



ZIMMET HEALTHCARE
SERVICES GROUP, LLC



PDPM REIMBURSEMENT ANALYSIS

October 2019 Medicare Claims

Financial Impact, Observations, Rate Measures & Comparative Integrity

Z-CORE Analytics, LLC (CORE) is pleased to present this analysis of
October 2019 Skilled Nursing Facility billing,
the first month processed under Medicare's Patient Driven Payment Model.

- I. Introduction
- II. PDPM Rate Benchmarks – October 2019 Claims
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I. INTRODUCTION

CMS implemented the highly anticipated SNF Patient Driven Payment Model for Medicare Part A claims effective October 1, 2019. PDPM replaced the Resource Utilization Group system which, through several iterations, carried the SNF revenue cycle for a generation. The efficacy of a Prospective Payment System is measured by its accuracy in predicting cost of patient care as a function of acuity. Statistically speaking, PDPM is a clear improvement over RUGs. Nevertheless, we presuppose that PDPM will evolve as it matures, with case-mix refinement and rate recalibration possible as early as next year.

CORE is Zimmet Healthcare's claims-based intelligence solution for market analytics and PDPM optimization. CORE leverages the Medicare UB-04's diverse item set to develop insight into patient-specific revenue opportunities and compliance concerns. CORE's mission is to improve healthcare quality and efficiency by providing the industry's most accurate, insightful and current utilization analytics.

CORE's PDPM findings were both fascinating and comparatively confounding respective to the system it replaced. As anticipated, provider experiences from the first revenue-cycle were highly variable, yet such a qualification is relative – industry standards are not yet established (most operators have yet seen only their own claims), and data without context clouds insight. PDPM's revenue impact may be noticed immediately, but nominally offers no measure of a facility's operational competency; financial outcomes must therefore be rationalized to ensure Comparative Integrity over time and among providers.

Comparative Integrity

The Minimum Data Set is used to group each patient into four distinct PDPM “Components” [PT/OT, SLP, Nursing, Non-Therapy Ancillary (NTA)]. For purposes of this discussion, the four Component scores assigned to a beneficiary are collectively referred to as the PDPM “Composite.”

PDPM is not a “fixed” payment system. The NTA Component's value is tripled during the first three days of admission, and PT/OT is slowly tapered downward after day-20. This creates average-rate variability driven by length of stay that complicates budgeting and destabilizes relative analysis. Simply stated, “Average Medicare Rate” is no longer an adequate stand-alone measure of reimbursement performance, nor is the quotient fully reliable in financial modeling. Shorter stays drive average per diem payment higher, and therefore must be considered in the context of a facility's average length of stay (ALOS) when measured against the rates of others.

To ensure comparative integrity, CORE offers a consistent alternative measure of PDPM performance; average rates are quantified two ways in this release:

Realized Rate

The “Realized” Rate is the amount Medicare sets/pays per Composite. Realized Average is simply total (gross) Medicare Part A revenue divided by Medicare days per patient or facility. For example, the Realized Average Rate per day for a particular Composite Score (KEGD) is calculated as follows:

Realized Rate		KEGD	Days = 8
Window	Rate	Days	Revenue
Days 1 - 3	\$843.19	3	\$2,530
Days 4 - 20	\$630.63	5	\$3,153
Total Admission		8	\$5,683
Ave. Realized Rate: 8 days			\$710.34

CORE Standard Rate (CORE-\$)

The CORE-\$ removes variable day-weight distortion from the PDPM equation. This is NOT the number reported on financial statements; however, the CORE-\$ offers a consistent and reasonable measure of performance – a true “apples to apples” comparison.

The CORE-\$ expresses each PDPM Composite as a blended per diem using MedPAC’s ~25-day national ALOS as the common day-weight factor, regardless of how many days a patient was covered at that score. The standardized CORE-\$ is computed by adding revenue from a Composite’s payment windows through day 25 (days 1 to 3 + 4 to 20 + 21 to 25) and dividing the sum by 25 days. We multiply each blended rate by the number of days actually billed at that score for respective admissions, then divide the product by total Medicare days billed for the period under consideration.

Compared to the Realized Rate above, the CORE-\$ for that same Composite is calculated as follows:

CORE-\$		KEGD	ALOS 25
Window	Rate	Days	Revenue
Days 1 - 3	\$843.19	3	\$2,530
Days 4 - 20	\$630.63	17	\$10,721
Days 21 - 27	\$627.04	5	\$3,135
Total for National ALOS		25	\$16,386
CORE-\$	KEGD		\$655.42

If this was the only patient billed for the month, we would use \$655.42 to compare a facility’s performance to its peer group of providers. But the actual (Realized) average daily revenue generated by Composite KEGD for a given admission depends on length of stay.

Note the Realized Rate calculated on the prior page far exceeded the CORE-\$, but that is because the Realized Rate was based on only an 8-day admission. As detailed below, the Realized Rate is diluted for the same Composite as they stay grows longer:

Realized Rate		KEGD	Days = 40
Window	Rate	Days	Revenue
Days 1 - 3	\$843.19	3	\$2,530
Days 4 - 20	\$630.63	17	\$10,721
Days 21 - 27	\$627.04	7	\$4,389
Days 28 - 34	\$623.45	7	\$4,364
Days 35 - 41	\$619.86	6	\$3,719
Total Admission		40	\$25,724
Ave. Realized Rate: 40 days			\$643.09

As shown in the preceding example, when a covered stay is fewer than 25 days, compressed day-weight adjustment results in a Realized Composite Rate that exceeds the same Composite’s CORE-\$ (and vice versa).

Relative to the same Composite at different stays, variation obfuscates Comparative Integrity. Here we find a \$67/day difference in the Realized average per diem revenue generated by KEGD between an 8-day and 40-day admission. Accordingly, we can only make reasonable comparisons among SNFs by applying a “standard measure” length of stay to the equation. The CORE-\$ is how we measure/compare PDPM’s impact over time and among providers, whereas the Realized Rate equals actual Medicare revenue earned by the SNF.

Transition Considerations

October rates are artificially distorted by the rules governing the transition from RUG-IV to PDPM. October 1st was considered day-one for patients already in-house prior to the transition, regardless of when their benefit period began. SNFs will not enjoy this universal benefit again.

At the same time, Composite scores for many transitioned patients did not reflect conditions present upon admission but since resolved. These are one-time offsetting factors; per CORE, revenue gained by the NTA increase typically exceeded the admission-condition loss in our database. We therefore anticipate a negative correction post-October of approximately 3% - 4% from a typical SNF’s Realized Rate (controlling for all possible independent variables).

A similar issue unrelated to transition mechanics, systemic MDS errors impact data integrity as new items, definitions and coding practices are introduced. CORE identified extensive reimbursement inconsistencies among UB-04 data fields that impacted reimbursement, many of which were confirmed and resolved when reconciled to supporting documentation (i.e. “Logic Tests”).

II. PDPM REIMBURSEMENT PERFORMANCE

PDPM is simply an updated “revenue delivery system” that shifts reimbursement-sensitivity from therapy volume to patient condition. The model is intended to be budget-neutral, another term for redistribution, and as such creates financial winners and losers. Performance is predicated on a provider’s population-acuity, accuracy of data capture, length of stay and reimbursement-management process.

To ascertain PDPM’s financial impact from October Medicare billing, we analyzed over 20,000 claims from 623 distinct SNFs across 35 states and the District of Columbia as of November 17, 2019.

CORE’s findings are presented net of PDPM “Default” scores. Across our client base, 1.6% of uploaded claims reported Composite ZZZZZ. Many were merely “placeholders” awaiting HIPPS codes that were not finalized when uploaded or resulted from technical issues under review; we felt including these “unfinished” scores would unnecessarily dilute actual performance.

CORE’s 623 contributing SNFs are all “freestanding,” distributed as follows:

For-Profit:	587 SNFs across 35 states and DC
Non-Profit:	36 SNFs across 6 states
Government:	0
Average size:	148 beds
Average census:	16.7 Medicare Part A

CORE’s facility count is statistically significant, but not randomly selected. Users elected to have their claims analyzed but this tells us nothing about potentially relevant distinctions that may cause their performance to be non-representative of the industry. Also, CORE includes providers from 35 states, but they are clustered in the Eastern half of the country, they are larger and disproportionately for-profit (94% to 71% national average). Accordingly, we do not suggest, recommend or represent that our findings be used as a proxy for national performance.

Providers in the CORE database are geographically diverse and as such do not share the same wage index. Rates in this analysis are “priced” for comparability using the unadjusted urban rate set (ignoring sequestration and co-insurance adjustments). As baseline, we measure PDPM performance against the most recently available national RUG-IV distribution, applied to 2019 RUG rates updated by the 2.4% market-basket increase effectuated this past October. Fiscal year 2019’s (inflated) unadjusted urban RUG-IV average equaled \$562.89 per day (for reference, the inflated RUB rate = \$646.37).

Regarding CORE’s PDPM performance, rates are based on claims uploaded prior to CORE’s “Logic Test” application and correction. The value of “High Probability” missed reimbursement events averaged **\$16.77** per patient day. We have confirmed that adjustment bills are being submitted and CORE will update results in future releases.

CORE's figures are presented in "simple average" form, where each provider's performance is represented equally (as opposed to "weighted average" wherein larger facilities would distort per-SNF results).

The results below are based on October claims submitted by 623 SNFs under PDPM. Relative to the \$562.89 RUG-IV baseline, 91.5% of CORE's SNFs enjoyed a positive PDPM impact ("winners"), while only 8.5% experienced a negative impact ("losers").

All rates are "per patient day."

2019 inflated RUG-IV Ave:	\$562.89
PDPM Realized Average:	\$614.96
Relative to RUG-IV Average	+ \$ 52.07
Positive:	570 SNFs (91.5%)
Negative:	53 SNFs (8.5%)

These figures are artificially inflated by the transition structure, but even after applying a theoretical 4% correction with no improved capture patterns, the average PDPM rate of \$584 would still be \$26 more per day than Medicare would have paid had RUG-IV continued unabated.

The variation in PDPM Realized Rate average was significant. Top quartile performers billed nearly 20% more than the bottom quartile average.

PDPM Realized Average:	\$614.96
Top 25% Average:	\$678.73
Bottom 25% Average:	\$566.24

Perpetuating long-standing trends, For-profit operators outperformed their Non-profit counterparts.

PDPM Realized Average:	\$614.96
For-profit:	\$616.26
Non-profit:	\$602.43

The PDPM Realized Rate is what ultimately matters, as it represents actual revenue. However, to effectively compare provider performance, the standardized CORE-\$ offers a more meaningful measure. There is nothing to be learned by judging the CORE-\$ against RUG-IV baseline; our metric is only relevant in context with another CORE-\$ value.

PDPM CORE-\$ Average:	\$597.05
Top 25% Average:	\$649.55
Bottom 25% Average:	\$555.84

The CORE-\$ average of the top 25% of providers outperformed the bottom quartile by an average of 16.8% (less than the 20% difference in Realized Rates). This suggests shorter stays are more a factor in variability than patient acuity or capture patterns.

Transition Outliers

To test our theory about the transition rate impact, we sampled 1,000 patients admitted at least 30 days prior to October 1 and 1,000 patients admitted after October 1. Our assumption was that higher scores would be captured for patients admitted in October than those captured more than 30 days pre-transition. Findings supported our supposition, but results were inconclusive specific to offsetting NTA enhancements applied to every resident from October 1 – 3.

Logic Tests

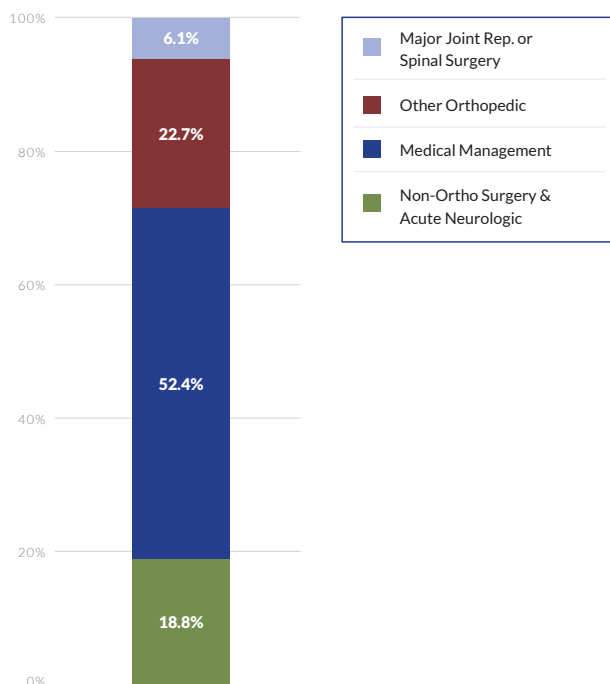
The term “Clean Claim” describes a UB-04 that does not trigger any Medicare billing edits, and therefore is accepted and processed; but it does not mean the bill is accurate. CORE does not “scrub for edits,” our algorithms cross-reference and analyze data fields that are sourced from many inputs outside the purview of the MDS-EMR to identify reimbursement inconsistencies. CORE’s Logic Tests enhance the “Triple Check” process, thereby improving payment accuracy. There are currently more than 1,000 Logic Tests embedded within CORE’s functionality. Tests are continuously refined and added as User feedback proves or disproves their accuracy.

III. COMPONENT DISTRIBUTION SUMMARY & OBSERVATIONS

The following percentages represent MDS assessment share count, not number of days billed.

PT-OT COMPONENT

The PT/OT distribution is in line with expectations from the therapy community, per our informal polling. Analysis confirms that, as anticipated, Medical Management is the predominant clinical category.



We believe that the PT/OT Component will be among the first systemic refinements implemented by CMS, as there is minimal variability among the clinical categories. For example, Medical Management (10 – 23) carries an initial per diem rate of \$179.43, while the same Function Score for Acute Neurologic pays \$181.82. Major Joint pays a bit more, but as we see these admissions have atrophied considerably.

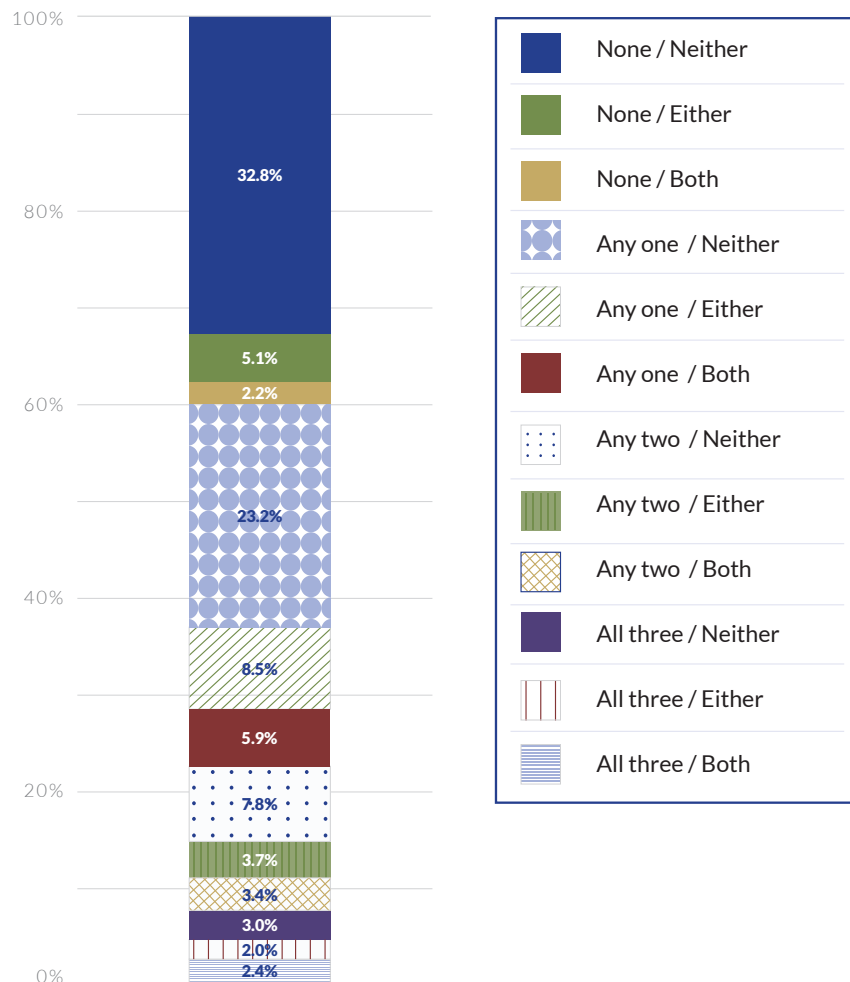
This price-compression was caused by the “clustering” of >70% of all patients around the 720 minute threshold for Ultra High capture, irrespective of their diagnosis.

SLP COMPONENT

We expected the Speech Component to be the most interesting and it did not disappoint. Note the “All three / Neither” score was captured on 3% of assessments, while “All three / Both” represented only 2.4%, while “All three / Either” was 2.0%.

In other words, 25% more patients were identified as having an acute neurological diagnosis, cognitive impairment and SLP-related comorbidity but NOT a Mechanically Altered Diet or Swallowing Disorder than had one or both recognized. Dieticians maintain the opposite is far more likely.

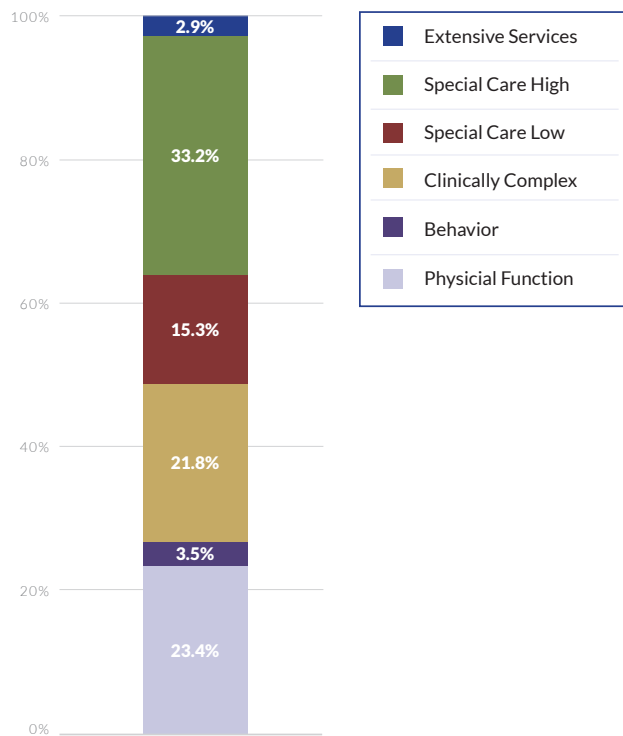
As curiously, more than 40% of scores reported “None” in the first SLP profile, meaning these patients had no signs of even “Mild” cognitive impairment. The number of patients scored fully cognitively intact is likely even higher, as cognition may be the missing qualifier in the “Any one” and “Any two” groups as well.



The connections (and disconnections) among these qualifiers will be studied thoroughly. In particular, one \$25/day issue comes to mind – 67% of all patients had “Neither” (Swallowing Disorder and Mechanically Altered Diet) reported. How many months will the industry need to reduce that unlikely number down to 25%?

NURSING COMPONENT

The nursing case-mix distribution held two surprises. First, nearly 27% of assessments reported no explicit skilled nursing service (i.e. Physical and Behavior scores). We expect these lower scores to rise steadily during 2020 as providers formalize clinical programs beyond rehab. In fact, CORE employs Logic Tests that correlate ancillary charges to each Nursing group. While not an “Explicit” indicator of downcoding, User validation rates exceed 60% when CORE highlights a Physical score with Pharmacy charges beyond two standard deviations from the mean. Yes, reimbursement-sensitive services & conditions are being missed, but we expect the PDPM learning curve to now accelerate.



Another surprise - we did not expect the Special Care High group to be so well represented on day 1. Respiratory Therapy generated well-deserved attention, with several high-profile service providers marketing RT’s potential Return on Investment.

Still, the most likely driver behind 70% capture among the Clinically Complex, Special Care Low and Special Care High groups is attention to secondary diagnosis coding. Nevertheless, omitted codes were the most commonly verified Logic Test during CORE’s first month of analysis.

Lastly, we imagine providers treating the 2.9% of Extensive Service patients are not bemoaning the loss of therapy levels - the CORE-\$ for this group is up around \$850!

NURSING END SPLITS:

Special Care High/Low and Clinically Complex scores are “Depression-sensitive;” payment is increased for qualifying beneficiaries in only these three classifications; which represented 70.3% of October claims. The dollars are material. Depending on category and function score, ~\$30 - \$40/day is accretive to performance if the condition is captured.

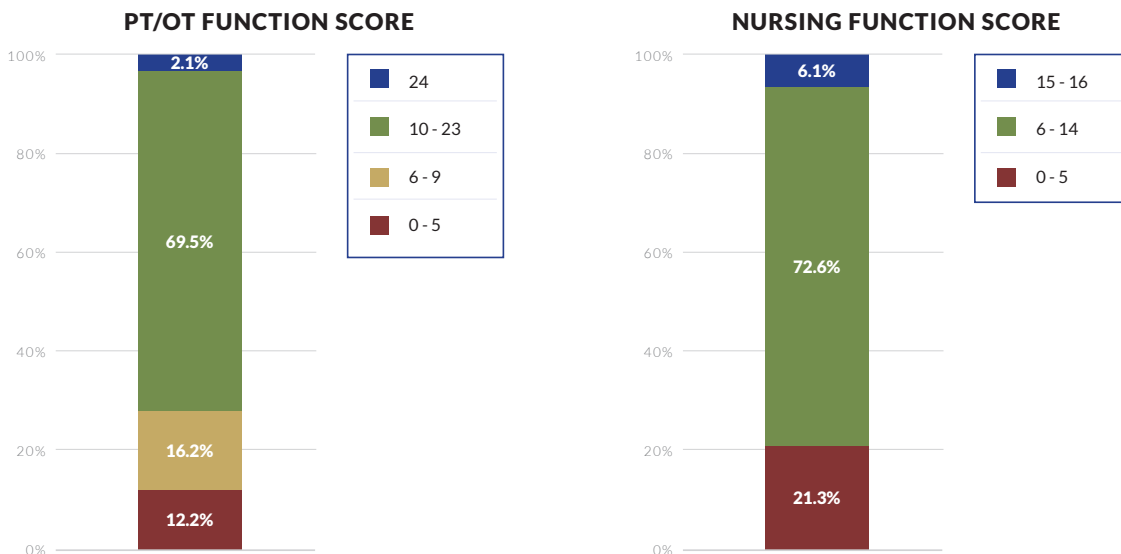
CORE facilities captured the Depression end split on 22.3% of assessments. While we are not releasing the state-specific distribution this month, the capture rate is significantly higher in states that use the RUG system for Medicaid case-mix adjustment, and lower in states that have no MDS-based acuity factor. This difference is easily attributable to assessment skills honed during patient interviews in case-mix states that were never developed where no incentive to do so existed.

A simple way to identify potentially lost dollars to depression is to review your billing summary for “1s and 2s.” If you take anything from this report, please review your October billing and count how many of your Nursing scores end in “2.” If you don’t find any, your facility is either incredibly pleasant and soothing, or you’re leaving upwards of \$35 Medicare/day on the table; our advice is to pick them up.

Restorative Nursing was long considered a great idea in desperate need of a business model; no one paid for it. And even if there was financial benefit, so few patients scored in the only groups that recognized it (Physical and Behavior) that the model couldn’t work anyway. It makes more sense now.

Nearly 27% of October scores are sensitive to RNP capture (about \$10/day). Despite all the attention drawn to RNP as an adjunct to declining therapy volume, only 10.6% of eligible patients received the service. While the goal should be to compliantly migrate these low paying scores up the hierarchy through appropriate clinical management, the time has never been better to formalize and execute a functional RNP to improve revenue and reduce pressure on the therapy department.

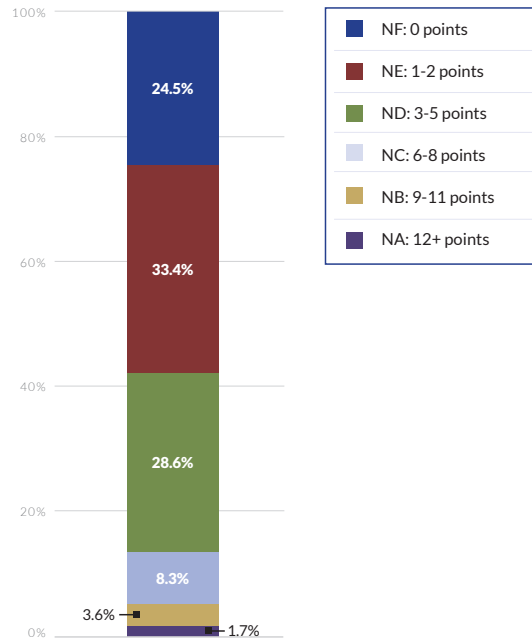
FUNCTION SCORE DISTRIBUTION



Section GG is difficult to arbitrage from a reimbursement perspective, as the inverse pricing relationship between PT/OT and Nursing Components offset respective capture ratios. Early analysis suggests that poorly structured contract therapy pricing (tied in any way to Section GG) will not work in the provider’s favor (something to consider when benchmarking your Composite distribution).

NTA COMPONENT

NTA scores on average were lower than we anticipated. This is partly attributable to the transition from RUG-IV, in that conditions present upon admission may have resolved by the October 1st start of PDPM. Nonetheless, NTAs were clearly missed on the MDS. Much of the CORE feedback to clients referenced NTAs reported on the UB-04, but not reflected in the Composite (and by association, not captured on the MDS). Many of these errors and omissions are already being corrected.



Finally, new products/services are appearing in the market promoting their ability to enhance NTAs with questionable assurances of Return on Investment. We advise our clients to proceed with caution if something sounds too good to be true. Regardless, we expect the NTA distribution to migrate up the point-scale over the coming months, although opinions are mixed specific to where they stabilize.

NURSING TO NTA COMPONENT CORRELATION

Due to the loss of capture opportunities for transition patients upon admission, CORE will use November claims for Regression Analysis to determine if/how NTA variation is explained by Nursing score.

Composite v. Component Variability

As explained, the October 2019 PDPM “simple average” rate equaled \$614.96; but as a stand-alone number bereft of context, it tells us little about the Components within our Composite distribution. Qualifying facts about a SNF episode animate Component Behavior - we have “numbers,” providers need “Relative Values” for benchmarking. We explore this concept below, starting with CORE’s Component averages for each Composite rate quartile.

TOTAL RATE	Component Averages by Total Rate Quartile						
	High	Low	Q Ave	PT/OT	SLP	Nursing	NTA
Top 25%	\$1,051.79	\$633.83	\$678.73	\$177.92	\$42.76	\$194.67	\$168.91
2nd Quartile	\$633.64	\$606.52	\$618.73	\$178.76	\$40.88	\$169.07	\$135.19
3rd Quartile	\$606.49	\$586.25	\$596.05	\$177.14	\$40.03	\$160.80	\$123.24
Bottom 25%	\$586.11	\$510.67	\$566.24	\$175.95	\$38.65	\$144.09	\$112.55
Q1 - Q4 spread			\$112.49	\$1.97	\$4.11	\$50.58	\$56.36
Variability Analysis			19.9%	1.1%	10.6%	35.1%	50.1%

Composite variance between the top 25% average rates and the bottom is 19.9%. This information is useful, but it does not hint at performance improvement opportunities (in fact, it may even mask them).

Approaching each Component as a distinct, independent rate system and comparing SNF capture to the Component-specific distribution can be far more effective.

PT/OT’s variance between top and bottom quartiles is only 1.1% (less than \$2.00 per day; not surprising given the “compression” issue discussed within). SLP variation is notable at 10.6%, but we see the Nursing Component is clearly driving the separation between high performers and the bottom with a 35.1% spread. Nursing is especially relevant due to scale and absence of day-weight adjustment. The NTA variance is the largest in terms of dollars and ratio, but the figure is less informing until it is CORE-\$ standardized (a short stay can propel an otherwise flawed assessment to top performing status, yet it still may hold significant enhancement potential).

This information tells us a great deal about Component behavior but proves again why the CORE-\$ distribution is a more consistent measure of PDPM capture patterns. Component averages and arrays are reported below. Remember, Components are analyzed as independent rate systems, not as part of the larger Composite.

PT/OT Only	High	Low	Q Ave
Top 25%	\$199.66	\$181.79	\$185.34
2nd Quartile	\$181.79	\$178.18	\$179.85
3rd Quartile	\$178.12	\$174.44	\$176.41
Bottom 25%	\$174.40	\$135.38	\$168.16
Q1 - Q4 spread		\$17.18	
Variability Analysis		10.2%	

SLP Only	High	Low	Q Ave
Top 25%	\$83.75	\$46.15	\$53.43
2nd Quartile	\$46.06	\$39.47	\$42.77
3rd Quartile	\$39.46	\$34.21	\$36.66
Bottom 25%	\$34.16	\$15.42	\$29.47
Q1 - Q4 spread		\$23.96	
Variability Analysis		81.3%	

Nursing Only	High	Low	Q Ave
Top 25%	\$430.04	\$177.63	\$200.75
2nd Quartile	\$177.57	\$163.51	\$170.22
3rd Quartile	\$163.18	\$151.09	\$157.31
Bottom 25%	\$150.63	\$105.71	\$140.37
Q1 - Q4 spread		\$60.38	
Variability Analysis		43.0%	

NTA Only	High	Low	Q Ave
Top 25%	\$496.24	\$146.50	\$174.84
2nd Quartile	\$146.50	\$128.90	\$135.97
3rd Quartile	\$128.86	\$115.60	\$122.11
Bottom 25%	\$115.55	\$82.10	\$106.96
Q1 - Q4 spread		\$67.88	
Variability Analysis		63.5%	

“Component Behavior & Benchmarking” are important tools in CORE’s PDPM “Logic Test” platform. October data is already driving CORE development of increasingly sophisticated Component associations. Statistical modeling aside, Component Behavior is based on the concept of mutual exclusivity - some scores just don’t make sense when combined with others.

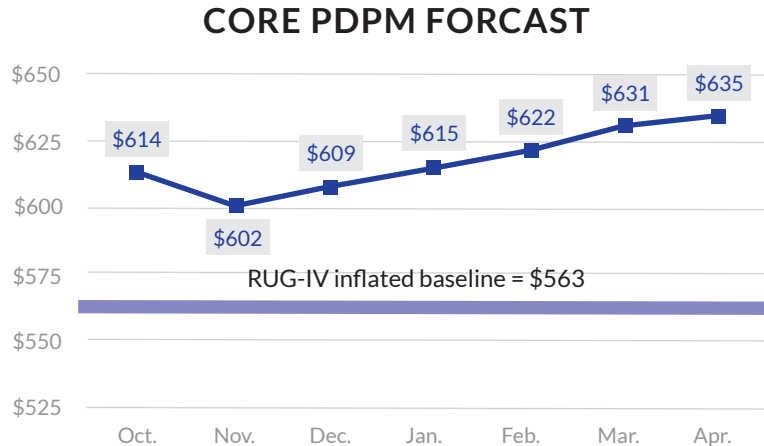
IV. REFLECTIONS

At this time, we offer only reflections, not conclusions. October seemed to create two new questions for each one it answered. But today we have a reasonable (if imperfect) baseline, a starting point from which to develop a new measure to compare provider performance.

Prospectively, assuming the NTA issue drives a 3.5% rate correction, at least half that loss should be reclaimed by an admission process that actually addresses the conditions of new admissions. Moreover, history has proven time and again that providers adapt; PDPM will be no exception, composite scores will rise.

October's NTA distortion may not be fully covered by improved admission scores in November, but I fully expect enhancement in three of the four components that will drive the Realized rate considerably higher (only PT/OT has no place to go, nor would it impact revenue much if it did). ZHSG consultants audit more than 100 providers each week; these engagements already reveal increases in Nursing and NTA scores post-transition; SLP scores may require many months to rationalize given the degree of improbable scenarios and the array of professionals involved in SLP Component management.

Financially, October 2019 claims support our belief that PDPM will NOT maintain budget-neutrality, making a rate recalibration (reduction) likely at some point. The following graph represents our unofficial forecast. If this proves even close to accurate, CMS may need a bigger budget.



That said, the purpose of this analysis was to introduce reliable benchmark data and begin the discussion about how provider performance should be measured in context with the unfamiliar structural mechanics of the Patient Driven Payment Model. Feel free to reach out with any questions.

Compiled and Prepared by:

Marc Zimmet, CEO

Zimmet Healthcare Services Group
Z-CORE Analytics
marc@zhealthcare.com

Vincent Fedele

Chief Operating Officer, Z-CORE Analytics
Director of Analytics, Zimmet Healthcare
vincent@zhealthcare.com

For more information or a complimentary analysis of SNF claims, please contact
support@zcoreanalytics.com or call (877) SNF-2001.

ABOUT ZIMMET HEALTHCARE SERVICES GROUP, LLC & CORE ANALYTICS

Zimmet Healthcare Services Group, LLC is a full-service consulting firm dedicated to enhancing the post-acute provider experience since 1993. The 60-person team supports ~3,000 SNFs and industry stakeholders nationwide on matters relating to reimbursement, regulatory-compliance, litigation support, transaction advisory, performance analytics and market strategy.

The UB-04 (formerly UB-92) has been our primary “tool of choice” for two decades. The claim’s diverse item-set is distinct from the MDS or medical record, and as such offers unique insight into provider and market dynamics – CORE Analytics was created to unlock this potential.

CORE delivers a superior alternative to Medicare public claims data used to measure provider-value. Public claims data is aggregated, lacks the finer-points of secondary UB-04 fields and is often a year old by the time it’s presented. CORE’s claims-based insight offers far greater detail, relevance and timeliness. Aggregated data based on thousands of claims can define a market, but a single SNF UB-04 holds far greater promise as a patient-specific PDPM and value-based management tool.

CORE is a stand-alone system that requires no technology integration. SNFs simply upload 837i files to CORE as they would to Medicare. There are no on-boarding costs, no cancellation fees, no contract lock-in burden... and no more than 30 minutes needed to realize results!

