 1.5124 | 1.2397 | 1.1381 | 1.0303 |
| 2004 | Miscellaneous M < 27.85 | 1.9412 | 1.5912 | 1.4608 | 1.3224 |
| 2101 | Burns M > 0 | 1.6899 | 1.6899 | 1.5061 | 1.3813 |
| 5001 | Short-stay cases, length of stay is 3 days or fewer | | | | 0.1585 |
| 5101 | Expired, orthopedic, length of stay is 13 days or fewer | | | | 0.6785 |
| 5102 | Expired, orthopedic, length of stay is 14 days or more | | | | 1.6606 |
| 5103 | Expired, not orthopedic, length of stay is 15 days or fewer | | | | 0.8002 |
| 5104 | Expired, not orthopedic, length of stay is 16 days or more | | | | 2.1200 |

SOURCE: Inpatient Rehabilitation Facility Prospective Payment System for Fiscal Year 2017; Final Rule

APPENDIX C STANDARDIZED PATIENT ASSESSMENT DATA ELEMENTS AND FUNCTIONAL INDEPENDENCE MEASURE (FIM™) ITEM DESCRIPTIVES

C.1 Standardized Patient Assessment Data Elements

| | Motor Score—Section GG (Range 19-110) | Mean | SD |
|-------------|---------------------------------------|-------|-------|
| Motor Score | | 55.67 | 15.03 |

| Motor Items—Section GG | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 9 | 88 | Missing |
|---|--------|--------|---------|---------|-------|-------|-------|-------|---------|---------|
| GG0170E1 Admission Performance Chair/Bed to Chair Transfer Code | 46,654 | 61,450 | 153,636 | 94,205 | 3,587 | 2,349 | 1,100 | 434 | 6,168 | 101 |
| GG0170F1 Admission Performance Toilet Transfer Code | 43,489 | 53,221 | 132,413 | 92,052 | 4,757 | 3,173 | 6,981 | 5,563 | 27,857 | 178 |
| GG0170I1 Admission Performance Walk 10 Feet Code | 30,319 | 15,017 | 114,184 | 111,677 | 2,777 | 1,945 | 1,878 | 730 | 30,889 | 60,268 |
| GG0170J1 Admission Performance Walk 50 Feet Code | 16,068 | 4,934 | 68,414 | 87,348 | 2,333 | 1,455 | 3,626 | 2,932 | 122,284 | 60,290 |
| GG0170K1 Admission Performance Walk 150 Feet Code | 13,010 | 2,454 | 25,706 | 47,509 | 1,759 | 1,212 | 5,040 | 6,414 | 206,249 | 60,331 |
| GG0170M1 Admission Performance 1 Step Code | 11,267 | 8,489 | 63,215 | 49,161 | 1,034 | 827 | 5,631 | 6,057 | 163,673 | 60,330 |

| Bowel and Bladder— Section H | 0 | 1 | 2 | 3 | 4 | 5 | 9 | Missing |
|----------------------------------|---------|--------|--------|--------|--------|-------|--------|---------|
| H0350 Urinary Continence Code | 211,108 | 18,445 | 48,263 | 36,816 | 22,182 | 4,601 | 28,218 | 51 |
| H0400 Bowel Continence Code | 270,598 | 36,257 | 20,207 | 22,515 | | | 20,058 | 49 |

| BIMS (Memory)—Section C (Range 1-15) | Mean | SD | Not Completed | Missing |
|--|-------|------|------------------|---------|
| C0500 Brief Interview for Mental Status (BIMS) Score Number | 12.55 | 3.27 | 5,995 | 21,232 |

| BIMS (Memory) Staff Assessment—Section C | 0 | 1 | Missing |
|--|--------|--------|---------|
| C0900A Staff Assessment of Mental Status—Recalls Current Season Code | 17,768 | 8,785 | 343,131 |
| C0900B Staff Assessment of Mental Status—Recalls Location of Room Code | 20,592 | 5,929 | 343,163 |
| C0900C Staff Assessment of Mental Status—Recalls Staff Name Code | 20,445 | 6,081 | 343,158 |
| C0900E Staff Assessment of Mental Status—Recalls Hospital Code | 13,812 | 12,760 | 343,112 |
| C0900Z Staff Assessment of Mental Status—Recalls None of Above Code | 14,332 | 12,246 | 343,106 |

| Communication—Section B | 1 | 2 | 3 | 4 | Missing |
|---|-------|--------|---------|---------|---------|
| BB0700 Expression Idea Want Code: Admission | 9,958 | 30,616 | 135,731 | 193,085 | 294 |
| BB0800 Understands Other Code: Admission | 6,109 | 34,438 | 140,227 | 188,616 | 294 |

C.2 FIM™ Items Used in IRF PPS

| FIM™ Motor Score (Range 12-84) | Mean | SD |
|--------------------------------|-------|-------|
| Motor Score | 28.49 | 10.51 |

| Motor Items—FIM™ | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|--|---------|---------|--------|---------|--------|---------|---------|--------|
| 39AA Self-Care—Eating: Admission | 1,021 | 26,806 | 8,153 | 11,199 | 35,352 | 228,168 | 30,599 | 28,386 |
| 39BA Self-Care—Grooming: Admission | 3,012 | 47,328 | 20,295 | 38,797 | 95,135 | 158,424 | 3,784 | 2,909 |
| 39CA Self-Care—Bathing: Admission | 16,171 | 77,467 | 54,276 | 105,412 | 90,398 | 24,878 | 822 | 260 |
| 39DA Self-Care—Dressing Upper: Admission | 6,635 | 79,592 | 38,116 | 56,033 | 93,789 | 93,017 | 1,354 | 1,148 |
| 39EA Self-Care—Dressing Lower: Admission | 4,875 | 184,126 | 66,535 | 49,023 | 52,041 | 12,452 | 418 | 214 |
| 39FA Self-Care—Toileting: Admission | 6,346 | 163,188 | 62,673 | 51,008 | 68,045 | 16,440 | 1,470 | 514 |
| 39GA Sphincter Control— Bladder: Admission | 0 | 162,376 | 25,971 | 27,395 | 30,540 | 74,725 | 23,730 | 24,947 |
| 39HA Sphincter Control— Bowel: Admission | 0 | 104,714 | 24,866 | 24,176 | 27,834 | 52,644 | 114,942 | 20,508 |
| 39IA Transfers—Bed | 1,629 | 120,184 | 72,728 | 93,464 | 75,480 | 5,710 | 372 | 117 |
| 39JA Transfers—Toilet: Admission | 15,549 | 92,125 | 67,168 | 87,943 | 96,906 | 9,123 | 734 | 136 |
| 39LA Locomotion— Walk/Wheelchair: Admission | • | 188,194 | 96,513 | 5,428 | 40,907 | 13,157 | 1,753 | 186 |
| 39MA Locomotion—Stairs: Admission | 196,179 | 64,639 | 84,144 | 1,768 | 17,376 | 5,008 | 518 | 52 |

| FIM™ Cognitive Score (Range 5-35) | Mean | SD |
|-----------------------------------|-------|------|
| Cognitive Score | 22.01 | 6.92 |

| Cognitive Items— | | | | | | | | _ |
|--|---|--------|--------|--------|--------|---------|--------|--------|
| FIM™ | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 39NA Communication— Comprehension: Admission | 0 | 11,240 | 24,796 | 46,992 | 74,901 | 106,330 | 81,576 | 23,849 |
| 390A Communication— Expression: Admission | 0 | 14,032 | 24,118 | 41,992 | 67,800 | 102,693 | 79,842 | 39,207 |
| 39PA Social Cognition— Social Interaction: Admission | 0 | 11,580 | 19,398 | 36,369 | 61,581 | 105,840 | 93,091 | 41,825 |
| 39QA Social Cognition— Problem Solving: Admission | 0 | 30,458 | 42,706 | 67,411 | 86,965 | 90,453 | 38,101 | 13,590 |
| 39RA Social Cognition— Memory: Admission | 0 | 25,301 | 43,400 | 65,063 | 80,412 | 87,672 | 48,826 | 19,010 |