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Abstract

The Patient Driven Payment Model (PDPM) is a new payment reform model that has rehabilitation providers asking if patient outcomes will be compromised in the transition from the existing Resource Utilization Group, IV (RUG-IV). This question arises given that there is a known incentive by PDPM to reduce therapy delivery of care.

Recent analysis of naviHealth data from the past five years demonstrates that when a “high-touch, high-tech” model is integrated into care planning and discharge planning, both efficient and effective outcomes can be achieved.

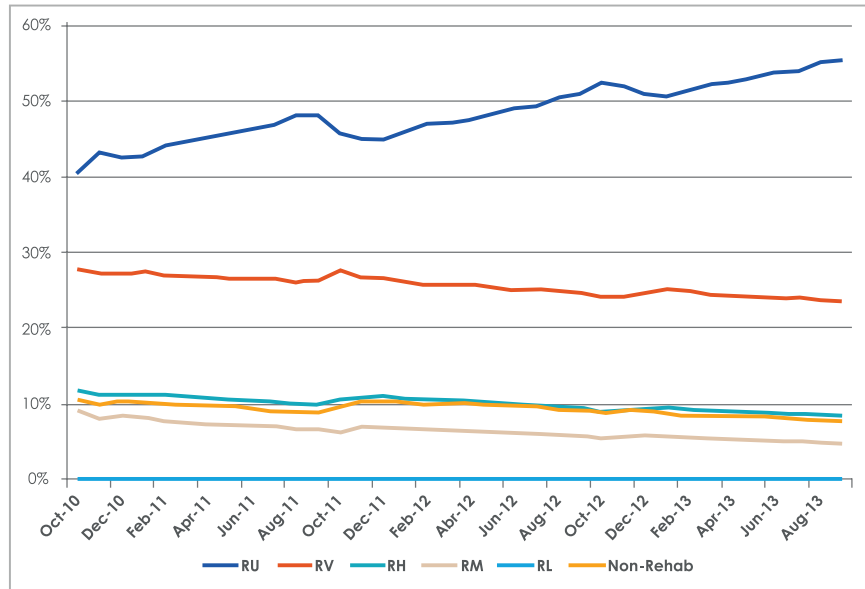
Why PDPM?

For the past decade, investigations by the The Office of Inspector General (OIG), The Centers for Medicare and Medicaid Services (CMS) and MedPAC indicated that RUG-IV payment incentives had a dramatic effect on rehab [occupational therapy (OT), physical therapy (PT), speech therapy (ST)] utilization. It was documented in January 2015 (MedPAC) that between 2002 and 2012, the combined frequency of Rehab Ultra-High (RUH) and Rehab Very-High (RVH) increased from 24 percent to 76 percent.

This trend in resource utilization continued through 2013. As reported in *CMS Trends Memo 4-21-2014*, “the percentage of billed service days in the resource utilization RUG-IV groups has increased to over 50 percent.”



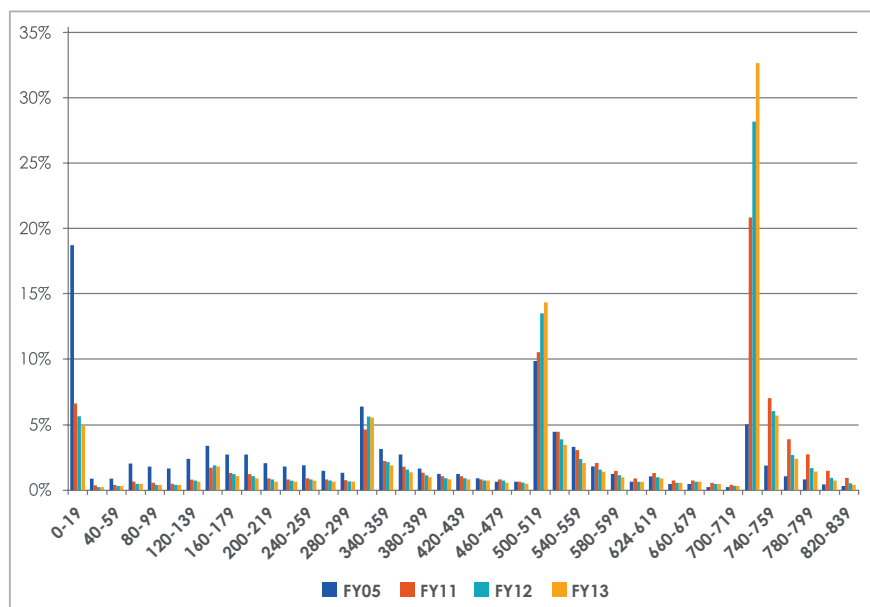
Figure 1: SNF Case-Mix Distributions by Major RUG-IV Category



CMS Trends Memo, April 21, 2014

In addition, this same report noted that the distribution of therapy service delivery was not as expected. “The second trend identified is that, most notably in the cases of the RUH and RVH groups, which taken together comprise more than 75 percent of the total billed days in FY 2013, the amount of therapy reported on the Minimum Data Set (MDS) is just enough to surpass the relevant therapy minute threshold for a given therapy RUG category.” This became commonly known as “thresholding”.

Figure 2: Allocated Therapy Minutes per Beneficiary, All Intervals



CMS Trends Memo, April 21, 2014

In the RUGs model, care may not have been delivered on patient's need and admission characteristics, but upon the payment incentive for higher therapy utilization. This payment incentive resulted in higher reimbursement for more therapy services.

Can efficient and effective care be achieved in spite of the incentives for lower therapy utilization with PDPM?

The answer is most definitely and conclusively YES. Based on naviHealth's experience, when a high-tech, high-touch clinical model is implemented, appropriate clinical behaviors change. These changes result in efficient AND effective outcomes.

The graph on the next page illustrates **longitudinal quality and efficiency outcomes demonstrated by a major Health Plan in the Northeast:**

QUALITY OUTCOMES:

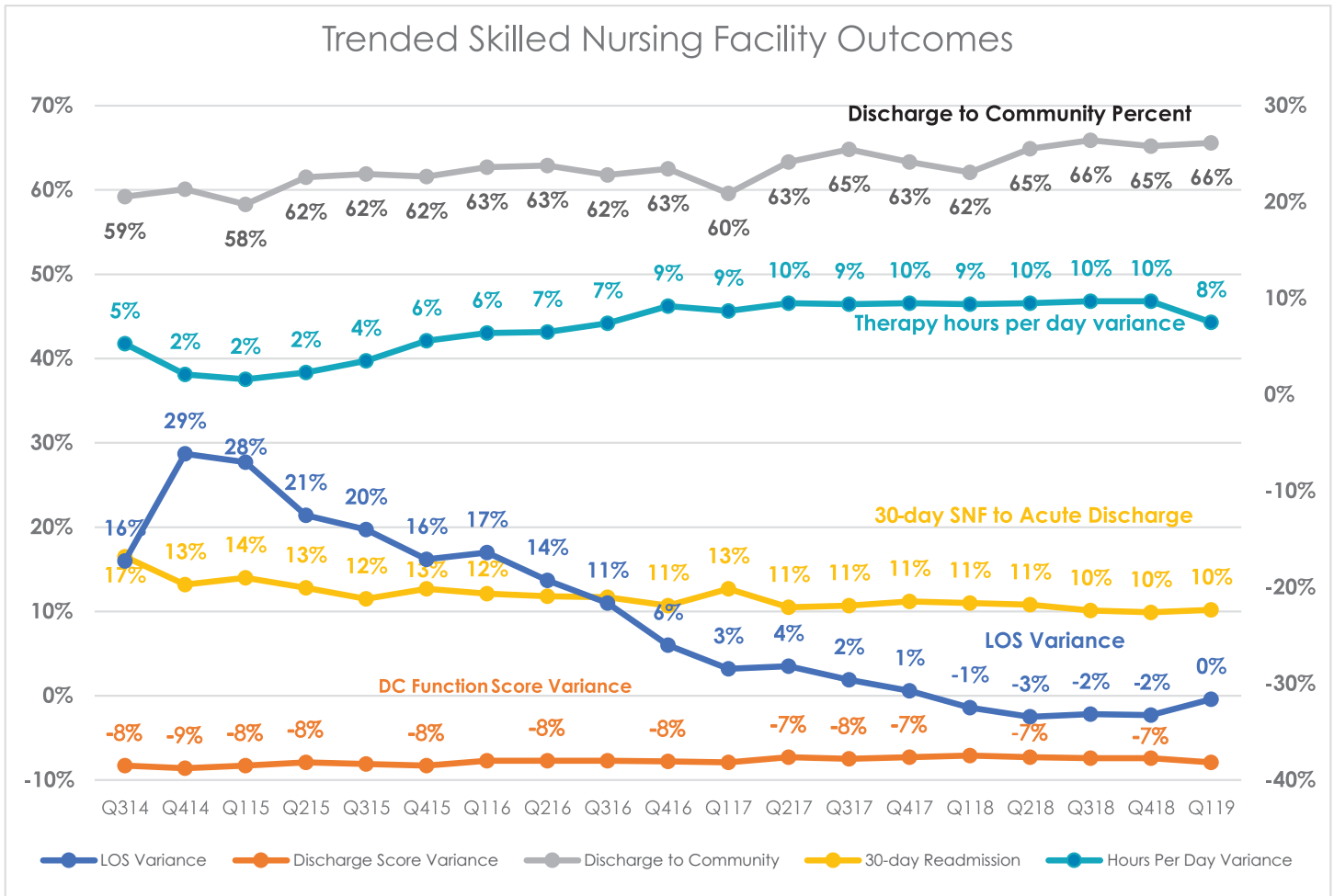
- Overall **3% reduction** in SNF to Acute **readmissions** (**yellow**)
- **Comparable** severity-adjusted discharge **functional** variances (**orange**)
- Approximately **4-6% improvement** in **discharge to community** percentages (**gray**)

EFFICIENCY OUTCOMES:

The above quality outcomes were achieved with the following efficiency improvements:

- Slightly higher skilled therapy (OT, PT and ST) services, trending from **546 (1.3 hrs/day) to 630 minutes/week (1.5 hours/day)**. (**green**)
 - These levels are well within the **RUGs Very High** (500-719 min/week) ranges.
- **Dramatic improvement** in efficiencies as exhibited by **decreasing LOS** severity-adjusted variances from **29% higher to -3% lower** than target values. (**blue**)
 - This equates to an overall LOS from an average **highest of 18.7 days to a lowest of 14.1 days**.

These significant changes in practice patterns and trends with health plans have been replicated in the Mid-West and Southeast Regions utilizing the naviHealth Clinical Model and proprietary predictive technologies.



naviHealth Data, Q3 2014 through Q1 2019

Does this indicate that an average 14.1-day length of stay (LOS) is appropriate for all therapy delivery?

No, not at all. This would be a gross misinterpretation of this data. This data demonstrates that given a severity-adjusted target LOS based upon a Best Practice dataset for this specific population, more efficient care (LOS variance) was achieved without compromising any of the quality variables (Functional gains, Readmissions, Discharge to Community). Each patient population will have a different severity-adjusted target specific to his or her unique characteristics.

What is the High-Tech High-Touch Clinical Model that naviHealth has developed to achieve these outcomes?

The naviHealth Care Management Model is a high-touch, high-tech care transition program which incorporates the use of a proprietary and predictive analytic technology **nH Predict | Function + Outcome**. Upon completion of the post-acute admission functional assessment, **nH Predict** provides the skilled nursing facility (SNF) care team with severity-adjusted predictions on various outcomes, including:

- Functional gains
- Rehabilitation intensity, in hours per day and total days of treatment
- SNF LOS
- Post-SNF discharge setting
- Non-skilled caregiver hours of assistance required upon discharge

The information provided by **nH Predict** augments the medical and social considerations discussed in the interdisciplinary team meetings and in family care conferences. The purpose is to establish realistic expectations in functional achievements, projected LOS, and most appropriate discharge destination. These critical elements are outlined within the first few days of the post-acute stay, informing and supporting the discharge planning process. Through the course of the episode of care, any anticipated or actual barriers to discharge are reviewed and addressed; expected LOS and projected functional gains are adjusted accordingly.

“The purpose is to establish realistic expectations in functional achievements, projected LOS, and most appropriate discharge destination.”

The most successful SNFs also instituted additional operational processes and care delivery practices. These best practices, along with use of the predictive data, enhanced interdisciplinary communications, care transitions, and both quality and efficiency outcomes.

nH Predict | Function Score:

The functional measurement technology is centered upon **nH Predict | Function**, which uses proven Activity Measure for Post-acute Care (AM-PAC) items, Item Response Theory (IRT) and Computer Adapted Testing (CAT) technology. Basic Mobility (BM), Daily Activity (DA) and Applied Cognition (AC) domains were assessed across a wide range of activities of daily living (ADL) and instrumental activities of daily living (IADL) functional tasks. There are 269 unique assessment questions within the **nH Predict | Function** item bank. The user needs only to answer 20-25 of them to determine a reliable functional level for each domain.

Data Points

For all episode records, both admission and discharge function were scored utilizing the **nH Predict | Function** measurement tool. These scores were determined utilizing information from the rehabilitation therapy admission and discharge assessments.

In addition, the following information was collected for each record:

- Basic demographics;
- Medical complexity, a rank-ordered severity scale of relevant co-morbidities;
- Primary diagnosis relevant to SNF admission mapped to one of 17 Impairment Groups;
- Total rehabilitation minutes delivered over the consecutive days on therapy (PT, OT and ST) during the episode.

Each patient's actual results were compared to a set of matched records from a Best Practice dataset and risk adjusted on the following covariates:

- Admission function score
- Medical complexity
- Impairment group

The Best Practice comparison dataset was composed of records from the top performing SNFs based upon efficiency and functional variances.

Summary

October 1, 2019, marks big changes for the industry with the anticipated arrival of PDPM. With these new changes come many pressing questions: How will PDPM impact rehab utilization? Can efficient and effective care be achieved in spite of the incentive to reduce delivery of care? How can health plans demonstrate longitudinal quality and efficiency outcomes in PDPM?

Recent analysis of naviHealth data and industry utilization trends have determined that value-based rehabilitation in skilled nursing facilities can be achieved with PDPM. Predictive analytic technologies provide SNF Clinical Teams with utilization targets (LOS and therapy hrs/day) which, when utilized in concert with a high-touch model, offer clinical guidance for the team. The clinical results (functional gain, readmission, discharge to community) are very positive, given the dramatic reduction in LOS.

