Centers for Medicare & Medicaid Services
Patient-Driven Groupings Model
Overview of the Patient-Driven Groupings Model

The Patient-Driven Groupings Model (PDGM) uses 30-day periods as a basis for payment. Figure 1 below provides an overview of how 30-day periods are categorized into 432 case-mix groups for the purposes of adjusting payment in the PDGM. In particular, 30-day periods are placed into different subgroups for each of the following broad categories:

- **Admission source (two subgroups):** community or institutional admission source
- **Timing of the 30-day period (two subgroups):** early or late
- **Clinical grouping (twelve subgroups):** musculoskeletal rehabilitation; neuro/stroke rehabilitation; wounds; medication management, teaching, and assessment (MMTA) - surgical aftercare; MMTA - cardiac and circulatory; MMTA - endocrine; MMTA - gastrointestinal tract and genitourinary system; MMTA - infectious disease, neoplasms, and blood-forming diseases; MMTA - respiratory; MMTA - other; behavioral health; or complex nursing interventions
- **Functional impairment level (three subgroups):** low, medium, or high
- **Comorbidity adjustment (three subgroups):** none, low, or high based on secondary diagnoses.

In total, there are $2^2 	imes 12 	imes 3^2 = 432$ possible case-mix adjusted payment groups. The remainder of this overview provides more detail on each PDGM grouping category and additional adjustments to payment that are made within the PDGM.

**FIGURE 1: STRUCTURE OF THE PATIENT-DRIVEN GROUPINGS MODEL**

Under the Patient-Driven Groupings Model, a 30-day period is grouped into one (and only one) subcategory under each larger colored category. A 30-day period’s combination of subcategories places the 30-day period into one of 432 different payment groups.

1. Gastrointestinal tract/Genitourinary system
2. The infectious disease category also includes diagnoses related to neoplasms and blood-forming diseases
Timing

Under the PDGM, the first 30-day period is classified as early. All subsequent 30-day periods in the sequence (second or later) are classified as late. A sequence of 30-day periods continues until there is a gap of at least 60-days between the end of one 30-day period and the start of the next. When there is a gap of at least 60-days, the subsequent 30-day period is classified as being the first 30-day period of a new sequence (and therefore, is labeled as early). The comprehensive assessment must be completed within five days of the start of care date and updated no less frequently than during the last five days of every 60 days beginning with the start of care date (as currently required by the Medicare Conditions of Participation at 42 CFR 484.55). As a result, information obtained from the Outcome and Assessment Information Set (OASIS) used in the PDGM may not change over the two 30-day periods the OASIS covers. However, if a patient experiences a significant change in condition before the start of a subsequent, contiguous 30-day period, for example due to a fall; a follow-up assessment would be submitted at the start of a second 30-day period to reflect any changes in the patient’s condition, including functional abilities, and the second 30-day claim would be grouped into its appropriate case-mix group accordingly.

Admission Source

Under the PDGM, each 30-day period is classified into one of two admission source categories – community or institutional – depending on what healthcare setting was utilized in the 14 days prior to home health admission. Late 30-day periods are always classified as a community admission unless there was an acute hospitalization in the 14 days prior to the late home health 30-day period. A post-acute stay in the 14 days prior to a late home health 30-day period would not be classified as an institutional admission unless the patient had been discharged from home health prior to post-acute stay.

Clinical Grouping

Under the PDGM, each 30-day period is grouped into one of twelve clinical groups based on the patient’s principal diagnosis. The reported principal diagnosis provides information to describe the primary reason for which patients are receiving home health services under the Medicare home health benefit.

Table 1 below describes the twelve clinical groups. These groups are designed to capture the most common types of care that home health agencies (HHAs) provide.

<table>
<thead>
<tr>
<th>CLINICAL GROUP</th>
<th>PRIMARY REASON FOR HOME HEALTH ENCOUNTER IS TO PROVIDE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Musculoskeletal Rehabilitation</td>
<td>Therapy (PT/OT/SLP) for a musculoskeletal condition</td>
</tr>
<tr>
<td>Neuro/Stroke Rehabilitation</td>
<td>Therapy (PT/OT/SLP) for a neurological condition or stroke</td>
</tr>
<tr>
<td>Wounds - Post-Op Wound Aftercare and Skin/Non-Surgical Wound Care</td>
<td>Assessment, treatment and evaluation of a surgical wound(s); assessment, treatment and evaluation of non-surgical wounds, ulcers burns and other lesions</td>
</tr>
<tr>
<td>Complex Nursing Interventions</td>
<td>Assessment, treatment and evaluation of complex medical and surgical conditions</td>
</tr>
<tr>
<td>Behavioral Health Care</td>
<td>Assessment, treatment and evaluation of psychiatric and substance abuse conditions</td>
</tr>
<tr>
<td>Medication Management, Teaching and Assessment (MMTA)</td>
<td>Assessment, evaluation, teaching, and medication management for a variety of medical and surgical conditions not classified in one of the above listed groups. The subgroups represent common clinical conditions that require home health services for medication management, teaching, and assessment.</td>
</tr>
</tbody>
</table>
Functional Impairment Level

The PDGM designates a functional impairment level for each 30-day period based on the following OASIS items:

<table>
<thead>
<tr>
<th>VARIABLE #</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>M1800</td>
<td>Grooming</td>
</tr>
<tr>
<td>M1810</td>
<td>Current ability to dress upper body safely</td>
</tr>
<tr>
<td>M1820</td>
<td>Current ability to dress lower body safely</td>
</tr>
<tr>
<td>M1830</td>
<td>Bathing</td>
</tr>
<tr>
<td>M1840</td>
<td>Toilet transferring</td>
</tr>
<tr>
<td>M1850</td>
<td>Transferring</td>
</tr>
<tr>
<td>M1860</td>
<td>Ambulation and locomotion</td>
</tr>
<tr>
<td>M1033</td>
<td>Risk for hospitalization</td>
</tr>
</tbody>
</table>

CMS estimates a regression model that determines the relationship between the responses for the listed OASIS items and average 30-day period resource use. The coefficients from the regression are used to assign points to a 30-day period. Responses that indicate higher functional impairment and a higher risk of hospitalization are associated with having larger coefficients and are therefore assigned higher points. The points are then summed, and thresholds are applied to determine whether a 30-day period is assigned a low, medium, or high functional impairment level. Each clinical group is assigned a separate set of thresholds. On average, 30-day periods in the low level have responses for the listed OASIS items that are associated with the lowest resource use. On average, 30-day periods in the high level have responses on the above OASIS items that are associated with the highest resource use.

Comorbidity Adjustment

The PDGM includes a comorbidity adjustment category based on the presence of secondary diagnoses. Depending on a patient’s secondary diagnoses, a 30-day period may receive no comorbidity adjustment, a low comorbidity adjustment, or a high comorbidity adjustment. Home health 30-day periods of care can receive a comorbidity adjustment under the following circumstances:

- **Low comorbidity adjustment:** There is a reported secondary diagnosis that is associated with higher resource use, or;
- **High comorbidity adjustment:** There are two or more secondary diagnoses that are associated with higher resource use when both are reported together compared to if they were reported separately. That is, the two diagnoses may interact with one another, resulting in higher resource use.

A 30-day period can have a low comorbidity adjustment or a high comorbidity adjustment, but not both. If a 30-day home health period of care does not have reported comorbidities that fall into one of the adjustments described above, there would be no comorbidity adjustment applied.
Determining Case-Mix Weights for the Patient-Driven Groupings Model

The case-mix weight for each of the 432 different payment groups under the PDGM are determined by estimating a regression where the dependent variable is the resource use of a 30-day period and the independent variables are categorical indicators representing the five dimensions of the model described above (timing of a 30-day period, admission source, clinical group, functional impairment level, and comorbidities). Case-mix weights are produced by dividing the predicted resource use for each PDGM payment group by the overall average resource use of all 30-day periods. The case-mix weights are then used to adjust the 30-day payment rate. Figure 2 (Page 5) describes how 30-day periods are paid and when payment adjustments are made.

Additional Payment Adjustments for the Patient-Driven Groupings Model

Payments for 30-day periods with a low number of visits are not case-mix adjusted, but instead paid on a per-visit basis using the national per-visit rates. Each of the 432 different PDGM payment groups has a threshold that determines if the 30-day period receives this Low-Utilization Payment Adjustment (LUPA). For each payment group, the 10th percentile value of visits is used to create a payment group specific LUPA threshold with a minimum threshold of at least two for each group. A 30-day period with a total number of visits below the LUPA threshold are paid per-visit rather than being paid the case-mix adjusted 30-day payment rate. A 30-day period with a total number of visits at or above the LUPA threshold is paid the case-mix adjusted 30-day payment rate rather than being paid per-visit.

When a 30-day period of care involves an unusually large number or a costly mix of visits, the HHA may be eligible for an additional outlier payment (See Figure 3). Once the imputed cost of a 30-day period of care exceeds a threshold amount, the HHA receives a payment equal to 80 percent of the difference between the imputed costs and the threshold amount.

Payments would be adjusted if a beneficiary transfers from one home health agency to another or is discharged and readmitted to the same agency within 30 days of the original 30-day period start date. The case-mix adjusted payment for 30-day periods of that type is pro-rated based on the length of the 30-day period ending in transfer or discharge and readmission, resulting in a partial period payment.
The 30-day period is grouped into one of 432 home health resource groups (HHRGs) based on admission source and timing, clinical grouping, functional impairment level, and comorbidity adjustment.

The 30-day base payment rate is multiplied by the HHRG's case-mix weight to adjust for case mix.

Case-mix adjusted payment is further adjusted for area wage differences by multiplying labor portion of the payment by the wage index value** for the patient's location.

Discharged and readmitted or transferred agencies within 30-day period?

High cost 30-day period?

Partial payment adjustment

Outlier payment***

Final payment for 30-day period

* LUPA = Low Utilization Payment Adjustment

** The wage-adjusted payment for a 30-day period is calculated by taking the case-mix adjusted 30-day payment amount and multiplying 76.1% of that payment by a wage-index value that controls for area wage differences. That value is then added to 23.9% of the case-mix adjusted base-payment to determine the wage-adjusted payment amount.

*** Outlier payment is in addition to the wage-adjusted and case-mix adjusted 30-day period payment.
FIGURE 3: CALCULATION OF OUTLIER PAYMENT

1. Calculate if Period Receives an Outlier Payment
   - Compute (1) Case-Mix and Wage-Adjusted Period Payment
     - Wage-adjusted national, standardized 30-day period payment rate multiplied by the case-mix weight
   - Compute (2) Wage-Adjusted Fixed Dollar Loss Amount
     - Fixed dollar loss amount is equal to the fixed dollar loss ratio multiplied by the national, standardized 30-day period payment rate
   - Compute (3) Outlier Threshold
     - Outlier threshold equals (2) wage-adjusted fixed dollar loss amount plus (1) case-mix and wage-adjusted period payment
   - Compute (4) Wage-Adjusted Costs per 30-day Period
     - A wage-adjusted per-unit amount for each discipline is used to calculate the cost of care (capped at 8 hours per day) provided during a 30-day period

2. Are the (4) Wage-Adjusted Costs per 30-day Period Greater than the (3) Outlier Threshold
   - Yes
     - Final Payment Equals (1) Case-Mix and Wage-Adjusted Period Payment
   - No
     - Final Payment Equals (1) Case-Mix and Wage-Adjusted Period Payment plus 80%* of the Difference Between the (4) Wage-Adjusted Per Visit Rate and the (3) Outlier Threshold

*80% is referred to as the loss sharing ratio