

Home Health Prospective Payment System

Overview

PBL-046

Java is a registered trademark of Oracle and/or its affiliates.

Table of Contents

Overview of the Home Health Prospective Payment System.....	5
Background and versioning.....	5
Changes for this version.....	5
Episodes.....	5
Episode timing.....	6
The executable file and versions.....	7
Versions of the grouper.....	7
Grouping and scoring.....	8
Diagnostic Groups.....	8
Diagnosis code processing and group scoring.....	9
Manifestation and Etiology.....	10
Gangrene Exclusion.....	10
Diabetic (Stasis) Ulcers.....	11
V-codes (under ICD-9-CM) and Payment Diagnoses.....	11
Primary point promotion.....	11
Data validation.....	12
Valid assessments.....	12
Data validity flag.....	12
Clinical and functional scores.....	14
Non-routine Supplies (NRS).....	18
Scoring of Non-routine Supplies (NRS).....	19
Generating HIPPS codes.....	21
Clinical and functional thresholds.....	21
Claim-OASIS matching string format.....	23

Overview of the Home Health Prospective Payment System

Background and versioning

Under the home health prospective payment system (HH-PPS), a case-mix adjusted payment for up to 60 days of care is made using one of 153 Home Health Resource Groups (HHRG). On Medicare claims these HHRGs are represented as Health Insurance Prospective Payment System (HIPPS) codes. HIPPS codes are determined based on assessments made using the Outcome and Assessment Information Set (OASIS). Grouper software run at a home health agency site uses specific data elements from the OASIS data set to assign beneficiaries to a HIPPS code. The grouper outputs the HIPPS code, which must be reported on the claim.

Changes for this version

This version includes changes as described on the Home Health Prospective Payment System Regulations and Notices web site for the Centers for Medicare & Medicaid Services. The URL for this website is:

<http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/HomeHealthPPS/Home-Health-Prospective-Payment-System-Regulations-and-Notices.html>

Episodes

An episode is a 60-day unit of payment for the Home Health Prospective Payment System (HH-PPS). The end date for a distinct episode is the 60th day after the start of care date reported in OASIS Field M0030. The HH-PPS utilizes the episode timing of adjacent episodes to distinguish between variations in resource needs.

Home Health Agencies (HHAs) are required to report if adjacent episodes are “early” or “later” using OASIS item M0110 “Episode Timing”. When determining if two eligible episodes are adjacent, the HHA should count the number of days from the last day of one episode until the first day of the next episode. Adjacent episodes are defined as those where the number of days from the last day of one episode until the first day of the next episode is not greater than 60. When determining the interval between episodes the first day after the last day of an episode is counted as day 1. Counting is continued and includes, the first day of the next episode.

For example, a patient is admitted to Agency A on July 5th and is reported within a payment episode that ends on the date of Sept 2nd. The patient is then recertified on Sept 3rd, with an end of episode date of November 1st. Agency B admits on January 1, 2008. November 1st was the last day of the previous episode, (the second episode), and January 1 is the first day of the

next episode. When counting the number of days from the last day of one episode (Nov 1st), November 2nd would be day 1, and January 1 would be day 61. Since the number of days from the end of one episode to the start of the next is more than 60 days, these two episodes are not adjacent. The episode starting January 1st would be reported by Agency B as “early”. December 31 represents day 60 in this example. If the next episode started December 31 instead of January 1, that episode would be considered adjacent since the number of days counted is not greater than 60. An episode starting December 31 would be reported by Agency B as “later.” Any episodes beginning between November 2 and December 31 in this example would also be reported as “later.”

Episode timing

Episode timing is used within the HH-PPS to determine the Health Insurance Prospective Payment System (HIPPS) code for billing. If the episode timing equals NA, no case mix group is defined for the assessment. The first position of the HIPPS code shows whether an episode is “early” or “later.” Since HHAs may not always have complete information about previous episodes, the HIPPS code is validated by Medicare systems. After submitting claims, the Common Working File reads the episode history to determine whether an episode has been coded correctly based upon the most current information available to Medicare. If the HIPPS code disagrees with Medicare’s episode history, the claim is recoded.

The receipt of any additional assessment (episode) may change the sequence of previously paid claims. For instance, a claim may be paid as “early” because the HHA was not aware of prior episodes and the previous HHA had not billed for the prior episodes. When the earlier dated episodes are received, Medicare systems initiate an automatic adjustment to recode the previously paid claim and correct its payment.

When claims are recoded, values in the treatment authorization code submitted on the claim are used to determine the new code. To avoid having to send the claim back to the provider (RTP), the HH-PPS generates four sets of scores based upon the OASIS responses. The four sets of scores correspond to alternate outcomes obtained from scoring equations constructed within the HH-PPS model varying by episode timing and the number of therapy visits. The four HH-PPS severity scoring equations are outlined in the following table.

Table 1. Severity scoring

Scoring equation	1	2	3	4
Episode Timing (M0110)	01 or UK ("Early")	01 or UK ("Early")	02 ("Later")	02 ("Later")
Therapy visits (M2200)	0-13	14+	0-13	14+

Scores are output by the HH-PPS as a Claim-OASIS Matching String and submitted on claims in the “Treatment Authorization” field (FL63, UB-04) in case they are needed during claims processing.

The executable file and versions

The executable file (.dll) is structured to accept an input string in the standard OASIS submission record format. The grouper accepts OASIS-B1, OASIS-C, OASIS-C1, and OASIS-C2 formats, the use of which is determined by Assessment Completion Date M0090. Each valid assessment passed through the .dll in standard format returns:

- Five-character HIPPS (Health Insurance Prospective Payment System) code
- Data validity flag
- Eighteen-character claim-OASIS matching key; HH-PPS version identifier.

The HH-PPS version applicable for the episode is identified by the Assessment Completion Date M0090. The version identifier occupies a five-character space with the following format:

v & [OASIS indicator] & [logic release indicator] & [effective starting year indicator]

Versions of the grouper

The following table lists all of the grouper versions and their effective dates.

Table 2. Grouper versions

Grouper version	Start date	End date
2308	01/01/2008	09/30/2008
2409	10/01/2008	09/30/2010
3110	10/01/2009	09/30/2010
3210	10/01/2010	09/30/2011
3211	10/01/2011	12/31/2011
3312	01/01/2012	12/31/2012
3413	01/01/2013	09/30/2013
3414	01/01/2014	09/30/2014
3514	10/01/2014	12/31/2014
4115	01/01/2015	09/30/2015

Grouper version	Start date	End date
5115	10/01/2015	12/31/2015
5116	01/01/2016	09/30/2016
5216	10/01/2016	12/31/2016
6117	01/01/2017	09/30/2017
6217	10/01/2017	12/31/2017
7118	01/01/2018	09/30/2018
7218	10/01/2018	12/31/2018

Grouping and scoring

Diagnostic Groups

Diagnosis codes reported in OASIS Fields M1021 (Primary Diagnosis) or M1023 (Other Diagnosis) of OASIS are used to classify patients within distinct Diagnostic Groups (DGs). A complete listing of diagnosis codes and DG assignments are available in the HH-PPS source code and accompanying tables.

Table 3. Diagnostic Groups

Diagnostic Group description	ID
Blindness and low vision	1
Blood disorders	2
Cancer and selected benign neoplasms	3
Diabetes	4
Dysphagia	5
Gait Abnormality	6
Gastrointestinal disorders	7
Heart Disease	8
Hypertension	9
Neuro 1 - Brain disorders and paralysis	10

Diagnostic Group description	ID
Neuro 2 - Peripheral neurological disorders	11
Neuro 3 - Stroke	12
Neuro 4 - Multiple Sclerosis	13
Ortho 1 - Leg Disorders	14
Ortho 2 - Other Orthopedic disorders	15
Psych 1 - Affective and other psychoses, depression	16
Psych 2 - Degenerative and other organic psychiatric disorders	17
Pulmonary disorders	18
Skin 1 -Traumatic wounds, burns and post-operative complications	19
Skin 2 - Ulcers and other skin conditions	20
Tracheostomy Care	21
Urostomy/Cystostomy Care	22

Note: Effective with version 4115, Diagnostic Groups 1, 16, 17, and 18 are no longer used in scoring. Effective with version 6117, Diagnostic Group 18 is included in scoring.

A small portion of diagnosis codes may be assigned to separate NRS (non-routine supplies) Diagnostic Groups, which are reserved for HH-PPS cases requiring complex or non-routine supplies, such as those used for complex skin or wound care (e.g., skin ulcers, surgical wounds, ostomy supplies). The assignment of an NRS group based on diagnosis codes reported provides additional points towards the total HIPPS score. For additional details see "[Non-routine Supplies \(NRS\)](#)" on page [18](#).

Diagnosis code processing and group scoring

The OASIS instrument permits the entry of a single Primary Diagnosis [M1021] and up to five Other Diagnoses [M1023]. Each of the diagnosis fields has a companion Payment Diagnosis [M1024] field in which two diagnosis codes can be placed to act, under defined rules through version 4115, as substitutes for the codes entered in M1021 and M1023 by the HH-PPS. Substitution by the use of Payment Diagnoses is described in more detail in the section, V-Codes (under ICD-9-CM) and Payment Diagnoses (page [11](#)).

Diagnosis codes recognized by the HH-PPS for scoring are assigned to one of the Diagnostic Groups (DG) shown in Table 3. Diagnosis codes recognized for Non-Routine Supply (NRS) scoring under HH-PPS are assigned to one of the Diagnostic Groups shown in table 7 (page [18](#)).

During scoring it is possible to accrue points from more than one DG per episode but each DG may contribute points only once. If a Primary and Other Diagnosis code fall within the same DG, points are calculated for the primary diagnosis only. If multiple Other Diagnosis codes are in the same DG, the single Other Diagnosis generating the highest points contributes to the total score. Although points may be accrued for multiple different DGs, additional processing of all required OASIS elements determines the final contribution of points towards the HIPPS score.

Manifestation and Etiology

Manifestation diagnosis codes (symptom or sign of an underlying disease) require the reporting of a preceding (code first) etiology diagnosis code (underlying cause or disease). Therefore, a manifestation code should never appear in the Primary Diagnosis position, but an etiology code may appear as a Primary Diagnosis.

Manifestation diagnosis codes are marked as "M" in the DiagnosisCodes table. The pairing of manifestation and etiology codes are included in the DiagnosisEtiologyPairs table. If there is an incorrect or invalid pairing of manifestation and etiology diagnosis codes, neither the etiology nor manifestation codes contribute to the score.

If a manifestation code and its etiology earn points in distinct DGs only the greater of the two scores is allowed. Scoring considers the interaction of diagnosis codes and allowable DG points. For example where another diagnosis code generates points within a DG, the impact upon those points of an "M" or etiology code within the DG is incorporated into the scoring algorithm. The presence of other "losing" manifestation or etiology codes within a DG does not prevent the attribution of points to other codes within the DG. For scoring purposes an etiology/manifestation pair may both be considered for primary diagnosis points where the etiology occupies the primary diagnosis position. Where a similar score is obtained for the "M" and etiology code the etiology code, is passed to the grouper for score with no impact on final HIPPS (Health Insurance Prospective Payment System) assignment.

Gangrene Exclusion

Prior to grouper version 6117 (January 2017), ICD-9-CM diagnosis code 785.4 (Gangrene), is a manifestation code and is subject to the general processing rules noted previously for manifestation and etiology diagnosis code pairing. If gangrene is reported as the primary diagnosis, the record does not score and no HIPPS code is generated. There are additional diagnosis codes that if present in the record and precede the Gangrene diagnosis code cause gangrene to be excluded from contributing to the score. These additional diagnosis codes for gangrene exclusion are listed in DiagnosisEtiologyPairs file, marked with an "E."

Beginning with grouper version 6117, ICD-10-CM diagnosis code I96 (Gangrene, not elsewhere classified) is no longer a manifestation diagnosis and may be reported as a primary diagnosis. However, there continue to be additional diagnosis codes that if reported with Gangrene in the Primary or any Other Diagnosis field cause Gangrene to be excluded and not contribute to the

score. Diagnosis code I96 is marked with a “G” in the DiagnosisCodes file, and gangrene excluded codes continue to be marked with “E” in the DiagnosisEtiologyPairs file.

Diabetic (Stasis) Ulcers

Diagnosis codes for diabetic (stasis) ulcers may contribute NRS points to the total score depending on the OASIS response for healing status of the ulcer and if reported in the Primary Diagnosis position or if present as part of a correctly reported manifestation/etiology pair. If a diabetic ulcer diagnosis code is reported in an Other Diagnosis field and not part of a manifestation/etiology pair, the diabetic ulcer code does not contribute to the score. When diabetic ulcer is reported as the Primary Diagnosis, and any non-diabetic ulcers or non-pressure ulcers are reported as Other Diagnoses, only the diabetic ulcer contributes points to the score.

V-codes (under ICD-9-CM) and Payment Diagnoses

Beginning with version 3413 (January 2013) through version 4115 (January 2015) the HH-PPS recognizes a select list of V-codes under ICD-9-CM which, when reported as a Primary Diagnosis (M1021) or Other Diagnosis (M1023), are substituted with Payment Diagnoses entered in OASIS field M1024 for the purpose of awarding points towards the HPPS scoring outcome. The list of V-Codes recognized for substitution by the HH-PPS are in the tables accompanying the HH-PPS source code, specifically marked with a “P” in the DiagnosisCodes table.

Payment diagnosis codes that act as substitutes for designated V-codes within the HH-PPS are subject to the same manifestation and etiology requirements outlined in the preceding section. A manifestation code requires submission in column 4 of OASIS field M1024 with a valid etiology code to be entered into preceding column 3 of OASIS field M1024.

When a valid etiology and manifestation pair are entered in the payment diagnosis fields and substituted for a designated V-code in the primary/other diagnosis field, both payment diagnosis codes are considered for DG and NRS assignment purposes. As with other manifestation and etiology code contentions, described in the preceding section, only one of the etiology and manifestation code pair is recognized for points scoring by the HH-PPS.

Beginning in version 5115 (effective October 1, 2015), the transition of V-Codes to Z-Codes under ICD-10-CM has removed any relationship with Payment Diagnosis codes, effectively removing the need to enter diagnoses in the payment fields of OASIS for the purpose of the HH-PPS.

Primary point promotion

Beginning with version 3413 (January 2013), the HH-PPS grouper reviews codes submitted in the Primary Diagnosis field (M1021), and for a select range of codes, treats the first secondary diagnosis, or diagnosis pairs if in etiology/manifestation contention, as if it were primary for

scoring purposes. Details of codes recognized with this change are available within the tables accompanying the HH-PPS source code, specifically marked with an "A" in the DiagnosisCodes table.

Data validation

Valid assessments

Assessments must have the following range of OASIS responses to be assigned a HIPPS (Health Insurance Prospective Payment System) code:

- OASIS Field: M0100 (Reason for Assessment) is 01,03,04,05
- OASIS Field: M0090 (Assessment Completion Date) is within the valid date range for the HH-PPS (after January 1, 2008 and the current effective end date)

Assessments not meeting HH-PPS grouping criteria for Reason for Assessment or Assessment Completion date do not return grouping results, and the HIPPS code is left blank. Additional details on specific validation are available in the HH-PPS source code.

Data validity flag

The HH-PPS grouper outputs a data validity flag separate from the HIPPS (Health Insurance Prospective Payment System) code assignment as part of the standard grouper output. The validity flag can be observed at the end of the output record after grouping. This single data validity flag combines validation returns from four separate flags that are switched through internal grouper logic. The service domain flag supersedes all other flags. Examples of validation errors are listed below with each of the four separate validity flags.

- Service Domain Flag: invalid OASIS entry for therapy need or number of therapy visits
- Manifestation Flag: incorrect sequencing of manifestation diagnosis code and/or etiology diagnosis code, invalid manifestation/etiology pairing; gangrene exclusion diagnosis code present
- Clinical Domain Flag: invalid diagnosis code present, external cause of injury as primary diagnosis code
- Functional Domain Flag: invalid entry of functional domain OASIS response

The following table describes how the single data validity flag reports the combination of data validation errors encountered during assignment.

Table 4. Data Validity Flag Output

Manifestation Flag	Clinical Domain Flag	Functional Domain Flag	Service Domain Flag	Data Validity Flag
0	0	0	0	1
0	1	0	0	2
0	0	1	0	3
0	0	0	1	4
0	1	1	0	5
0	0	1	1	6
0	1	0	1	7
0	1	1	1	8
1	0	0	0	A
1	1	0	0	B
1	0	1	0	C
1	0	0	1	D
1	1	1	0	E
1	0	1	1	F
1	1	0	1	G
1	1	1	1	H

Note: A 'B' flag with no HIPPS code indicates that the record has a manifestation code in the primary position.

For all assessments utilizing grouper versions beginning October 1, 2009 and later, regardless of original OASIS Assessment Completion date, it is the requirement for all ICD-CM diagnosis codes used in assignment to conform to ICD-CM coding guidelines. Manifestation flags are encountered where diagnosis codes that have been included in the payment model are entered on an assessment but the necessary preceding etiology codes for validation have not been recorded.

A full inventory of edit checks that may result in the assignment of validation flags can be obtained by referring to the HH-PPS source code. Similarly, a complete list of valid ICD-CM diagnosis codes complete with acceptable etiologies may be found by consulting the tables accompanying the HH-PPS source code.

OASIS fields flagged as having a validation error during assignment by the HH-PPS grouper may not score and in some cases, may affect the assignment of HIPPS codes. For example, the

presence of the service domain data issue flag leads to a recognized therapy service level of 0 in HIPPS code assignment.

Clinical and functional scores

The HH-PPS grouper calculates assessment scores by combining the severity score (page 6) with clinical and functional attributes. Points are awarded for diagnostic groups and some specified responses in OASIS fields stratified by the severity scoring equation.

Points scores associated with Diagnostic Groups, OASIS values and the severity scoring equation are shown in the following tables. Points scores are awarded for scoring for each equation if the record meets the criteria defined by the Row ID and description.

Table 5. Case mix adjustment variables and scores - clinical dimension

Row ID	Variable description	Scoring equation 1	Scoring equation 2	Scoring equation 3	Scoring equation 4
1	Primary or Other Diagnosis = Blindness/Low Vision	0	0	0	0
2	Primary or Other Diagnosis = Blood disorders	0	1	0	0
3	Primary or Other Diagnosis = Cancer, selected benign neoplasms	0	4	0	4
4	Primary Diagnosis = Diabetes	0	3	0	0
5	Other Diagnosis = Diabetes	1	0	0	0
6	Primary or Other Diagnosis = Dysphagia AND Primary or Other Diagnosis = Neuro 3 - Stroke	2	16	1	10
7	Primary or Other Diagnosis = Dysphagia AND M1030 (Therapy at home) = 3 (Enteral)	1	5	0	9
8	Primary or Other Diagnosis = Gastrointestinal disorders	0	0	0	2
9	Primary or Other Diagnosis = Gastrointestinal disorders AND M1630 (ostomy)= 1 or 2	0	7	0	0

Row ID	Variable description	Scoring equation 1	Scoring equation 2	Scoring equation 3	Scoring equation 4
10	Primary or Other Diagnosis = Gastrointestinal disorders AND Primary or Other Diagnosis = Neuro 1 - Brain disorders and paralysis, OR Neuro 2 - Peripheral neurological disorders, OR Neuro 3 - Stroke, OR Neuro 4 - Multiple Sclerosis	0	0	0	0
11	Primary or Other Diagnosis = Heart Disease OR Hypertension	1	3	0	2
12	Primary Diagnosis = Neuro 1 - Brain disorders and paralysis	3	9	6	9
13	Primary or Other Diagnosis = Neuro 1 - Brain disorders and paralysis AND M1840 (Toilet transfer) = 2 or more	0	4	0	4
14	Primary or Other Diagnosis = Neuro 1 - Brain disorders and paralysis OR Neuro 2 - Peripheral neurological disorders AND M1810 or M1820 (Dressing upper or lower body) = 1, 2, or 3	2	4	2	4
15	Primary or Other Diagnosis = Neuro 3 - Stroke	3	9	2	4
16	Primary or Other Diagnosis = Neuro 3 - Stroke AND M1810 or M1820 (Dressing upper or lower body) = 1, 2, or 3	0	2	0	0
17	Primary or Other Diagnosis = Neuro 3 - Stroke AND M1860 (Ambulation) = 4 or more	0	0	0	0

Row ID	Variable description	Scoring equation 1	Scoring equation 2	Scoring equation 3	Scoring equation 4
18	Primary or Other Diagnosis = Neuro 4 - Multiple Sclerosis AND AT LEAST ONE OF THE FOLLOWING: M1830 (Bathing) = 2 or more OR M1840 (Toilet transfer) = 2 or more OR M1850 (Transferring) = 2 or more OR M1860 (Ambulation) = 4 or more	3	7	5	11
19	Primary or Other Diagnosis = Ortho 1 - Leg Disorders or Gait Disorders AND M1324 (most problematic pressure ulcer stage) = 1, 2, 3 or 4	7	1	7	0
20	Primary or Other Diagnosis = Ortho 1 - Leg OR Ortho 2 - Other orthopedic disorders AND M1030 (Therapy at home) = 1 (IV/Infusion) or 2 (Parenteral)	3	0	3	7
21	Primary or Other Diagnosis = Psych 1 - Affective and other psychoses, depression	0	0	0	0
22	Primary or Other Diagnosis = Psych 2 - Degenerative and other organic psychiatric disorders	0	0	0	0
23	Primary or Other Diagnosis = Pulmonary disorders	0	2	0	1
24	Primary or Other Diagnosis = Pulmonary disorders AND M1860 (Ambulation) = 1 or more	0	0	0	0
25	Primary Diagnosis = Skin 1 -Traumatic wounds, burns, and post-operative complications	3	17	6	17
26	Other Diagnosis = Skin 1 - Traumatic wounds, burns, post-operative complications	6	14	7	14

Row ID	Variable description	Scoring equation 1	Scoring equation 2	Scoring equation 3	Scoring equation 4
27	Primary or Other Diagnosis = Skin 1 -Traumatic wounds, burns, and post-operative complications OR Skin 2 - Ulcers and other skin conditions AND M1030 (Therapy at home) = 1 (IV/Infusion) or 2 (Parenteral)	2	0	0	0
28	Primary or Other Diagnosis = Skin 2 - Ulcers and other skin conditions	2	16	8	18
29	Primary or Other Diagnosis = Tracheostomy	2	17	0	17
30	Primary or Other Diagnosis = Urostomy/Cystostomy	0	17	0	12
31	M1030 (Therapy at home) = 1 (IV/Infusion) or 2 (Parenteral)	0	15	5	15
32	M1030 (Therapy at home) = 3 (Enteral)	0	16	0	6
33	M1200 (Vision) = 1 or more	0	0	0	0
34	M1242 (Pain) = 3 or 4	3	0	2	0
35	M1308 = Two or more pressure ulcers at stage 3 or 4	4	6	4	6
36	M1324 (Most problematic pressure ulcer stage) = 1 or 2	4	19	7	17
37	M1324 (Most problematic pressure ulcer stage) = 3 or 4	9	31	10	25
38	M1334 (Stasis ulcer status) = 2	4	13	8	13
39	M1334 (Stasis ulcer status) = 3	7	17	9	17
40	M1342 (Surgical wound status) = 2	2	7	6	13
41	M1342 (Surgical wound status) = 3	0	6	5	10
42	M1400 (Dyspnea) = 2, 3, or 4	1	1	0	0
43	M1620 (Bowel Incontinence) = 2 to 5	0	3	0	2
44	M1630 (Ostomy) = 1 or 2	4	11	2	8
45	M2030 (Injectable Drug Use) = 0, 1, 2, or 3	0	0	0	0

Table 6. Case mix adjustment variables and scores - functional dimension

Row ID	Variable description	Severity score 1	Severity score 2	Severity score 3	Severity score 4
46	M1810 or M1820 (Dressing upper or lower body) = 1, 2, or 3	1	0	0	0
47	M1830 (Bathing) = 2 or more	6	5	6	2
48	M1840 (Toilet transferring) = 2 or more	0	1	0	0
49	M1850 (Transferring) = 2 or more	3	1	2	0
50	M1860 (Ambulation) = 1, 2 or 3	7	0	4	0
51	M1860 (Ambulation) = 4 or more	8	9	7	7

Non-routine Supplies (NRS)

The HH-PPS grouper incorporates a separate scoring algorithm for non-routine medical supplies (NRS). The NRS model uses the same diagnoses and clinical information from the OASIS assessment to calculate points before assigning the assessment to one of six NRS severity levels.

Diagnosis codes recognized by the HH-PPS for NRS scoring are assigned to one of 12 diagnostic groups shown in the following table. A complete listing of diagnosis codes and diagnostic group assignments for NRS are in the HH-PPS source code and accompanying tables.

Table 7. NRS diagnostic groups

NRS diagnostic group description	ID
Anal fissure, fistula and abscess	1
Cellulitis and abscess	2
Diabetic Ulcers	3
Gangrene	4
Malignant neoplasms of skin	5
Non-pressure and non-stasis ulcers (other than diabetic)	6
Other infections of skin and subcutaneous tissue	7
Post-operative Complications	8
Traumatic wounds, burns and post-operative complications	9

NRS diagnostic group description	ID
Z-code, Cystostomy Care	10
Z-code, Tracheostomy Care	11
Z-code, Urostomy Care	12

Scoring of Non-routine Supplies (NRS)

The HH-PPS calculates assessment scores for NRS by combining Diagnostic Groups with additional clinical attributes obtained from specified OASIS fields.

Point scores associated with NRS Diagnostic Groups and OASIS values are shown in the following tables and are awarded for scoring if the record meets the criteria defined by the Row ID and description.

Table 8. NRS scores for selected skin conditions

Row ID	Selected skin conditions	Points
1	Primary diagnosis = Anal fissure, fistula and abscess	15
2	Other diagnosis = Anal fissure, fistula and abscess	13
3	Primary diagnosis = Cellulitis and abscess	14
4	Other diagnosis = Cellulitis and abscess	8
5	Primary diagnosis = Diabetic Ulcers	20
6	Primary diagnosis = Gangrene	11
7	Other diagnosis = Gangrene	8
8	Primary diagnosis = Malignant neoplasms of skin	15
9	Other diagnosis = Malignant neoplasms of skin	4
10	Primary or Other diagnosis = Non-pressure and non-stasis ulcers	13
11	Primary diagnosis = Other infections of skin and subcutaneous tissue	16
12	Other diagnosis = Other infections of skin and subcutaneous tissue	7
13	Primary diagnosis = Post-operative Complications	23
14	Other diagnosis = Post-operative Complications	15
15	Primary diagnosis = Traumatic Wounds and Burns	19
16	Other diagnosis = Traumatic Wounds and Burns	8

Row ID	Selected skin conditions	Points
17	Primary or other diagnosis = Z code, Cystostomy care	16
18	Primary or other diagnosis = Z code, Tracheostomy care	23
19	Primary or other diagnosis = Z code, Urostomy care	24
20	OASIS M1322 = 1 or 2 pressure ulcers, stage 1	4
21	OASIS M1322 = 3+ pressure ulcers, stage 1	6
22	OASIS M1311 = 1 pressure ulcer, stage 2	14
23	OASIS M1311 = 2 pressure ulcers, stage 2	22
24	OASIS M1311 = 3 pressure ulcers, stage 2	29
25	OASIS M1311 = 4+ pressure ulcers, stage 2	35
26	OASIS M1311 = 1 pressure ulcer, stage 3	29
27	OASIS M1311 = 2 pressure ulcers, stage 3	41
28	OASIS M1311 = 3 pressure ulcers, stage 3	46
29	OASIS M1311 = 4+ pressure ulcers, stage 3	58
30	OASIS M1311 = 1 pressure ulcer, stage 4	48
31	OASIS M1311 = 2 pressure ulcers, stage 4	67
32	OASIS M1311 = 3+ pressure ulcers, stage 4	75
33	OASIS M1311 Unstageable Dressing/Device or Unstageable Slough/Eschar = 1+	17
34	OASIS M1332 = 2 (2 stasis ulcers)	6
35	OASIS M1332 = 3 (3 stasis ulcers)	12
36	OASIS M1332 = 4 (4+ stasis ulcers)	21
37	OASIS M1330 = 1 or 3 (unobservable stasis ulcers)	9
38	OASIS M1334 = 1 (status of most problematic stasis ulcer: fully granulating)	6
39	OASIS M1334 = 2 (status of most problematic stasis ulcer: early/partial granulation)	25
40	OASIS M1334 = 3 (status of most problematic stasis ulcer: not healing)	36
41	OASIS M1342 = 2 (status of most problematic surgical wound: early/partial granulation)	4
42	OASIS M1342 = 3 (status of most problematic surgical wound: not healing)	14

Table 9. NRS scores for other clinical factors

Row ID	Other clinical factors	Points
43	OASIS M1630 = 1 (ostomy not related to inpt stay/no regimen change)	27
44	OASIS M1630 = 2 (ostomy related to inpt stay/regimen change)	45
45	Any 'Selected Skin Conditions' (rows 1-42 above) AND M1630 = 1 (ostomy not related to inpt stay/no regimen change)	14
46	Any 'Selected Skin Conditions' (rows 1-42 above) AND M1630 = 2 (ostomy related to inpt stay/ regimen change)	11
47	OASIS M1030 (Therapy at home) =1 (IV/Infusion)	5
48	OASIS M1610 = 2 (patient requires urinary catheter)	9
49	OASIS M1620 = 4 or 5 (bowel incontinence, daily or >daily)	10

Generating HIPPS codes

The HH-PPS outputs HIPPS (Health Insurance Prospective Payment System) codes for assessments beginning on and after January 1, 2008, using a distinct 5-position, alphanumeric code.

Clinical and functional thresholds

The first position of the HIPPS (Health Insurance Prospective Payment System) code is a numeric value that represents the interaction of episode timing and number of therapy visits (grouping step). The second, third, and fourth positions of the code reflect clinical severity, functional severity, and service utilization respectively. The fifth HIPPS code position indicates a severity group for non-routine supplies (NRS) based upon the scoring of NRS described previously.

Table 10. HIPPS Position 1 - Grouping

Episode sequence	Episode 1 or 2 (Early)	Episode 1 or 2 (Early)	After 2nd episode (Late)	After 2nd episode (Late)	All episodes
Total therapy visits	0 to 13	14 to 19	0 to 13	14 to 19	20+
HIPPS value	1	2	3	4	5

Table 11. HIPPS Position 2 - Clinical severity level (by points)

Grouping step	1	2	3	4	5	HIPPS value
C1 (Low)	0 to 1	0 to 1	0 to 1	0 to 1	0 to 3	A
C2 (Moderate)	2 to 3	2 to 7	2	2 to 9	4 to 16	B
C3 (High)	4+	8+	3+	10+	17+	C

Table 12. HIPPS Position 3 - Functional severity level (by points)

Grouping step	1	2	3	4	5	HIPPS value
F1 (Low)	0 to 13	0 to 7	0 to 6	0 to 2	0 to 2	F
F2 (Moderate)	14	8 to 15	7 to 10	3 to 7	3 to 6	G
F3 (High)	15+	16+	11+	8+	7+	H

Table 13. HIPPS Position 4 - Services utilization level (therapy visits)

Grouping step	1	2	3	4	5	HIPPS value
S1	0 to 5	14 to 15	0 to 5	14 to 15	20+	K
S2	6	16 to 17	6	16 to 17	N/A	L
S3	7 to 9	18 to 19	7 to 9	18 to 19	N/A	M
S4	10	N/A	10	N/A	N/A	N
S5	11 to 13	N/A	11 to 13	N/A	N/A	P

Table 14. HIPPS Position 5 - Severity group for NRS

Non-routine supplies	Points	With NRS	No NRS
NRS1	0	S	1
NRS2	1 to 14	T	2
NRS3	15 to 27	U	3
NRS4	28 to 48	V	4
NRS5	49 to 98	W	5

Non-routine supplies	Points	With NRS	No NRS
NRS6	99+	X	6

Note: In order to promote more accurate billing of supplies, CMS established a separate set of codes (numbers 1 to 6) for the fifth position of the HIPPS code that is to be submitted on claims for episodes where no supplies were provided. For episodes where supplies were not provided, the HHA must edit the HIPPS code output by the HH-PPS and enter the correct final digit before submitting the claim for payment. (See MLN Matters 5746 on <http://cms.hhs.gov> for further details.)

Claim-OASIS matching string format

The 18-character claim-OASIS matching string, applicable for claim submissions for episodes beginning on or after January 1, 2008, is required for Medicare claim submissions to identify the OASIS assessment used to generate the HIPPS (Health Insurance Prospective Payment System) code and to store OASIS information if a HIPPS code correction is required. The output string from the HH-PPS grouper is entered on a standard UB-04 as the Treatment Authorization Code (FL 63). Information contained in this string may be required for calculating payment. An explanation of the string format is shown in the following table.

Table 15. Claim-OASIS matching string

Position	Definition	Format
1-2	M0030 (Start-of-care date) – two-digit year	99
3-4	M0030 (Start-of-care date) – alpha code for date	XX
5-6	M0090 (Date assessment completed) – two-digit year	99
7-8	M0090 (Date assessment completed) – alpha code for date	XX
9	M0100 (Reason for assessment)	9
10	M0110 (Episode Timing) – Early = 1, Late = 2	9
11	Alpha code for Clinical severity points – under Equation 1	X
12	Alpha code for Functional severity points – under Equation 1	X
13	Alpha code for Clinical severity points – under Equation 2	X
14	Alpha code for Functional severity points – under Equation 2	X
15	Alpha code for Clinical severity points – under Equation 3	X
16	Alpha code for Functional severity points – under Equation 3	X

Position	Definition	Format
17	Alpha code for Clinical severity points – under Equation 4	X
18	Alpha code for Functional severity points – under Equation 4	X

The dates in positions 3-4 and 7-8 are converted to two-position alphabetic values using a hexavigesimal coding system table, which is included in the Documentation folder accompanying the software. The two-position numeric point scores in positions 11-18 are converted to a single alphabetic value with 0 = A, 1 = B, 2 = C, etc and 25+ = Z.

The following table shows an example string.

Table 16. Example string

Position	Definition	Actual value	Resulting code
1-2	M0030 (Start-of-care date) – two-digit year	2014	14
3-4	M0030 (Start-of-care date) – code for date	09/01	JK
5-6	M0090 (Date assessment completed) – two-digit year	2015	15
7-8	M0090 (Date assessment completed) – code for date	01/01	AA
9	M0100 (Reason for assessment)	04	4
10	M0110 (Episode Timing)	01	1
11	Clinical severity points – under Equation 1	7	H
12	Functional severity points – under Equation 1	2	C
13	Clinical severity points – under Equation 2	13	N
14	Functional severity points – under Equation 2	4	E
15	Clinical severity points – under Equation 3	3	D
16	Functional severity points – under Equation 3	4	E
17	Clinical severity points – under Equation 4	12	M
18	Functional severity points – under Equation 4	7	H

The treatment authorization code that should appear on the claim is: 14JK15AA41HCNEDEMH.