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## MEMORANDUM

**TO:** RHCF Members

**FROM:** Darius Kirstein, Director of Financial Policy & Analysis

**DATE:** June 13, 2018

**SUBJECT:** Summary of Patient Driven Payment Model Proposal

**ROUTE TO:** CEO, Administrator, CFO, Therapy Director, DON

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### Introduction

On April 27<sup>th</sup>, the Centers for Medicare and Medicaid Services (CMS) released the Skilled Nursing Facility (SNF) Prospective Payment System (PPS) proposed rule for Federal Fiscal Year (FFY) 2019, which begins Oct. 1, 2018. The rule outlines proposed FFY 2019 Medicare payment updates and quality program changes and, most notably, proposes a new Medicare Part A reimbursement methodology to be implemented in October 2019. The proposed rule is being presented to solicit stakeholder comments which are being accepted until June 26<sup>th</sup>. We expect the proposal to be finalized and published as part of the final SNF PPS rule in August.

As proposed, the rule would:

- increase Medicare Part A rates by 2.4 percent as required by the Bipartisan Budget Act of 2018, effective Oct. 2018;
- publicly display SNF-Quality Reporting Program (QRP) assessment-based quality measures and make changes to how CMS evaluates QRP measures for addition or retention in the program;
- set baseline and performance periods for the 2021 SNF Value-Based Payment (VBP) program year, adjust the VBP scoring methodology, and add an exceptions policy for extraordinary circumstances; and
- replace the RUG-IV case mix classification system used to determine SNF Part A rates with the Patient-Driven Payment Model (PDPM), effective October 2019.

An overview of the proposed Medicare Part A rates, VBP and QRP provisions, as well as a preliminary review of the PDPM proposal that LeadingAge NY issued previously is available [here](#). This memo

provides a more comprehensive overview of the PDPM methodology, and encourages members to contact us with any questions or feedback on the proposal.

## **Background**

The proposed rule would implement a new case-mix classification system as the basis for SNF Medicare Part A payments effective Oct. 1, 2019, replacing the current RUG-IV methodology. The new system, named the Patient-Driven Payment Model, would base payment not on the amount of services provided but on objective resident characteristics that are predictive of service needs. Although the PDPM model incorporates significant revisions, it is structurally similar to the Resident Classification System, Version I (RCS-I) model that CMS circulated for comment in last year's Advanced Notice of Proposed Rulemaking and reflects the same policy objectives.

The proposal stems from a longstanding concern within CMS that the RUG methodology over-incentivizes therapy and under-reimburses for nursing and other medical services. To address this, CMS contracted with Acumen, LLC to manage a multiyear SNF Payment Models Research (PMR) Project to explore alternative payment methodologies. Much of the work of the project involved identifying patient characteristics that drive costs, dividing these into major categories, and finding appropriate gradations to align reimbursement to cost. The model was then calibrated for budget neutrality.

As a result of this work, CMS and Acumen initially developed an alternative to the RUG-IV classification system, which they named the RCS-1. In the spring of 2017, CMS published an Advanced Notice of Proposed Rulemaking that outlined the methodology and requested stakeholder feedback. Over the past six months, CMS used that feedback to refine the RCS-1 methodology, reducing the number of possible payment categories, revising how a resident's functional score would be calculated, separating PT and OT into separate components, and making other changes. CMS has renamed this revised methodology the PDPM, but it retains a similar overall structure and maintains the same philosophical underpinnings as RCS-1. CMS has posted the technical reports that describe the analyses used to inform the development of the new system on the SNF PPS PMR page [here](#).

In this proposed rule, CMS outlines the PDPM methodology and requests that stakeholders provide additional feedback. In some cases, the agency indicates their intended approach but also includes alternatives that are still under consideration. Consequently, while the overall direction of the new system and the major payment drivers are clear, the methodology outlined in the rule is not final, and some features may change by the time the final rule is published in the summer.

## **PDPM Overview**

Structurally, the PDPM would:

- Separate the amount of therapy from payment by no longer relying on minutes of therapy provided to a resident to classify that resident into a payment category;
- Impose a combined 25 percent limit on group and concurrent therapy, by discipline, to ensure that at least 75 percent of therapy is provided on an individual basis;
- Establish five individual rate components, each with its own discrete case-mix adjustment, and classify each resident into the appropriate category for each of the components (Physical Therapy (PT), Occupational Therapy (OT), Speech/Language Pathology (SLP), nursing, and non-therapy ancillaries (NTA)) based primarily on that resident's clinical and functional characteristics;
- Incorporate a variable, per-diem payment adjustment for the PT, OT, and NTA components, which would result in a decreasing daily payment as a resident's stay progresses; and
- Reduce required PPS assessments to the 5-Day Scheduled PPS Assessment, PPS Discharge Assessment with some additional items, and a new Interim Payment Assessment (IPA) that could be

used to change the resident classifications assigned by the 5-Day PPS Assessment when certain criteria are met.

Specifically, instead of a resident being assessed into a RUG-IV category that determines the per-day payment under the current methodology, payment under the PDPM model would be the sum of five separate, case-mix adjusted components plus a non-case-mix component. For each component CMS would establish a base rate. Each base rate would be adjusted by the component-specific case-mix derived from resident characteristics deemed relevant to that component.

**Figure 1: PDPM Rate Components**

PT	OT	SLP	Nursing	NTA	Non-Case Mix
<ul style="list-style-type: none"> <li>- Primary reason for SNF care</li> <li>- Functional status</li> </ul>	<ul style="list-style-type: none"> <li>- Primary reason for SNF care</li> <li>- Functional status</li> </ul>	<ul style="list-style-type: none"> <li>- Primary reason for SNF care</li> <li>- Cognitive status</li> <li>- Presence of swallowing disorder or mechanically altered diet</li> <li>- Other SLP-related comorbidities</li> </ul>	<ul style="list-style-type: none"> <li>- Clinical information from SNF stay</li> <li>- Functional status</li> <li>- Extensive services received</li> <li>- Presence of depression</li> <li>- Restorative nursing services received</li> </ul>	<ul style="list-style-type: none"> <li>- Co-morbidities present</li> <li>- Extensive services received</li> </ul>	<ul style="list-style-type: none"> <li>- Room and board</li> <li>- Capital-related costs</li> <li>- Admin costs</li> </ul>
- Point in the stay (variable per diem adjustment)	- Point in the stay (variable per diem adjustment)			- Point in the stay (variable per diem adjustment)	

The five components, also shown in Figure 1 above with their associated payment drivers, are:

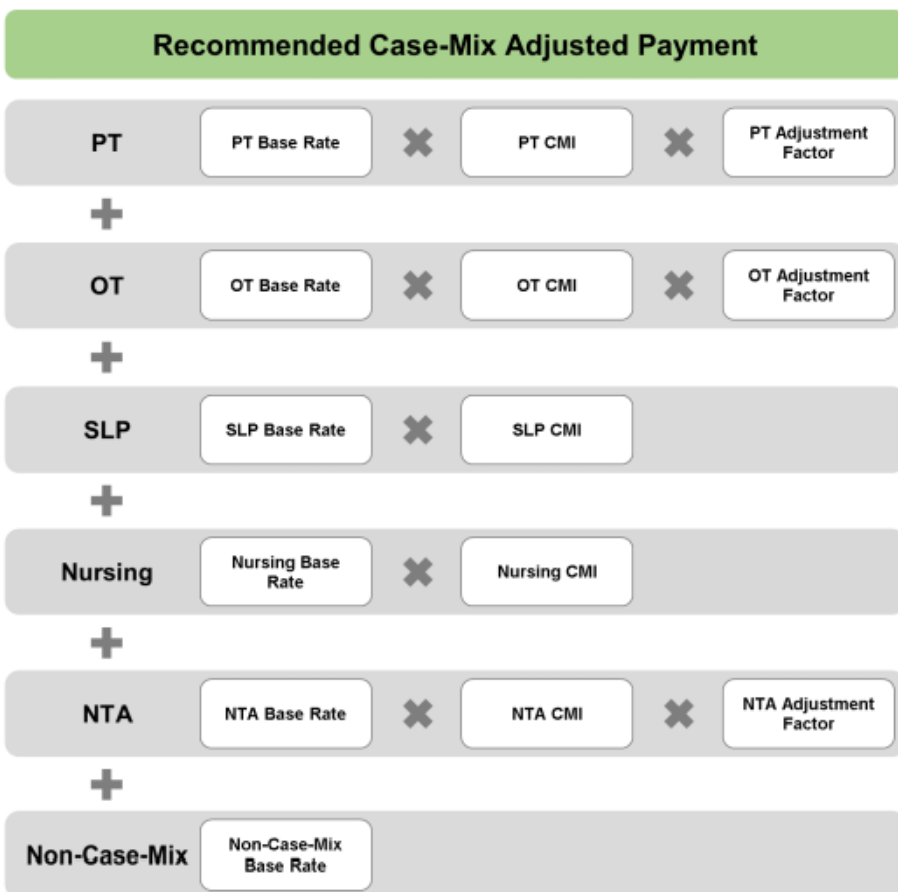
- A PT base rate adjusted by one of 16 PT case-mix weights (based on clinical category and functional score) to yield a PT component;
- An OT base rate adjusted by one of 16 OT case mix weights (based on the same 16 categories and resident characteristics as PT but with an OT specific case-mix) to yield an OT component;
- A Speech/Language Pathology (SLP) base rate adjusted by one of 12 SLP case-mix weights (based on the presence of an acute neurological condition, and/or a SLP-related comorbidity and/or cognitive impairment as well as whether the resident requires a mechanically altered diet and/or has a swallowing disorder) to yield an SLP component;
- A Nursing base rate adjusted by one of 25 nursing case-mix weights (i.e., the current 43 non-rehab RUGs consolidated into 25 categories) to yield a nursing component;
- A Non-Therapy Ancillary (NTA) base rate adjusted by one of six NTA case-mix weights (based on the presence of specific conditions and need for extensive services) to yield an NTA component; and
- A non-case-mix component meant to reimburse for room and board, administrative and capital costs, that would remain as it currently is in the new methodology.

The rate would be the sum of these six components subject to two additional adjustments. The PDPM model would incorporate an adjustment to the PT, OT and NTA components to reflect CMS findings that costs for these three components are higher at the beginning of a Part A stay and decrease as the stay progresses. This is discussed in greater detail further in the memo.

Additionally, the resulting rate would be wage-adjusted using the same hospital wage index and the same wage adjustment methodology as is currently used. The existing market basket methodology currently used to update base rates for inflation, including the forecast error and multifactor productivity adjustments, would also be maintained.

Figure 2 provides a visual representation of the proposed PDPM methodology.

**Figure 2: PDPM Rate Schematic**



## Payment Models Research Discussions and Materials

The proposal to replace RUG-IV as the case mix adjustment model has its origin in the PMR project CMS embarked on in 2013. That year CMS contracted with Acumen, LLC, a firm specializing in policy research and analytics, to manage the Skilled Nursing Facility PMR (SNF PMR) Project. The SNF PMR was comprised of several phases. The first phase reviewed past research studies and policy issues related to SNF PPS therapy payment and examined options for improving or replacing the current system of paying for SNF therapy services.

The second phase expanded the scope of the project beyond therapy to include other aspects of SNF PPS. This phase included four meetings of Technical Expert Panels (TEPs) comprised of industry experts,

stakeholders, clinicians as well as the Acumen and CMS research team. It was during this phase that the outlines of a new methodology were developed and preliminary impacts were modeled.

In the third phase, Acumen developed supporting language and documentation as well as a technical report on the initial (RCS-1) alternative methodology. The final phase of the project which began in October 2017, has been focused on refining and updating the model using newer data and taking into account stakeholder feedback received in response to the Advance Notice of Proposed Rulemaking that unveiled the RCS-1 methodology. The result is the PDPM methodology that CMS seeks to finalize in this year's SNF PPS Rule and implement in Oct. 2019. Acumen also developed various tools, including a model grouper, to allow a better understanding of how RUG-IV based payments would correspond with PDPM payments.

The 2014 report on alternative model research as well as presentations and discussion summaries from each of the four TEP discussions are available on the CMS SNF PPS PMR page [here](#). The page also has links to download various other PDPM resources including a [classification walkthrough](#), a [grouper tool](#) and the [provider specific impact estimates](#) (discussed below). The Technical Report released in April of 2018 that focuses on the PDPM model and describes the underlying data analyses is [here](#).

Notably, CMS is interested in implementing a model within the current statutory requirements, meaning that the requisite changes could be made administratively without requiring a change in federal law. This includes maintaining budget neutrality when moving from one methodology to the other. Tables and information in this memo are as published in the 2019 Proposed PPS Rule as well as in the supporting Technical Report.

## **The PDPM Model**

Under the RUG-IV case-mix model, a resident is first categorized as either a rehabilitation resident or a non-rehabilitation resident, and then categorized further based on additional aspects of the resident's care. Under the PDPM case-mix model, the primary focus is on categorizing the resident based on the clinical reasons for the resident's SNF stay.

The PDPM was developed to be a model where payments derive almost exclusively from resident characteristics. More specifically, the model separately identifies and adjusts five separate case-mix components to best fit a resident's characteristics and predicted care needs, and then combines these together with the non-case-mix component to form the full SNF PPS per diem rate for that resident. Key in the development of the model were the results of a number of regression analyses that allowed researchers to associate variations in costs to specific resident characteristics, and combinations of characteristics, that were consistent and predictive of staff time and the associated costs. Statistical modeling also allowed researchers to assign appropriate case-mix weight for each grouping. Each of the five case-mix adjusted components relies on a set of different characteristics to assign the resident to a component-specific case-mix group (with the exception of OT and PT which rely on the same characteristics but assign different weights to them).

Figure 3 below shows the 2017 FY Urban and Rural base rates, by component, for RUG-IV and PDPM showing how the base rates associated with RUG-IV components were divided among the PDPM components. The tables present RUG-IV base rates used in 2017 and estimated base rates for PDPM for the same time period since this was the basis of the impact estimate calculations Acumen prepared. Note that the 2019 FY estimated base rates are approximately 3.5 percent higher. Each PDPM component is discussed individually below.

**Figure 3: Existing and Proposed Base Rates**

**RUG-IV FY 2017 Base Rates**

Rate Type	Nursing Case-Mix	Therapy Case-Mix	Therapy Non-Case Mix	Non-Case Mix
Urban	\$ 175.25	\$ 132.03	\$ 17.39	\$ 89.46
Rural	\$ 167.45	\$ 152.24	\$ 18.58	\$ 91.11

**Estimated PDPM FY 2017 Base Rates for Comparison**

Rate Type	Nursing Case-Mix	NTA Case-Mix	PT Case-Mix	OT Case Mix	SLP Case Mix	Non-Case-Mix
Urban	\$ 99.91	\$ 75.37	\$ 57.30	\$ 53.34	\$ 21.39	\$ 89.46
Rural	\$ 95.45	\$ 72.00	\$ 65.31	\$ 59.98	\$ 26.95	\$ 91.11

***Components 1 and 2: Physical & Occupational Therapy (PT/OT)***

While research indicated that resident characteristics that predicted Speech and Language Pathology (SLP) costs differed significantly from those predictive of PT and OT costs, there was a strong correlation between the cost predictors for PT and OT. Because of this, CMS is proposing to maintain the same case-mix classification model for both components in the PDPM model. In practice, this means that the same resident characteristics will determine into which of the 16 PT/OT categories a resident is classified. However, each of the 16 categories has a separate PT and OT weight that is applied to separate PT and OT base rates. CMS believes that providing separate case-mix-adjusted payments for PT and OT may allay concerns about inappropriate substitution across disciplines and encourage provision of these services according to clinical need. Note that in the RCS-1 proposal, PT and OT had been combined into a single component.

To separate the RUG-IV therapy base rate into three components (i.e., separate OT, PT and SLP components), researchers used 1995 cost reports to calculate estimated proportions of per-day therapy costs that PT, OT and SLP represented. For urban areas, they calculated the proportion of PT to be 43.4 percent, OT to be 40.4 percent and SLP to be 16.2 percent of the combined therapy base rate. For rural areas the percentages were 42.9 percent, 39.4 percent and 17.7 percent, respectively.

Once they had calculated the base rates for the components, researchers analyzed predictors of PT and OT costs. They determined that the three most relevant predictors of these costs were the clinical reasons for the SNF stay, the resident's functional status, and the presence of a cognitive impairment.

Researchers found ten clinical categories to be most predictive of resource utilization in SNFs and encompassed the bulk of SNF residents. They collapsed these into four clinical categories which were predictive of PT/OT costs and used them as a first step in assigning a resident into a PT/OT case mix group. The four clinical categories (with their component sub-categories shown in parentheses) are:

1. Major Joint Replacement or Spinal Surgery
2. Other Orthopedic (includes non-Surgical Orthopedic/Musculoskeletal and Orthopedic Surgery other than #1 above)
3. Non-Orthopedic Surgery and Acute Neurologic
4. Medical Management (includes Acute Infections, Cancer, Pulmonary, Cardiovascular & Coagulations)

CMS proposes to categorize a resident into a clinical category using item I8000 of the MDS which reports the ICD-10-CM code representing the primary reason for the resident's SNF stay. Additionally, residents

who received a surgical procedure during their hospital stay would have an ICD-10-PCS code entered into the second line of item I8000 to ensure the appropriate clinical category. A file mapping ICD-10 Codes to the PDPM clinical categories can be downloaded [here](#).

Please note that while CMS is proposing to use the above clinical categorization method, they are also considering an alternative approach that would use a resident's primary diagnosis shown on item I0020 as the basis for assigning a clinical category. This would require SNFs to select a primary diagnosis from a pre-populated list of most common SNF diagnoses, as opposed to relying on entered ICD-10 codes. CMS is seeking feedback on the proposed and alternative modes of clinical classification.

Because analysis indicated that a resident's functional status was predictive of PT and OT costs, researchers incorporated an Activity of Daily Living (ADL) score as the second characteristic used to assign a resident into a PT/OT case-mix group. While RUG-IV uses late loss ADLs coded in section G of the MDS, the PDPM would rely on section GG items that were found to be predictive of PT and OT costs: four late loss ADLs (bed mobility, transfer, eating, toileting) and two early loss ADLs (oral hygiene and walking). Those conversant with RCS-1 will note that this approach to ADL scoring is a significant change from the prior proposal, as is the CMS proposal to remove a separate measure of cognitive function as a predictor of PT and OT costs.

Figure 4 shows the values associated with responses on ADL items on the MDS while Figure 5 shows which ADL items on section G of the MDS would be included in the calculation of the score. Note that residents with higher level of independence will have higher ADL scores resulting in higher PT/OT reimbursement components. To avoid overlap and the potential for double-counting of the mobility items, CMS proposes to average the responses for those items as indicated in the table below. The sum of the scores from Figure 4 will yield a score between 0 and 24 points for the resident. The ADL ranges that separate payment categories are scores totaling 0-5, 6-9, 10-23 and 24.

**Figure 4: PT/OT ADL Values**

	Response	ADL Score
05, 06	Set-up assistance, Independent	4
4	Supervision or touching assistance	3
3	Partial/moderate assistance	2
2	Substantial/maximal assistance	1
01, 07, 09, 88	Dependent, Refused, N/A, Not Attempted	0

Once a resident is categorized into an appropriate clinical category and assigned an ADL-based functional score, the characteristics are combined to categorize them into one of the 16 PT/OT case-mix groups. The PT/OT case-mix groups along with their discrete PT and OT case mix weights and resident characteristics used in assigning a resident to one of the groups is shown in Figure 6. The PT base rate is multiplied by the PT case-mix index associated with the case-mix group into which the resident is assigned. The same is done with OT. The two case-mix adjusted base rates are summed to yield the PT/OT portion of the rate.



**Figure 5: ADLs Included in PT/OT Scoring**

Section GG Item		ADL Score
GG0130A1	Self-care: Eating	0-4
GG0130B1	Self-care: Oral Hygiene	0-4
GG0130C1	Self-care: Toileting Hygiene	0-4
GG0170B1	Mobility: Sit to lying	0-4 (average of 2 items).
GG0170C1	Mobility: Lying to sitting on side of bed	
GG0170D1	Mobility: Sit to stand	0-4 (average of 3 items).
GG0170E1	Mobility: Chair/bed-to-chair transfer	
GG0170F1	Mobility: Toilet transfer	
GG0170J1	Mobility: Walk 50 feet with 2 turns	0-4 (average of 2 items).
GG0170K1	Mobility: Walk 150 feet	

**Figure 6: PT/OT Case-Mix Groups**

Clinical category	Section GG function score	PT OT case-mix group	PT case-mix index	OT case-mix index
Major Joint Replacement or Spinal Surgery	0-5	TA	1.53	1.49
	6-9	TB	1.69	1.63
	10-23	TC	1.88	1.68
	24	TD	1.92	1.53
Other Orthopedic	0-5	TE	1.42	1.41
	6-9	TF	1.61	1.59
	10-23	TG	1.67	1.64
	24	TH	1.16	1.15
Medical Management	0-5	TI	1.13	1.17
	6-9	TJ	1.42	1.44
	10-23	TK	1.52	1.54
	24	TL	1.09	1.11
Non-Orthopedic Surgery and Acute Neurologic	0-5	TM	1.27	1.3
	6-9	TN	1.48	1.49
	10-23	TO	1.55	1.55
	24	TP	1.08	1.09

**Rate Calculation Example:** a resident in an urban area who is classified into the major joint replacement category and requires partial assistance in all measured ADLs which results in an ADL score of 12, would be assessed into the “TC” PT/OT case-mix group. This group has a PT case-mix index of 1.88 and an OT index of 1.68. The PT base of \$57.30 (urban) is multiplied by 1.88 to yield \$107.72 and is added to the OT component of \$89.61 (base rate of \$53.34 multiplied by 1.68) for a total PT/OT component of \$197.33.



### **Component 3: Speech/Language Pathology (SLP)**

The characteristics found to be most relevant in predicting relative differences in SLP costs were clinical reasons for the SNF stay; presence of a swallowing disorder or the need for a mechanically altered diet; and the presence of an SLP-related comorbidity or cognitive impairment.

The clinical category found to correlate to SLP costs was “acute neurologic”, so the first step in assigning a SLP case mix group is to determine whether the resident has an acute neurologic condition or not. The second step is determining whether the resident has a SLP-related comorbidity found to be relevant in predicting resident SLP costs. The 12 SLP-related comorbidities are shown in Figure 7 below. The third step is determining if a resident had a mild to severe cognitive impairment (defined as a BIMS score of 12 or lower and/or a CPS score above 0). Determining if none, one, two or all three of these conditions apply (acute neurological condition, cognitive impairment and/or a SLP-related comorbidity) is the first determinant in assigning a SLP case-mix group.

**Figure 7: SLP-Related Comorbidities**

Aphasia	Laryngeal cancer
CVA, TIA, or Stroke	Apraxia
Hemiplegia or Hemiparesis	Dysphagia
Traumatic Brain Injury	ALS
Tracheostomy Care (While a Resident)	Oral Cancers
Ventilator or Respirator (While a Resident)	Speech and Language Deficits

**Figure 8: SLP Case-Mix Groups**

Presence of acute neurologic condition, SLP-related comorbidity, or cognitive impairment	Mechanically altered diet or swallowing disorder	SLP case-mix group	SLP case-mix index
None	Neither	SA	0.68
None	Either	SB	1.82
None	Both	SC	2.66
Any one	Neither	SD	1.46
Any one	Either	SE	2.33
Any one	Both	SF	2.97
Any two	Neither	SG	2.04
Any two	Either	SH	2.85
Any two	Both	SI	3.51
All three	Neither	SJ	2.98
All three	Either	SK	3.69
All three	Both	SL	4.19

The other drivers of SLP costs, and therefore characteristics selected to determine a resident's SLP case-mix group, was presence of a swallowing disorder and/or the need for a mechanically altered diet. Determining whether neither, either or both are present would be the final step in selecting which of the 12 SLP case-mix categories is appropriate for the resident. Figure 8 lists the SLP-related case-mix index groups.

**Rate Calculation Example:** *A resident assessed with a non-neurologic condition who has a mild cognitive impairment and an SLP-related co-morbidity (i.e., meets the condition of “any two” in the first column), who does not have a swallowing disorder nor requires a mechanically altered diet (i.e., meets the condition of “neither” in column 2) would be assessed into the “SG” SLP case-mix group. This group has a case mix index of 2.04. The SLP base rate of \$21.39 (2017 base estimate for urban areas) is multiplied by 2.04 to yield \$43.64 which is the SLP component of the rate.*

### Component 3: Nursing

The PDPM methodology would separate the nursing component used in the RUG-IV methodology into a nursing component and a non-therapy ancillary (NTA) component, each of which would be subject to separate case-mix adjustment. The original 1998 base rate calculations indicated the percentages attributable to nursing and NTA making it possible for CMS to separate the current nursing component into two parts. For urban areas, nursing (which also includes social services) represents 56.6 percent of the current nursing component base costs. The proportion is 57.3 percent for rural areas. The remainder is attributed to the NTA component.

The proposed model would consolidate the 43 non-rehabilitation categories in the current RUG-IV methodology into 25 PDPM nursing categories by decreasing distinctions based on function and would base the nursing component ADL scoring on selected items reported in section GG of the MDS. Case-mix weights would be revised with updated wage data and weight development would include the entire STRIVE population, including those residents that were classified into rehabilitation categories (whose data was not used when the current RUG-IV nursing case mix weights were developed). Adjustments would be made to correct for STRIVE oversampling and an 18 percent increase in the nursing component would be provided for residents with HIV/AIDS.

**Figure 9: Nursing ADL Values**

MDS Code	MDS Response	ADL Score
05, 06	Set-up assistance, Independent	4
4	Supervision or touching assistance	3
3	Partial/moderate assistance	2
2	Substantial/maximal assistance	1
01, 07, 09, 88	Dependent, Refused, N/A, Not Attempted	0

While similar to the ADL scoring in the PT/OT components, the nursing component uses fewer ADL items. Figure 9 shows the values associated with each ADL response while Figure 10 shows the items that would be used in the nursing component. Note that as with the PT and OT components, residents with higher level of independence will have higher ADL scores. To avoid overlap and the potential for double-counting of the mobility items, CMS proposes to average the responses for those items as indicated in Figure 9. The sum of the ADL scores from Figure 9 will yield a score between 0 and 16 points for the resident. The ADL ranges that mark distinct payment categories for nursing are 0-5, 6-14, 15-16 (and 11-16 for behavioral categories).

**Figure 10: ADLs Included in Nursing Scoring**

Section GG Item		ADL Score
GG0130A1	Self-care: Eating	0-4
GG0130C1	Self-care: Toileting Hygiene	0-4
GG0170B1	Mobility: Sit to lying	0-4 (average of 2 items).
GG0170C1	Mobility: Lying to sitting on side of bed	
GG0170D1	Mobility: Sit to stand	0-4 (average of 3 items).
GG0170E1	Mobility: Chair/bed-to-chair transfer	
GG0170F1	Mobility: Toilet transfer	

**Figure 11: Nursing Case-Mix Groups**

RUG-IV nursing RUG	Extensive services	Clinical conditions	Dpressn	Number of restorative nursing services	GG-based function score	PDPM nursing case-mix group	Nursing case-mix index
ES3	Trach & Vent				0-14	ES3	4.04
ES2	Trach or Vent				0-14	ES2	3.06
ES1	Infection				0-14	ES1	2.91
HE2/HD2		Serious medical conditions e.g. comatose, septicemia, respiratory therapy	Yes		0-5	HDE2	2.39
HE1/HD1			No		0-5	HDE1	1.99
HC2/HB2			Yes		6-14	HBC2	2.23
HC1/HB1			No		6-14	HBC1	1.85
LE2/LD2		Serious medical conditions e.g. radiation therapy or dialysis	Yes		0-5	LDE2	2.07
LE1/LD1			No		0-5	LDE1	1.72
LC2/LB2			Yes		6-14	LBC2	1.71
LC1/LB1			No		6-14	LBC1	1.43
CE2/CD2		Conditions requiring complex medical care e.g. pneumonia, surgical wounds, burns	Yes		0-5	CDE2	1.86
CE1/CD1			No		0-5	CDE1	1.62
CC2/CB2			Yes		6-14	CBC2	1.54
CA2			Yes		15-16	CA2	1.08
CC1/CB1			No		6-14	CBC1	1.34
CA1			No		15-16	CA1	0.94
BB2/BA2		Behavioral or cognitive symptoms		2 or more	11-16	BAB2	1.04
BB1/BA1				0-1	11-16	BAB1	0.99
PE2/PD2		Assistance with daily living and general supervision		2 or more	0-5	PDE2	1.57
PE1/PD1				0-1	0-5	PDE1	1.47
PC2/PB2				2 or more	6-14	PBC2	1.21
PA2				2 or more	15-16	PA2	0.7
PC1/PB1				0-1	6-14	PBC1	1.13
PA1				0-1	15-16	PA1	0.66

Figure 11 shows how the current RUG-IV nursing categories crosswalk into the 25 categories of PDPM, indicate the resident characteristics associated with each category, and provide the case-mix index for each case-mix group.

**Rate Calculation Example:** A resident meeting the CC1 Clinically Complex nursing RUG group criteria based on current RUG assignment rules would be assessed into the CBC1 nursing case-mix group. The group has a case-mix index of 1.34. The nursing base of \$99.91 (for urban areas) is multiplied by 1.34 to yield \$133.88 which represents the nursing component of the rate.

#### **Component 4: Non-Therapy Ancillary (NTA)**

In the PDPM model, NTA costs such as drugs, laboratory services, respiratory therapy and medical supplies will no longer be included in the nursing component as they are in the current methodology, but will rather be split out as a separate component with a separate and distinct case mix adjustment based on resident characteristics. Data analysis indicated that certain comorbidity conditions and extensive services were highly predictive of differences in NTA costs. Several of those conditions and characteristics were discarded due to coding reliability concerns as well as CMS wariness about creating perverse incentives.

The 50 selected extensive services and conditions predictive of costs, listed in Figure 12, were each assigned a point value. The points corresponding to each condition present, or extensive service required, would be summed for a total point score. In this way the NTA component would adequately reflect relative differences in NTA costs of each condition or service, as well as the additive effect of multiple comorbidities.

**Figure 12: NTA-Related Conditions/Services and Scoring**

Condition/extensive service	Source	Points
HIV/AIDS	SNF Claim	8
Parenteral IV Feeding: Level High	MDS Item K0510A2, K0710A2	7
Special Treatments/Programs: Intravenous Medication Post-admit Code	MDS Item O0100H2	5
Special Treatments/Programs: Ventilator or Respirator Post-admit Code	MDS Item O0100F2	4
Parenteral IV feeding: Level Low	MDS Item K0510A2, K0710A2, K0710B2	3
Lung Transplant Status	MDS Item I8000	3
Special Treatments/Programs: Transfusion Post-admit Code	MDS Item O0100I2	2
Major Organ Transplant Status, Except Lung	MDS Item I8000	2
Active Diagnoses: Multiple Sclerosis Code	MDS Item I5200	2
Opportunistic Infections	MDS Item I8000	2
Active Diagnoses: Asthma COPD Chronic Lung Disease Code	MDS Item I6200	2
Bone/Joint/Muscle Infections/Necrosis—Except Aseptic Necrosis of Bone	MDS Item I8000	2
Chronic Myeloid Leukemia	MDS Item I8000	2
Wound Infection Code	MDS Item I2500	2
Active Diagnoses: Diabetes Mellitus (DM) Code	MDS Item I2900	2
Endocarditis	MDS Item I8000	1
Immune Disorders	MDS Item I8000	1
End-Stage Liver Disease	MDS Item I8000	1

Condition/extensive service	Source	Points
Other Foot Skin Problems: Diabetic Foot Ulcer Code	MDS Item M1040B	1
Narcolepsy and Cataplexy	MDS Item I8000	1
Cystic Fibrosis	MDS Item I8000	1
Special Treatments/Programs: Tracheostomy Care Post-admit Code	MDS Item O0100E2	1
Active Diagnoses: Multi-Drug Resistant Organism (MDRO) Code	MDS Item I1700	1
Special Treatments/Programs: Isolation Post-admit Code	MDS Item O0100M2	1
Specified Hereditary Metabolic/Immune Disorders	MDS Item I8000	1
Morbid Obesity	MDS Item I8000	1
Special Treatments/Programs: Radiation Post-admit Code	MDS Item O0100B2	1
Highest Stage of Unhealed Pressure Ulcer—Stage 4	MDS Item M0300X1	1
Psoriatic Arthropathy and Systemic Sclerosis	MDS Item I8000	1
Chronic Pancreatitis	MDS Item I8000	1
Proliferative Diabetic Retinopathy and Vitreous Hemorrhage	MDS Item I8000	1
Other Foot Skin Problems: Foot Infection Code, Other Open Lesion on Foot Code, Except Diabetic Foot Ulcer Code	MDS Item M1040A, M1040B, M1040C	1
Complications of Specified Implanted Device or Graft	MDS Item I8000	1
Bladder and Bowel Appliances: Intermittent Catheterization	MDS Item H0100D	1
Inflammatory Bowel Disease	MDS Item I8000	1
Aseptic Necrosis of Bone	MDS Item I8000	1
Special Treatments/Programs: Suctioning Post-admit Code	MDS Item O0100D2	1
Cardio-Respiratory Failure and Shock	MDS Item I8000	1
Myelodysplastic Syndromes and Myelofibrosis	MDS Item I8000	1
Systemic Lupus Erythematosus, Other Connective Tissue Disorders, and Inflammatory Spondylopathies	MDS Item I8000	1
Diabetic Retinopathy—Except Proliferative Diabetic Retinopathy and Vitreous Hemorrhage	MDS Item I8000	1
Nutritional Approaches While a Resident: Feeding Tube	MDS Item K0510B2	1
Severe Skin Burn or Condition	MDS Item I8000	1
Intractable Epilepsy	MDS Item I8000	1
Active Diagnoses: Malnutrition Code	MDS Item I5600	1
Disorders of Immunity—Except: RxCC97: Immune Disorders	MDS Item I8000	1
Cirrhosis of Liver	MDS Item I8000	1
Bladder and Bowel Appliances: Ostomy	MDS Item H0100C	1
Respiratory Arrest	MDS Item I8000	1
Pulmonary Fibrosis and Other Chronic Lung Disorders	MDS Item I8000	1

The model uses six NTA groupings, each representing a point score range and each with a distinct case-mix weight. Residents would be categorized into an NTA case-mix group based on their total NTA point score and their payment would include the NTA base rate adjusted by the category case-mix weight. The resulting NTA Case-Mix Classification Groups along with their case mix weights is shown in Figure 13.

**Figure 13: NTA Case-Mix Groups**

NTA score range	NTA case-mix group	NTA case-mix index
12+	NA	3.25
9-11	NB	2.53
6-8	NC	1.85
3-5	ND	1.34
1-2	NE	0.96
0	NF	0.72

**Rate Calculation Example:** A resident with diabetes with an opportunistic infection and cirrhosis would have a total point score of 5. This would place them in the “ND” NTA case-mix group. The group has a case-mix index of 1.34. The NTA base rate of \$75.37 (for urban areas) is multiplied by 1.34 to yield \$101.00 which represents the NTA component of the rate.

### **Variable Per-Diem Adjustment**

For each RUG category, the current RUG-IV methodology provides the same level of reimbursement for every day of a qualified Part A stay (assuming the resident’s RUG category remains unchanged). To address the concern that resource need may be greater at the beginning of the stay and decline as the stay progresses, CMS is proposing to incorporate adjustments for certain rate components that would result in higher rates at the beginning days of a stay and decline as the stay went forward.

Data analysis suggested that PT, OT and NTA costs are greatest at the beginning of a stay. Because the decline differs for PT/OT and NTA costs, CMS developed two separate decreasing adjustment schedules that could be applied to the PT/OT component and the NTA component to reflect this. Analysis suggests that SLP costs do not vary as a SNF stay progresses and there is insufficient data to gauge these differences for the nursing component, meaning that only the PT/OT and NTA components would be subject to this variable per-diem adjustment.

Analysis suggests that PT and OT costs remain relatively high for the first 20 days of a stay and then decline by approximately 0.3 percent per day. CMS proposes to adjust PT and OT component reimbursement so that after the initial 20 days, they would decline by two percent every seven days.

Research on NTA costs indicate that these costs are very high at the start of a SNF stay, drop quickly after the first three days, and then remain relatively stable throughout the remainder of the stay. To reflect this, CMS proposes to set the NTA component to 300 percent (i.e., three times the appropriate NTA component amount) for the first three days, then to 100 percent for the remainder of the stay. Figures 14 and 15 below show the adjustment schedules that CMS is considering for PT/OT and NTA.

CMS also deliberated on how to address interrupted stays for purposes of resetting the variable per-day adjustment back to day one. To avoid creating an incentive for discharge and readmission, CMS proposes that in cases where a resident is discharged but returns to the same SNF no later than 12 a.m. at the end of the third day, the resident would be assigned the same classification as prior to discharged, and the stay would be considered a continuation of the previous stay for variable per-diem adjustment purposes. If the readmission occurs later than the three-day window or if the resident is readmitted to a different SNF (no matter how long the interruption), the variable adjustments is reset to day one.

**Figure 14: PT/OT Variable Per-Diem Adjustment Factors**

Medicare payment days	Adjustment factor
1-20	1.00
21-27	0.98
28-34	0.96
35-41	0.94
42-48	0.92
49-55	0.90
56-62	0.88
63-69	0.86
70-76	0.84
77-83	0.82
84-90	0.80
91-97	0.78
98-100	0.76

**Figure 15: NTA Variable Per-Diem Adjustment Factors**

Medicare payment days	Adjustment factor
1-3	3
4-100	1

**Rate Calculation Example:** The table below provides an example of how the variable per-diem adjustment factors would be applied in calculating the rate for the first day vs. the 60<sup>th</sup> day of a resident's stay. Note that only the PT/OT and NTA components are subject to these adjustments and that while the PT/OT adjustment continues to decline during the entire stay, the NTA adjustment impacts only the first three days of the stay.

**Figure 16: Sample Daily Rate with Variable Adjustment Factors (using 2017 estimated base rates)**

Component	Case-Mix Adjusted Rate (before variable adjustment)	Day 1		Day 60	
		Day 1 Variable Adjustment	Day 1 Rate (with variable adjustment)	Day 60 Variable Adjustment	Day 60 Rate (with variable adjustment)
PT	\$ 107.72	1.00	\$ 107.72	0.88	\$ 94.79
OT	\$ 89.61	1.00	\$ 89.61	0.88	\$ 78.86
SLP	\$ 43.64	na	\$ 43.64	na	\$ 43.64
Nursing	\$ 133.88	na	\$ 133.88	na	\$ 133.88
NTA	\$ 101.00	3.00	\$ 303.00	1.00	\$ 101.00
Non-Case Mix	\$ 89.46	na	\$ 89.46	na	\$ 89.46
<b>TOTAL</b>	<b>\$ 565.31</b>		<b>\$ 767.31</b>		<b>\$ 541.63</b>



As Figure 16 suggests, the total Medicare Part A rate under the PDPM methodology would be calculated by summing each of the five case-mix adjusted components. The PT, OT and NTA components would be further adjusted by their respective variable per-diem adjustment factors. The non-case mix component would be added to this and the wage-related portion of the rate would be wage-adjusted using the same wage index as is currently used in the SNF PPS.

## Less Frequent PPS Assessments

CMS notes that the MDS assessments required under the current SNF PPS are largely driven by the therapy that a resident receives. The case-mix classification under the PDPM model relies to a much lesser extent on characteristics that may change over the course of a resident's stay. Instead, it relies on more stable predictors of resource utilization by tying case-mix classification to resident characteristics such as diagnosis information and comorbidities.

Given the greater reliance of the proposed case-mix classification on resident characteristics that are relatively stable over a resident's SNF stay, CMS is proposing to reduce the number of MDS assessments that providers are required to complete. Specifically, CMS is proposing to use the 5-day SNF PPS scheduled assessment to classify a resident under the PDPM model for the entirety of a resident's Part A SNF stay, with an Interim Payment Assessment (IPA) (similar to the current significant change assessment) and Discharge Assessment as the only other required assessments.

The IPA would be used to reclassify a resident from the initial classification determined by the 5-day assessment. It would be required when there is a change in the resident's first tier classification criteria (for any component) that would result in a payment change AND that the change is such that the resident is not expected to return to their original clinical status within 14 days. CMS proposes that the Assessment Reference Date (ARD) for the IPA be no later than 14 days after the change that triggers the IPA is identified. Figure 17 summarizes the proposed assessments.

**Figure 17: Patient MDS Assessments Under PDPM**

Medicare MDS assessment schedule type	Assessment reference date	Applicable standard Medicare payment days
5-day Scheduled PPS Assessment	Days 1-8	All covered Part A days until Part A discharge (unless an IPA is completed).
Interim Payment Assessment (IPA)	No later than 14 days after change in resident's first tier classification criteria is identified	ARD of the assessment through Part A discharge (unless another IPA assessment is completed).
PPS Discharge Assessment	PPS Discharge: Equal to the End Date of the Most Recent Medicare Stay (A2400C) or End Date	N/A.

In light of the reduction in the frequency of assessments that would be required under PDPM and to better track therapy utilization under the new methodology, CMS is proposing to add 18 items to the SNF PPS Discharge Assessment. These are identified in Figure 18 below.

**Figure 18: Tracking of Therapies**

<b>MDS item No.</b>	<b>Item Name</b>
O0400A5	Special Treatments, Procedures and Programs: Speech-Language Pathology and Audiology Services: Therapy Start Date.
O0400A6	Special Treatments, Procedures and Programs: Speech-Language Pathology and Audiology Services: Therapy End Date.
O0400A7	Special Treatments, Procedures and Programs: Speech-Language Pathology and Audiology Services: Total Individual Minutes.
O0400A8	Special Treatments, Procedures and Programs: Speech-Language Pathology and Audiology Services: Total Concurrent Minutes.
O0400A9	Special Treatments, Procedures and Programs: Speech-Language Pathology and Audiology Services: Total Group Minutes.
O0400A10	Special Treatments, Procedures and Programs: Speech-Language Pathology and Audiology Services: Total Days.
O0400B5	Special Treatments, Procedures and Programs: Occupational Therapy: Therapy Start Date.
O0400B6	Special Treatments, Procedures and Programs: Occupational Therapy: Therapy End Date.
O0400B7	Special Treatments, Procedures and Programs: Occupational Therapy: Total Individual Minutes.
O0400B8	Special Treatments, Procedures and Programs: Occupational Therapy: Total Concurrent Minutes.
O0400B9	Special Treatments, Procedures and Programs: Occupational Therapy: Total Group Minutes.
O0400B10	Special Treatments, Procedures and Programs: Occupational Therapy: Total Days.
O0400C5	Special Treatments, Procedures and Programs: Physical Therapy: Therapy Start Date.
O0400C6	Special Treatments, Procedures and Programs: Physical Therapy: Therapy End Date.
O0400C7	Special Treatments, Procedures and Programs: Physical Therapy: Total Individual Minutes.
O0400C8	Special Treatments, Procedures and Programs: Physical Therapy: Total Concurrent Minutes.
O0400C9	Special Treatments, Procedures and Programs: Physical Therapy: Total Group Minutes.
O0400C10	Special Treatments, Procedures and Programs: Physical Therapy: Total Days.

## Concurrent and Group Therapy

CMS is concerned that since the PDPM methodology would not use minutes of therapy provided to classify the resident for payment purposes, that it may incentivize group and concurrent therapy over the kind of individualized therapy which is tailored to address each beneficiary's specific care needs which CMS believe is generally the most appropriate mode of therapy for SNF residents. To address this, CMS is proposing to set a combined 25 percent limit on concurrent and group therapy for each discipline of therapy provided.

## Impact Modeling

Using estimated 2017 PDPM base rates (calibrated to be budget neutral), CMS recategorized residents based on MDS data into PDPM payment categories and compared how these PDPM payments

compared to actual 2017 RUG-IV payments. Appendix A shows the resident-level payment impact based on specific resident characteristics. Appendix B shows the facility-level payment impact based on facility characteristics. Note that the comparisons assume no behavior changes on the part of providers.

As would be expected based on the CMS concerns that precipitated these changes, the most pronounced decrease on the resident level (8.4 percent) is for those in the ultra-high (i.e., RU) therapy RUG categories which represented 58.4 percent of all Medicare fee-for-service SNF stays in 2017. Modeling suggested that reimbursement for residents in other rehabilitation groups would increase by 11 percent for those in the very high (i.e., RV) categories which represented 22.4 percent of 2017 stays, and by 27 percent for the high (i.e., RH) categories which represented 6.8 percent of stays. Modeling of payment changes for non-rehab stays which accounted for 9.1 percent of stays increased by 50.5 percent.

Modeling suggested that under the new payment system, reimbursement for bariatric residents, those with severe cognitive impairments and stays that are 15 days or shorter would see noticeable increases, while residents with HIV/AIDS, those receiving therapy from multiple disciplines and those with stays longer than 31 days would see the largest decreases.

On the facility level, modeling showed non-profit homes that represent 22.6 percent of providers nationwide, seeing an overall 2 percent increase, while payments to for-profit homes decreased by 0.7 percent. Payments to government sponsored homes increased by 4.2 percent. However, the change drivers were clearly therapy: payments to homes where Ultra-High therapy RUGs represented 90 percent or more of Part A FFS days decreased by 9.8 percent; payments dropped by 6 percent to homes billing 75-90 percent of their days as Ultra-High; homes where Ultra-High therapy days accounted for 50 to 75 percent of total days saw a 0.4 percent revenue drop. Revenue for homes that billed 50 percent or fewer of their days as Ultra-High increased.

CMS also made available facility-specific impact estimates showing the difference between actual Part A payments based on the distribution of resident days by RUG-IV groups in 2017 and estimated payments based on categorizing the 2017 days into PDPM payment categories. The file also breaks out the estimated change in payment for therapy and nursing components. The CMS file can be downloaded [here](#) and a file showing just New York homes can be downloaded [here](#). Please note that there are no estimates for roughly 100 New York homes, potentially due to low Medicare volume and/or unavailability of data. (You will need your Medicare provider number to identify your home.)

Based on the CMS/Acumen analysis (and assuming the same Medicare residents with the same lengths of stay and receiving the same services for each nursing home as in 2017), 52 percent of homes in NY would see a total revenue decrease while 48 percent would see a revenue increase if reimbursement for these same residents were provided using the new payment model. The statewide aggregate funding decrease for NY would be \$87.9M based on the 506 homes with estimates.

When it comes to not-for-profit homes, 39 percent would do worse while 61 percent would do better. However, the statewide estimated aggregate change for voluntary homes is an \$8.7M decrease and there are some voluntary homes with significant drop including 6 whose estimated decrease exceeds 10 percent.

The bulk of the estimated decreases are driven by the change in reimbursement for residents who are in the current ultra-high RUG categories, that is, for the residents who receive the highest number of therapy minutes. Other components, especially nursing and NTA, are being valued more. CMS is attempting to change what they see as a perverse incentive in the current methodology to provide more therapy than may be required and point to the fact that in so many cases therapy is provided to the RUG

category threshold as an indicator that reimbursement, not need, may determine therapy utilization in some cases.

It is important to keep in mind that if the same level of therapy is provided to residents under the new methodology, the revenue reductions may play out as estimated. But if providers respond by finding opportunities to provide therapy more efficiently, for example by relying more on group and/or concurrent therapy (capped at 25%), the decrease in reimbursement for these high-therapy individuals may be accompanied by a decrease in provider costs. Those homes that serve large proportions of non-therapy residents are likely to see costs of care better reflected in the PDPM payment structure.

However, what is not reflected in the modeling are the costs of implementing a new system: staff training and education costs, software updates, policy and procedure changes, vendor contract revisions, etc. We have made this case in our previous comments and will do so again. These costs are substantial and argue for additional funding in the new methodology, at least initially, instead of for budget neutrality. The challenge is that violating budget neutrality would require Congressional approval and CMS is trying to effectuate this change administratively.

## **Request for Input**

CMS states that the following goals guide the development of PDPM:

- To create a model that compensates SNFs accurately based on the complexity of the particular beneficiaries they serve and the resources necessary in caring for those beneficiaries;
- To address CMS concerns, along with those of OIG and MedPAC, about current incentives for SNFs to deliver therapy to beneficiaries based on financial considerations, rather than the most effective course of treatment for beneficiaries; and
- To maintain simplicity by, to the extent possible, limiting the number and type of elements used to determine case-mix, as well as limiting the number of assessments necessary under the payment system.

CMS is interested in comments on how effective the PDPM model is in addressing those goals as well as specific aspects of the model. CMS also welcomes comments on logistical aspects of implementing revisions to the current SNF PPS, such as whether those revisions should be implemented in a budget neutral manner, and how much lead time providers and other stakeholders should receive before any finalized changes would be implemented. Finally, CMS invites comments on other potential issues that should be considered in implementing revisions to the current SNF PPS, such as potential effects on state Medicaid programs, potential behavioral changes, and the type of education and training that would be necessary to implement successfully any changes to the SNF PPS.

## **Conclusion**

The PDPM model that CMS is considering would represent a significant change in how Medicare reimburses nursing homes for post-acute care. It would rely much less on therapy which is the largest reimbursement driver in the current methodology and place more weight on nursing services and other clinical needs and characteristics of the resident. The methodology for calculating the rate would be more complex and Part A revenue would be less predictable. Payments would change as a resident's stay progressed. More aspects of a resident's unique characteristics and needs would factor into determining the resident's payment classification, which CMS argues would make for more resident centered care and reimbursement. Because the PDPM system would be based on specific resident characteristics predictive of resource utilization for each component, CMS believes that payments would be better aligned with resident service needs.

While it is important for members to be familiar with the broad strokes of the methodology, including the concerns CMS is trying to address in developing the model, please note that the model may be further refined between now and the publication of the final rule later this summer based on stakeholder comments.

LeadingAge NY will submit comments and we urge members to do so as well, either directly to CMS or to us so that we may incorporate them into the association's comments. Comments are due to CMS on June 26. Please contact Darius Kirstein, [dkirstein@leadingageny.org](mailto:dkirstein@leadingageny.org), 518-867-8841, with questions, comments and input.

## Appendix A: Resident-Level Estimated Payment Changes (p.1 of 2)

Resident characteristics	% of stays	Percent change
All Stays	100.0	0.0
Sex:		
Female	60.3	-0.8
Male	39.7	1.2
Age:		
Below 65 years	10.3	7.2
65-74 years	24.1	3.1
75-84 years	32.5	-0.4
85-89 years	17.6	-3.1
Over 90 years	15.6	-4.3
Race/Ethnicity:		
White	83.8	-0.2
Black	11.2	0.8
Hispanic	1.7	0.9
Asian	1.3	-0.6
Native American	0.5	7.1
Other or Unknown	1.5	0.8
Medicare/Medicaid Dual Status:		
Dually Enrolled	34.7	3.3
Not Dually Enrolled	65.3	-2.1
Original Reason for Medicare Enrollment:		
Aged	74.6	-1.7
Disabled	24.5	4.8
ESRD	0.9	10.5
Utilization Days:		
1-15 days	35.4	13.7
16-30 days	33.8	0.0
31+ days	30.9	-2.5
Utilization Days = 100:		
No	98.4	0.1
Yes	1.6	-1.9
Length of Prior Inpatient Stay:		
0-2 days	2.2	1.3
3 days	22.5	-3.3
4-30 days	73.6	0.7
31+ days	1.7	6.7
Most Common Therapy Level:		
RU	58.4	-8.4
RV	22.4	11.4
RH	6.8	27.4
RM	3.3	41.1
RL	0.1	67.5
Non-Rehab	9.1	50.5
Number of Therapy Disciplines Used:		
0	2.3	63.1
1	2.4	44.2
2	51.6	1.6
3	43.7	-3.1
Physical Therapy Utilization:		
No	3.7	50.9
Yes	96.3	-0.7
Occupational Therapy Utilization:		
No	4.5	47.7
Yes	95.5	-0.8

## Appendix A: Resident-Level Estimated Payment Changes (p.2 of 2)

Resident characteristics	% of stays	Percent change
Speech Language Pathology Utilization:		
No	55.0	2.8
Yes	45.0	-2.5
Therapy Utilization:		
PT+OT+SLP	43.7	-3.1
PT+OT Only	50.8	1.3
PT+SLP Only	0.4	27.3
OT+SLP Only	0.4	30.1
PT Only	1.3	41.3
OT Only	0.6	47.9
SLP Only	0.5	46.8
Non-Therapy	2.3	63.1
Extensive Services Level:		
Tracheostomy and Ventilator/Respirator	0.3	22.2
Tracheostomy or Ventilator/Respirator	0.6	7.3
Infection Isolation	1.1	9.1
Neither	98.0	-0.3
CFS Level:		
Cognitively Intact	58.5	-0.3
Mildly Impaired	20.7	-0.2
Moderately Impaired	16.8	-0.7
Severely Impaired	3.9	8.8
HIV/AIDS:		
No	99.7	0.3
Yes	0.3	-40.5
IV Medication:		
No	91.7	-2.1
Yes	8.3	23.5
Diabetes:		
No	64.0	-3.0
Yes	36.0	5.4
Wound Infection:		
No	98.9	-0.3
Yes	1.1	22.2
Amputation/Prosthesis Care:		
No	100.0	0.0
Yes	0.0	6.4
Presence of Dementia:		
No	70.9	0.5
Yes	29.1	-1.2
MDS Alzheimer's:		
No	95.2	0.0
Yes	4.8	-0.3
Unknown	0.0	5.0
Presence of Addictions:		
No	94.6	-0.1
Yes	5.4	1.8
Presence of Bleeding Disorders:		
No	90.9	-0.1
Yes	9.1	1.5
Presence of Behavioral Issues:		
No	53.1	-0.9
Yes	46.9	1.0
Presence of Chronic Neurological Conditions:		
No	74.4	-0.2
Yes	25.6	0.6
Presence of Bariatric Care:		
No	91.3	-0.6
Yes	8.7	6.5



## Appendix B: Provider-Level Estimated Payment Changes

Provider characteristics	% of providers	Percent change
All Stays	100.0	0.0
Ownership:		
For profit	72.0	-0.7
Non-profit	22.6	1.9
Government	5.4	4.2
Number of Certified SNF Beds:		
0-49	10.0	3.5
50-99	38.2	0.6
100-149	34.7	-0.2
150-199	11.1	-0.3
200+	5.9	-1.8
Location:		
Urban	72.7	-0.7
Rural	27.3	3.8
Facility Type:		
Freestanding	96.2	-0.3
Hospital-Based/Swing Bed	3.8	16.7
Location by Facility Type:		
Urban   Freestanding	70.6	-1.0
Urban   Hospital-Based/Swing Bed	2.2	15.3
Rural   Freestanding	25.6	3.2
Rural   Hospital-Based/Swing Bed	1.6	21.1
% Stays with Maximum Utilization Days = 100:		
0-10%	94.4	0.1
10-25%	5.1	-2.8
25-100%	0.4	-3.6
% Medicare/Medicaid Dual Enrollment:		
0-10%	8.6	-1.3
10-25%	17.5	-1.3
25-50%	36.0	0.3
50-75%	26.5	1.3
75-90%	8.2	0.4
90-100%	3.1	1.6
% Utilization Days Billed as RU:		
0-10%	8.9	27.6
10-25%	8.0	15.5
25-50%	24.1	7.0
50-75%	39.2	-0.4
75-90%	17.2	-6.0
90-100%	2.6	-9.8
% Utilization Days Billed as Non-Rehab:		
0-10%	79.8	-1.5
10-25%	16.6	8.6
25-50%	2.7	23.1
50-75%	0.4	35.8
75-90%	0.2	41.8
90-100%	0.4	33.6