Partnership for Quality Home Healthcare

THERE'S NO PLACE LIKE HOME

August 31, 2018

Submitted via regulations.gov

The Honorable Seema Verma
Administrator
Centers for Medicare & Medicaid Services
7500 Security Boulevard
Baltimore, MD 21244

Re: Medicare and Medicaid Programs; CY 2019 Home Health Prospective Payment System Rate Update and CY 2020 Case-Mix Adjustment Methodology Refinements; Home Health Value-Based Purchasing Model; Home Health Quality Reporting Requirements; Home Infusion Therapy Requirements; and Training Requirements for Surveyors of National Accrediting Organizations

Dear Administrator Verma:

The Partnership for Quality Home Healthcare (the "Partnership") appreciates the opportunity to comment on payment and policy changes to the Home Health Prospective Payment System ("HH PPS") as proposed by the Centers for Medicare & Medicaid Services ("CMS") on July 12, 2018 ("proposed rule"). This comprehensive letter is intended to supplement the letter we submitted on July 31, 2018 through Regulations.gov addressing our overall view of the proposed rule, which we have also attached as Exhibit A. We submit our comments to offer constructive feedback that we believe will help avoid disruptions so that Medicare beneficiaries continue to have access to skilled home health services.

As a national coalition of skilled home healthcare providers, we are appreciative of the fact that CMS has consistently recognized the value and quality that the Medicare home health benefit provides to patients, as well as the value it creates in savings for the Medicare program. As professionals dedicated to ensuring the quality, efficiency, and integrity of the Medicare home health benefit for homebound seniors and disabled Americans we want to offer our expertise in these core competencies to improve and implement CMS's significant new payment reform. It is important that any improvements to this payment model ensure continued access to this valued benefit through continued growth, allowing more patients to be cared for in their home as an alternative to institutional services, which in turn results in savings to the Medicare program.

We acknowledge CMS's efforts to reform the HH PPS to align payment with patient characteristics, quality, and to remove utilization-based incentives and we are ready to help the Agency make changes to achieve these goals. This should be done by engaging stakeholders in a transparent and constructive process and responding to comments from beneficiaries, home health agencies ("HHAs"), physicians and other providers. We are concerned that CMS did not incorporate into the proposed rule the productive dialogue and critical policy recommendations from the many comments filed during last year's process or from the single Technical Expert Panel's ("TEP") meeting that included a broad range of providers and that produced a Final Report (the "TEP Report").[1] We urge CMS to review and incorporate many of these important recommendations before finalizing the rule.

The proposed Patient Driven Groupings Model ("PDGM") only incorporates minimal changes from last year's Home Health Groupings Model ("HHGM") proposed rule, despite widespread recognition that policy changes are necessary. The PDGM proposal is the HHGM proposal with minor modifications.[2]

Our primary concerns regarding the proposed PDGM relate to the following issues:

- **Behavioral Assumptions:** The proposed rule relies on behavioral assumptions for coding and Low-Utilization Payment Adjustments ("LUPA"), that are based on a model that is untested as it has not yet gone into effect. Such assumptions are not based on actual evidence and thus may not be accurate. Therefore, in order to protect the integrity of the payment system and prevent unintended consequences, CMS should delay relying on such behavioral assumptions until it has actual evidence on which to base its assumptions. While we believe CMS should not rely on such unsupported assumptions, in the alternative, we urge CMS to modify the assumptions to correct the punitive negative 6.42% under the proposed rule. **The Partnership recommends CMS not apply any behavioral adjustments unless they are based on actual and documented behavioral changes by providers once the PDGM is implemented.**

- **Budget Neutrality:** CMS's proposed rule appears to suggest that aggregate spending must be capped resulting in limiting beneficiary access to the Medicare home health benefit. However, **the Partnership does not believe this was the intent of the law and urges CMS to ensure its interpretation protects beneficiary access to the home health benefit.**

- **Cost Reports:** The Partnership is concerned about the use of unaudited cost reports as a basis for establishing new payment rates. Given the lack of cost report audits for the past 18 years, there is a growing inconsistency in the way agencies report costs by category rendering them unreliable for the purpose of discipline based cost analysis.

[1] A copy of the TEP Report is attached as Exhibit B.
[2] For reference, we are also providing our comment letter on the CY 2018 proposed rule, Exhibit C, as the majority of these concerns are identical to those we have with the CY 2019 proposed rule.

The Partnership firmly believes that CMS should implement payment reform based on data that is accurate and reliable. We do not understand why CMS has decided to change from the time tested methods of using Wage Weighted Minutes of Care ("WWMC") and Bureau of Labor Statistics ("BLS") data.

- **Clinical Groupings:** The Partnership is concerned about the accuracy of the payment model because it does not consider previous comments by the general public, including beneficiary groups and Congress. It also does not include key clinical group recommendations from the single TEP member meeting that included a broad array of experts.

- **Timing and Industry Feedback:** CMS states that this new program will be implemented in 2020[3] but we do not believe the program should be implemented until CMS has completed a comprehensive review of the key issues raised and there are assurances that there is sufficient information and guidance to HHAs, physicians, and Medicare Administrative Contractors ("MACs") to ensure a smooth transition and no unintended consequences. Further, CMS should evaluate the impact the program will have on Star Ratings, regional variations, revenue, and case volume, among other key issues. CMS should monitor the impact to ensure no disruption in access to services for patients. We recommend that CMS form an advisory committee made up of consumers, providers, and physicians to provide regular feedback and advice on necessary technical changes to this reform.

- **Data:** While CMS relies on data to make many decisions in evaluating the transition to a new system, we ask that there be more transparency in what data is used and what assumptions are relied upon. In particular, we are hopeful to obtain this information for future comment periods as it relates to budget neutrality, behavioral assumptions, and other factors in building this new payment system. Transparency in the data and assumptions relied upon permits comments to be more precise.

- **Regional Variation:** The proposed rule appears to have a disparate impact on various regions of the country. We urge CMS to look at this issue closely to ensure all Medicare beneficiaries, especially those in rural communities, continue to have access to a valued skilled home health benefit.

I. Behavioral Assumption Not Based on Actual Behavior

CMS should not implement cuts to the new payment based on the "potential" for changes in behavior without evidence that such behavior will or has occurred under the new payment system. The proposed behavioral assumption changes includes a 6.42% reduction which would exceed past actual case mix adjustments made by CMS since the development of the current

[3] 83 Fed. Reg. 32340, 32381 (July 12, 2018).

payment system. As discussed above, we believe that there are significant legal and policy implications of making such reductions without actual evidence.

CMS should only implement behavioral assumptions when there is actual data demonstrating that the behavior change did occur and when CMS can measure the scope of such adjustment. We believe that CMS has proposed behavioral changes in other payment systems AFTER the payment system was implemented and WHEN there was an understanding of the scope and application of the behavior. We urge CMS to consistently apply this standard so that data, not predictions, is used in establishing new payment policy.

There are some behavioral issues that may not occur if CMS provides clear guidance as to the operational implementation of the program. One example is the assumed behavior change that 100% of the time if a secondary diagnosis would result in higher reimbursement, it would be moved to primary. However, there is not sufficient data to understand how the predicted behavioral assumptions were made and how broadly they may occur. Furthermore, we have concerns that policies which rely on unsupported assumptions may impact the integrity of the coding system and reliability of future diagnosis based data. We ask that all payment rules are clear and grounded in evidence so that HHAs can ensure they are in compliance with all requirements prior to any adjustments being made.

Legally, we are concerned that CMS should do more to ensure that it is complying with the requirements of the Administrative Procedure Act ("APA") under the proposed rule. Courts have consistently held that an agency "must examine relevant data" and where it fails to do so, it can be found to be acting in an arbitrary and capricious manner.[4] Prior to implementing this new payment model, the Bipartisan Budget Act of 2018 ("BBA of 2018") – and the APA – require CMS to provide data or evidence to support the behavioral assumptions it is making. However, CMS has instead made guesses as to the behaviors of HHAs. The assumptions are not grounded in facts and are unsupported by observed evidence. Courts have held that federal agencies cannot make presumptions, but instead must use critical factual material and "relevant data" to support their position. Until CMS can provide factual material and "relevant data" to support the behavioral assumptions under the new payment model – which will not be available until at least 2021 – CMS must avoid making any behavioral payment adjustments. We have attached a full legal memorandum prepared by Greenberg Traurig LLP as Exhibit D, which discusses the legal implications of notice and comment rulemaking and the lack of "relevant data" and critical factual material.

Finally, we note that many other new payment systems did not implement behavioral changes absent actual evidence that a change was necessary once the new system went into effect. Consistent with the transitional principles discussed above, CMS did not include a behavioral adjustment for Skilled Nursing Facilities ("SNF") in the PDPM proposal in the 2019 SNF Final Rule because CMS could not estimate how the behaviors would change:

[4] *See Motor Vehicle Mfg. Ass'n* , 463 U.S. 29 (1983).

> …the impacts presented here assume consistent provider behavior in terms of how care is provided under RUG–IV and how care might be provided under the proposed PDPM, as we do not make any attempt to anticipate or predict provider reactions to the implementation of the proposed PDPM. That being said, we acknowledge the possibility that implementing the proposed PDPM could substantially affect resident care and coding behaviors. Most notably, based on the concerns raised during a number of TEPs, we acknowledge the possibility that, as therapy payments under the proposed PDPM would not have the same connection to service provision as they do under RUG–IV, it is possible that some providers may choose to reduce their provision of therapy services to increase margins under the proposed PDPM. However, we do not have any basis on which to assume the approximate nature or magnitude of these behavioral responses, nor have we received any sufficiently specific guidance on the likely nature or magnitude of behavioral responses from ANPRM commenters, TEP panelists, or other sources of feedback. *As a result, lacking an appropriate basis to forecast behavioral responses, we do not adjust our analyses of resident and provider impacts discussed in this section for projected changes in provider behavior. However, we do intend to monitor behavior which may occur in response to the implementation of PDPM, if finalized, and may consider proposing policies to address such behaviors to the extent determined appropriate*.[5]

The HH PPS should follow this same analytical, policy, and legal logic: If you do not have actual evidence of the behavior, then it should not be included. However, monitoring behavior "which may occur in response to the implementation" – and making adjustments based on that observed behavior – would be appropriate to determine whether an adjustment needs to be made.

We believe that CMS should adopt the following policy in a consistent manner as contained in the 2019 SNF Final Rule: "Should we discover such behavior, we will flag these facilities for additional scrutiny and review and consider potential policy changes in future rulemaking."[6] Further, a departure from this guiding principle may be seen as an "[u]nexplained inconsistency" in agency policy, which has been seen to be "a reason for holding an interpretation to be an arbitrary and capricious change from agency practice."[7]

[5] 83 Fed. Reg. 39162, 39255 (Aug. 8, 2018) (emphasis added).
[6] Id. at 39245.
[7] *National Cable & Telecomms. Ass'n v. Brand X Internet Servs.*, 545 U.S. 967, 981 (2005).

II. The Patient Driven Groupings Model Does Not Accurately Reflect Patients' Needs

A. CMS Was Not Responsive to Industry Concerns

After significant stakeholder review and feedback to CMS on HHGM – and to ensure compliance with applicable law – we urge CMS to review and analyze all comments on the design and implement changes to this payment model so that there are no unintended consequences. We request that CMS work to correctly implement PDGM through an adoption of reasoned changes in order to reduce the need for disruptive cuts based on behavior change assumptions. In doing so, CMS must "examine the relevant data and articulate a satisfactory explanation for its action including a rational connection between the facts found and the choice made." *Motor Vehicle Mfg. Ass'n v. State Farm Mutual Auto. Ins. Co.*, 463 U.S. 29, 43 (1983).[8]

During the last year's rulemaking cycle, CMS received nearly 1,400 comments on the CY 2018 HH PPS proposed rule. However, during this current rulemaking cycle, no real significant changes were made to the model. To ensure that the public notice and comment process is more than just a perfunctory gesture, CMS should examine pathways to make improvements based on the comments submitted, and ensure it thoroughly responds to and addresses concerns.[9]

In addition, CMS did not hold a TEP meeting on the proposal in 2017 with a broad array of experts. CMS convened a TEP meeting in 2018; however, the proposed rule contains few of their recommendations.

After withdrawing HHGM last year, CMS committed to finding an alternative and promised to "*engage with stakeholders* to move towards . . . a more patient-centered model" and "take the comments submitted on the proposed rule into *further consideration* regarding patients' needs that strikes the right balance in putting *patients first*."[10]

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[8] *See*, *e.g.*, *Banner Health v. Price*, 867 F.3d 1323, 1349 (D.C. Cir. 2017) (reversing summary judgment where agency provided an inadequate explanation for its calculations); *Sierra Club v. EPA*, 863 F.3d 834 (D.C. Cir. 2017) (where the agency fails to explain its decision or provides an inadequate response to comments, the courts have not hesitated to set aside an agency's rules.).

[9] *See Motor Vehicle Mfg. Ass'n v. State Farm Mutual Auto. Ins. Co.*, 463 U.S. 29 (1983) (an agency's actions will be set aside if they are "arbitrary, capricious or an abuse of discretion" and can be found where an agency fails to provide an explanation for the adoption of rules following notice and comment rulemaking under the APA); *see Global Tel* Link v. Federal Commc'ns Comm'n*, 859 F.3d 39, 55-56 (D.C. Cir. 2017) (finding the FCC's categorical exclusion of cost information "hard to fathom" and its reasons for doing so "implausible.").

[10] CENTERS FOR MEDICARE & MEDICAID SERVICES, CMS Announces Payment Changes for Medicare Home Health Agencies for 2018, Nov. 1, 2017, https://www.cms.gov/Newsroom/MediaReleaseDatabase/Fact-sheets/2017-Fact-Sheet-items/2017-11-01-2.html (emphasis added).

PDGM contains a number of elements that differ significantly from today's payment model. It is notable that when CMS has implemented "documentation and coding" and similar types of payment adjustments in other payment systems, it has done so either, 1) based on extensive data analytics and research justifying the adjustment; 2) on a transitional basis; or, 3) in modest amounts.

For example, when general acute care and long-term acute care hospitals transitioned from DRGs to MS-DRGs, in the CY 2008 rulemaking cycle CMS finalized a 4.8% behavioral adjustment that was to be implemented over a 3-year period. These adjustments were based upon extensive research and technical data analytics. Another example is CMS's implementation of the IRF PPS in 2002, which included a modest 1.16% behavioral adjustment based on CMS's view that prospective payment would shorten IRF patients' length-of-stay.

In contrast to HHGM and PDGM, in the skilled nursing facility ("SNF") setting, specifically in the CY 2019 SNF final rule (the "2019 SNF Final Rule") CMS acknowledged its initial proposal in May 2017 to transition from the Resource Utilization Groups, Version IV model (RUG-IV) to a new proposed Resident Classification System, Version I (RCS-I) model did not adequately address patient and stakeholder needs. Therefore, CMS incorporated stakeholder feedback and provided "comprehensive" revisions in a new Patient-Driven Payment Model which it believed would "better account for resident characteristics and care needs while reducing both systemic and administrative complexity."[11] During this process, CMS's contractor "conducted additional analyses based on the comments received and made a number of modifications to the payment model" and held an additional TEP. In the SNF setting, CMS solicited and *incorporated* significant revisions before finalizing the new model. The same is not true for CMS's proposal for PDGM.

PDGM does not reflect these transitional principles which are vital to ensuring patients' access to the Medicare home health benefit is not disrupted.

The proposed rule provides that "[r]efinements were made to the comorbidity case-mix adjustment while all other variables remain as proposed in the CY 2018 HH PPS proposed rule (for example, clinical group, functional level, admission source, and episode timing)."[12] We ask CMS to reconsider all the public comments during this process and include those comments from 2017 on the CY 2018 HH PPS proposed rule. We also believe that CMS should further discuss and seriously consider the TEP recommendations before finalizing this new payment.

B. Eligibility and Administrative Costs in First 30-Day Payment Period of Each 60-Day Episode

By shifting to 30-day units of payment, PDGM does not address the additional overhead costs borne by providers during the first 30-day period. CMS should alter the case mix weights to

[11] 83 Fed. Reg. 39162, 39185 (Aug. 8, 2018).
[12] 83 Fed. Reg. 32340, 32415 (July 12, 2018).

address this reality. At a minimum, the first 30-day payment of an episode should take into account the costs associated with eligibility of the benefit. This requires HHAs to ensure all documentation is complete (face-to-face encounter and homebound status) and that a plan of care is developed (called a "comprehensive assessment" in the proposed rule). These costs are not likely replicated in the second 30-days and we believe should be included only in the first 30-day payment. If another episode of care is warranted, the comprehensive assessment should be completed in the first 30-days and such costs should be captured during that period of time.

C. CMS Should Consider a Delay in Order to Prevent Harm to Beneficiary Access

CMS should delay its implementation of the new payment model. As noted by CMS, implementation should only begin when CMS can ensure that HHAs, physicians, and MACs have received sufficient education and training, all relevant manuals have been revised and updated, and claims processing systems have been changed.[13] This will ensure a smooth transition to the new model and also ensure that there is no disruption in access to services for patients.

A delay is necessary to ensure that there is sufficient time for CMS to issue appropriate guidance, provide proper training and implement necessary operational changes to address the technical and clinical issues raised by the commenters and the TEP Report. CMS acknowledges that it has the authority to "implement the PDGM for home health periods of care beginning on or after January 1, 2020."[14]

As an alternative to a delay, we encourage CMS to conduct a limited and targeted demonstration program to evaluate the accuracy of the model, the need for greater operational guidance, and the effect that the change will have on beneficiaries.

As outlined above, PDGM will result in many unintended consequences in terms of its implications for home health market stability and subsequently beneficiary access to home health services. Many of the problems in HHGM remain present in PDGM. The Partnership commissioned Dobson DaVanzo & Associates ("DDA") to conduct analyses of PDGM, a copy of which is attached as Exhibit E. Among DDA's findings, we are specifically very concerned about the impact PDGM will have on the redistribution of revenue, case volume, and Star Ratings, as highlighted in the charts below.

i. Distribution of HHA Projected Revenue Change Under PDGM Implementation

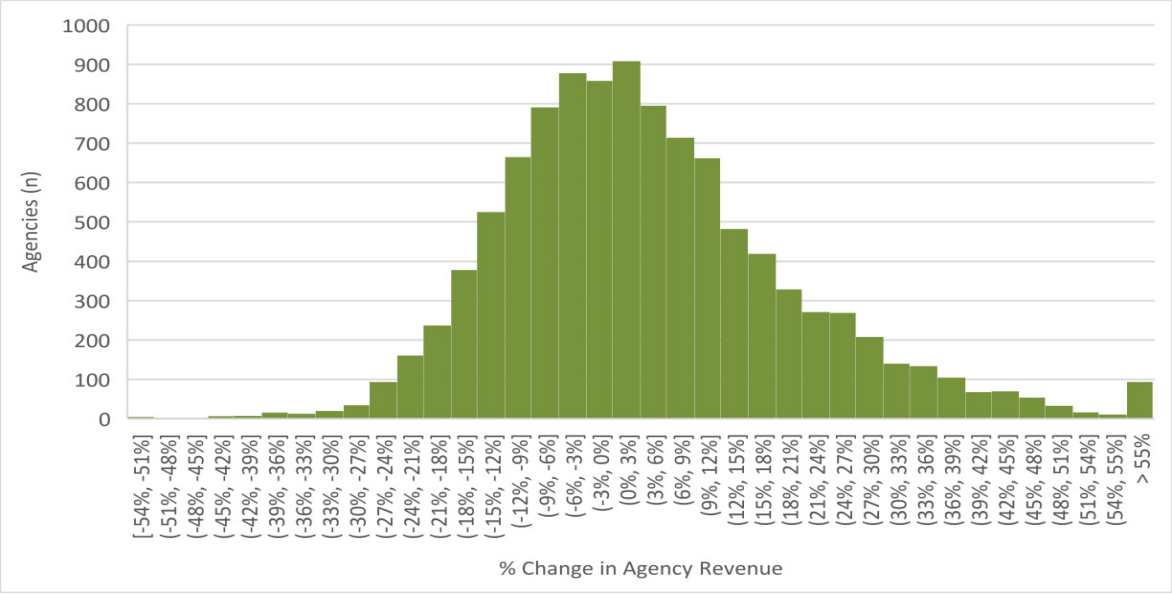
A rapid switch to PDGM may yield extraordinarily high levels of revenue redistribution across providers – DDA projects 48% of HHAs could experience at least a +/-10% change in revenue under their current case mixes, as shown in Chart 1 below.

[13] 83 Fed. Reg. 32340, 32381 (July 12, 2018) ("The implementation of the PDGM will require provider education and training, updating and revising relevant manuals, and changing claims processing systems.").
[14] Id.

When changes of this magnitude were implemented in the late 1990s, significant and detrimental impacts were observed across the home health landscape which Medicare was compelled to reverse:[15]

- Agency impacts:
  - There was a net 15% reduction in the number of Medicare HHAs.[16]
- Beneficiary impacts:
  - Home health utilization dropped by 29%, from 104 home health users per 1,000 in 1996 to 72 users per 1,000 in 1999.[17]
- System impacts:
  - Program payments were reduced from $16.8 billion in 1996 to $7.9 billion in 1999.
  - The industry had not fully recovered as of 2007.[18]

Chart 1[19]



[15] Adapted from Dobson et. al. presentation "The Home Health Groupings Model (HHGM)", Dobson DaVanzo and Associates, Slide 3, Dobson DaVanzo and Associates Presentation, October 25,2017.

[16] Note: The actual closure rate was 26%; the entry of new agencies provided a level of offset. Source: "Agency Closings and Changes in Medicare Home Health Use, 1996-1999." Page 7. U.S. Department of Health and Human Services Assistant Secretary for Planning and Evaluation Office of Disability, Aging and Long-Term Care Policy. July 2003. https://aspe.hhs.gov/system/files/pdf/74761/closings.pdf.

[17] Average county-level rate of decline in HHA utilization. Source: Ibid. Page 6.

[18] Program payments were $15.6 billion in 2007. Source: Health Care Financing Review 2008 Statistical Supplement. Table 7.1, Trends in Persons Served, Visits, Total Charges, Visit Charges, and Program Payments for Medicare Home Health Agency Services, by Year of Service: Selected Calendar Years 1974-2007. Centers for Medicare and Medicaid Services. https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/MedicareMedicaidStatSupp/Downloads/2008_Section7.pdf#Table%207.1.

[19] Chart 1 does not include behavioral assumption reductions, as these cannot be predicted at an agency level from the HH-OASIS LDS dataset.

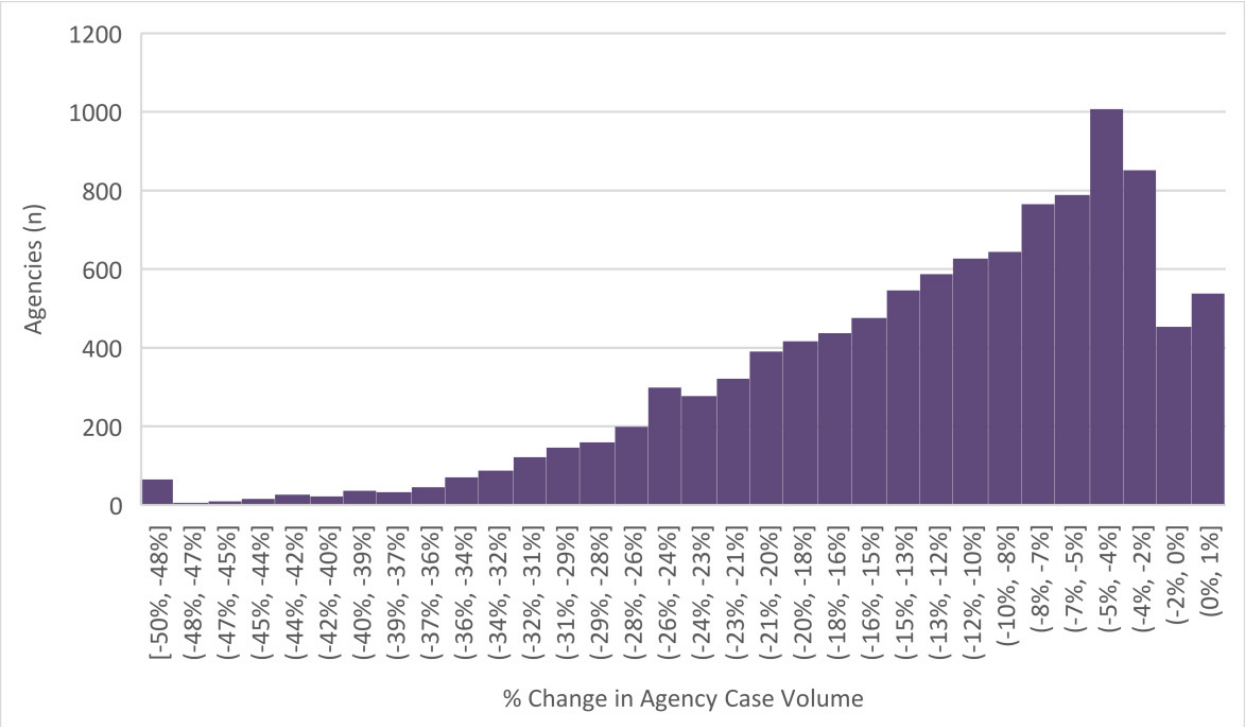
ii. Distribution of HHA Projected Case Volume Changes is Significant

Changes in case volume in large part drive the projected revenue changes described above and in Chart 1, which illustrates this dramatic change. This projected change in revenue, as identified in the DDA analysis, will likely result in significant shifts and potential disruption in access to patient care for Medicare beneficiaries. In addition, under PDGM, the system would have an overall apparent case volume drop of 14.9% distributed across facilities (shown in Chart 2, below). This change in case volume acts as a second order of revenue redistribution after the initial change to new case weights – the "fall off" is due to a portion of 60-day episodes only converting to a single 30-day period in the new system instead of two. The combined effect of case payment and volume changes are shown in Chart 1.

The average HHA is expected to experience a 10.4% reduction in volume under the same case mix and practices, with over five thousand HHAs projected to experience reductions greater than 10%.

These are monumental shifts that will undoubtedly be very disruptive and likely lead to instability in the Medicare home health delivery system, which will in turn negatively compromise Medicare beneficiary access to care.

Chart 2



iii. PDGM Would Improperly Skew the Star Rating System

From the Partnership's analysis of the publicly available data showing Star Ratings for all HHAs combined with the publicly available summary PDGM impact file by HHA, we believe that PDGM would result in lower quality Star Rated agencies receiving a material increase under PDGM while higher Star Rated agencies would have their payments decreased. Such a result is directly contrary to the purpose of the Star Rating System which was designed to highlight and reward those high-quality providers and reduce payments to lower-quality providers, while showcasing their lower quality rankings.

Chart 3

Star Rating	Agency Count	Revenue Impact %
1.0	35	11.8%
1.5	357	8.5%
2.0	936	4.2%
2.5	1,307	1.2%
3.0	1,626	0.5%
3.5	1,653	0.1%
4.0	1,360	-1.2%
4.5	1,001	-2.3%
5.0	490	-0.8%

III. Additional Key Issues in the Proposed Rule

A. Budget Neutrality Should Not Cap Home Health Payments

CMS must clarify that the new payment methodology will not result in any limits on the overall growth and availability of the home health benefit. While some have interpreted the proposed rule as potentially implementing the PDGM in a non-budget neutral fashion, such an interpretation appears to depart from the statutory language requirements that link the budget neutrality assumptions about behavior changes to the implementation of the 30-day unit and case mix adjustment factors.

We do not believe that capping the overall payment approach to budget neutrality was the intent of the law. The plain language of the statute clearly requires the Secretary to put forward assumptions associated with the home health payment reform changes involving the new 30-day unit of service and the new case mix adjustment factors. In fact, CMS itself notes that the law is not intended to be broadly applicable, but rather applicable only to the 30-day unit of service and new case mix adjustment factors.[20] Consistent with this requirement in the law, the Secretary's determination of the impact of differences between actual and assumed behavior should be analyzed through the lens of those differences attributable to the 30-day

[20] 83 Fed. Reg. 32340, 32380 (July 12, 2018).

unit of service and changes in case mix adjustment factors. We urge CMS to clarify this issue quickly to avoid any disruption in the benefit.

When making budget neutrality adjustments, it is important that CMS consistently make its calculations and assumptions available and be more explicit and quantifiable in its reasoning. We also believe it is important to provide information on what will happen prospectively in implementing the budget neutrality factors so that all information can be easily replicated and understood by the industry.

We are concerned that while the proposed rule highlights that an increase in volume of Medicare beneficiaries receiving home health care "may represent a positive outcome of the PDGM", CMS has also expressed a desire to cap home healthcare spending. The capping of home health spending runs completely counter to overall policy goals of federal policy initiatives over the past years, particularly as outlined in the Affordable Care Act, which emphasized the need for more home and community based care delivery options and solutions. Home health providers help alleviate the financial pressure that Medicare faces by delivering cost-effective care. In addition to playing an essential role in the recovery of vulnerable seniors, low-cost home health care is being substituted for high-cost institutional post-acute care under the CMS Innovation Center's alternative payment models, including ACOs, CJR, and BPCI models.

We are concerned that the present model does not appear to reflect the other attributes or reasons that may affect the amount of spending on home healthcare. There are many reasons, aside from the introduction of a new payment model, as to why total Medicare home healthcare spending can vary from estimates. Patient volumes may be greater than projected because the patients have been shifted to home-based care from more expensive care settings. Additionally, has CMS accounted for the increasingly older Medicare population or the fact that health care reform initiatives have aimed to maximize care delivery to more chronically ill patients? Further, patients shifted to home healthcare may have conditions or illnesses which require longer stays. Expanding care delivery in the home has been emphasized in nearly every new federal and state health policy change over the past decade aiming to improve value and costs, improve access, and better manage the most complex and chronically ill patients. Capping or limiting home health spending during a transition to a new payment model seems counter intuitive and contrary to care delivery policy goals of this Administration.

B. Concerns with the Validity and Reliability of Cost Reports

HHAs inputs, as demonstrated through cost reports, do not reflect the effects of changes in utilization, provider payments, and provider supply that have occurred over the past decade. Since cost reports have not been audited for any purpose since the 1990s, they are an inaccurate source of resource use data. Further, cost report data provides an unfair advantage to facility-based agencies that have the ability to allocate indirect overhead to the cost of services.

In the February 1, 2018 TEP, TEP members strongly advised that cost reports *not* be utilized as the basis of payment determination *until and unless* CMS begins to audit the cost reports and can assure they are consistent in their reporting and are accurately filed. Because cost reports are not audited by CMS and contain inconsistencies from HHA to HHA, they do not represent an accurate and reliable dataset upon which to base the HH PPS.

The Wage-Weighted Minutes of Care ("WWMC") method should continue to be the basis for payment determination among HHRGs until cost reports, or another source of accurate and reliable information, can be assured to be reliable and consistent enough to use.

It is very clear that PDGM will reward inefficient HHAs with historically high costs. The use of cost report data in lieu of WWMC favors facility-based agencies because they have the ability to allocate indirect overhead costs from their parent facilities to their service cost. The Medicare Payment Advisory Commission's ("MedPAC") 2017 Report to Congress effectively reinforces this point, where it states that "[t]he Commission includes hospital-based HHAs in the analysis of inpatient hospital margins because these agencies operate in the financial context of hospital operations. Margins for hospital-based agencies in 2015 were negative 14.8 percent. The lower margins of hospital-based agencies are chiefly due to their higher costs, some of which may be due to overhead costs allocated to the HHA from its parent hospital. Hospital-based HHAs help their parent institutions financially if they can shorten inpatient stays, lowering expenses in the most costly setting."[21]

Cost report data also provides an unfair advantage to provider types that have been historically inefficient operators. To the extent that inefficient providers tend to serve a distinct set of patients, and efficient providers a different set of distinct patients, these differences are incorporated into the resource use. Thus the case-mix for these patient types is reallocating dollars to inefficient providers from those who have been more efficient with their delivery of services as the result of staff productivity, efficient visit utilization, lower turnover rates, and technology investments.

Based on our operational experiences with clinical staffing labor costs, HHA cost report data suggests more parity exists between costs regarding skilled nursing ("SN") and physical therapist ("PT") than in fact exists. The Bureau of Labor and Statistics ("BLS") data showing a 35-40 percent difference between SN and PT costs are more reflective of our human resources/staffing experiences in the markets where we operate whereas the cost report data suggest a delta of only 14 percent.[22] As such, the use of cost report data may result in PDGM *over*paying for nursing services and *under*paying for therapy services.[23]

[21] MEDICARE PAYMENT ADVISORY COMMISSION, REPORT TO THE CONGRESS: MEDICARE PAYMENT POLICY (March 2017), at pg. 247.
[22] 83 Fed. Reg. 32340, 32388 (July 12, 2018).
[23] According to the BLS, a registered nurse earned an average annual salary of $73,550 in 2016 compared to the average annual salary for physical therapist was $88,080. The best paying work setting for PTs was home health, with an average annual salary of $96,070.

In response to comments made by CMS in the proposed rule relating to one of the Partnership's comments from the 2018 proposed rule, we do not understand the correlation CMS is attempting to make between contract labor costs that are captured on cost reports and the relative parity between actual skilled nursing and therapy costs incurred by HHAs. As CMS notes, contract labor costs consist primarily of therapy costs for HHAs. In reality, it is typically more expensive for HHAs to use contract therapy companies to provide services to patients than for them to employ therapists on staff. Thus, including contract therapy costs as part of the resource use calculation will widen the gap between nursing and therapy costs. Many HHAs mistakenly report back office nursing expense in direct care nursing costs on cost reports, even though those nurses are minimally involved, if at all, in actual direct patient care. Those nurses typically oversee the clinical provisions of care, yet frequently get allocated only to direct nursing costs. This artificially inflates the nursing costs on the cost report and artificially decreases the actual therapy costs. With more education from CMS and more effective auditing practices, this could be improved in the future. However, we do not believe CMS should use this data at this time given that it is not audited and there are no assurances it is correct.

C. MMTA Clinical Grouping Is Too Large

The Medication Management Teaching and Assessment ("MMTA") incorporates too large of a share of overall patients to accurately reimburse for all episodes that fall into that category. More than 55% of all episodes fall into a single clinical grouping. While the TEP Report aptly notes, "The majority of TEP members indicated that the MMTA subgroup should be split into subgroups", the proposed rule does not include this in PDGM. The TEP was an important step to help guide CMS's rulemaking—when CMS does not adopt the recommendations from the TEP we believe it is vital for CMS to provide stakeholders with rationale for its decision making. The lack of the creation of a more refined MMTA subgrouping is a good example of a TEP recommendation that would have improved the PDGM payment system, yet was not considered or incorporated.

The r^2 value of the PDGM, like the HHGM, is lower than desired. This is in large part because home health clinicians do not determine their treatment pattern based upon clinical diagnoses and as such, deriving a payment model from diagnoses using historical data from the home health industry does not work well. Clinicians typically determine their treatment patterns based upon patient impairments.

While there are best practices for teaching patients how to manage certain clinical diagnoses and comorbid conditions, patients' corresponding impairments are the primary focus of clinicians so that patients can become more independent and achieve their goals from the home health plan of care.

Home health clinicians do not treat diagnoses, they treat the body structure and function impairments that are derived from the diagnosis within the patient-specific environment, which includes unique socio-economic factors. For example, home health clinicians would not treat the fracture in a patient with a hip fracture. Rather, the surgeon would repair the fracture and the home health clinicians would treat the swelling, pain, immobility, and direct self-care derived from the trauma.

i. Questionable Encounters

While the proposed rule does not use the term "Questionable Encounters" ("QEs") – a term that was used throughout the CY 2018 proposed rule – the concept remains as do the concerns around its impact of limiting needed home health services from qualifying Medicare beneficiaries. The proposed rule states that CMS reviewed and re-grouped certain QE codes based on commenter feedback,[24] however, a preliminary review of the proposed rule's tables suggests the changes were very minor. In fact, out of over 64,000 codes, we only found 1 additional code included in the PDGM when compared with the HHGM. Eight additional codes were included in the PDGM that were QEs in the HHGM while 7 codes that were grouped into a clinical group in the HHGM are now QEs in the PDGM.

ii. Non-Routine Supplies

Our concerns around non-routine supplies ("NRS") in the base rate remain unchanged from those we provided on last year's proposed rule. Typically, the costs of non-routine supplies do not differ across the country (i.e., urban/rural, northeast/southwest/etc.). Thus, applying them to the base rate subjects them to wage-index adjustments and results in CMS paying more for NRS in high wage-index, urban areas, and less in low wage-index, rural areas. This may result in CMS underpaying for expensive wound care treatments for Medicare beneficiaries residing in rural and other low wage-index areas.

As CMS plans to roll these costs into each episode, we request information on whether it did so in a manner that examined the supply charge relationship by episode type or whether CMS merely added the average of all episode cost to each episode in determining the overall episode rate. We are concerned that CMS's methodology may not correctly account for the supply usage for some supply intensive episodes. Consistent with CMS's goal of determining the cost of the visits used for each episode category, we recommend that CMS conduct a thorough analysis of these costs, particularly for supplies.

Further, we are concerned about the impact that this has on the wage adjusted value of the episode payment. Currently, supplies are a total add-on amount to each episode based on the supply severity level and are not in any way subject to wage adjustment. The current episode payment for CY 2018 – 78.53% of the episode is adjusted. Under the proposed rule for CY 2019 – 76.1% will be wage adjusted. Based on our review, there is no mention of changing the

[24] 83 Fed. Reg. 32340, 32401 (July 12, 2018).

amount that is subject to wage adjustment. Assuming there is no change, it appears that 76.1% of the supply costs added to the episode reimbursement will be wage adjusted, which should not take place.

iii. Therapy

Eliminating the use of the number of therapy visits provided to determine payment is a step in the right direction to aligning payments more closely with patient needs. At the same time, in establishing the case mix adjustment factors, we encourage CMS to consider the provision of therapy, not therapy thresholds.

D. PDGM Timing Categories

Proposals that would utilize "early" and "late" categories under a 60-day episode where the initial episode is "early" and all subsequent episodes are "late" appear to be consistent with intent of the statute. However, it is important that alternative models are carefully evaluated and do not underestimate the impact on the changing needs of patients eligible for the home health benefit. In addition, we encourage CMS to discuss these changes with providers to better understand their impacts.

IV. Additional Issues in the Proposed Rule

A. Admission Source Categories

CMS's efforts to move from volume-driven payments to payments based on patient characteristics should be done following a review of comments and TEP input, but we are concerned that distinguishing the source of admission between community and institutional may increase hospitalizations and may deter community referrals. Shifts to therapy services since the 1990s have been to the benefit of patients and to Medicare and the Medicare trust fund as the home setting is preferred by the patient. Home care is more financially beneficial to the taxpayer and trust fund because it is a more cost effective alternative to receiving care in SNFs. Deterring referrals to home health from any source is an unwise policy outcome and is counter to policy goals of this Administration.

B. Functional Levels and Corresponding Outcome and Assessment Information Set ("OASIS") Items

Additional time is needed to evaluate whether the point values and proposed OASIS items accurately reflect patients' characteristics and providers' operations. We request that CMS hold an additional TEP on the proposed OASIS items and the associated points and thresholds used to group patients into three functional impairment levels under the PDGM.

C. Co-morbidity Adjustment

CMS's proposal does not account for the benefit of having viable home based services for chronic co-morbid patients with longer term needs. Longer term patients such as these may experience fewer visits over the course of each episode than shorter term patients, but they also require more community care coordination, on-call resources, and risk-stratification technologies that have not been considered and properly allocated under this proposal.

PDGM reduces payments for polychronic, comorbid patients who require multiple episodes to adequately treat all of their home health related needs. This model does not appear to fully incorporate all necessary elements to accurately predict resource use among patients. It is also important to note that inadequate home health reimbursement may ultimately result in higher costs to Medicare as a result of more polychromic patients utilizing higher cost nursing home care.

We believe the proposed rule's payment associated with the Low Comorbidity and High Comorbidity Adjustment represents only a minor improvement from the proposal under HHGM. If there is an area to increase the number of payment groups under the PDGM to improve its accuracy, the comorbidity adjustment is not the best place to do so.

D. CMS's Technical Expert Panel Was Insufficient

i. The Bipartisan Budget Act of 2018 Requires Updates to the TEP

CMS held the TEP on February 1, 2018, prior to the passage of the BBA of 2018. Although the proposed rule and the TEP Report provide that the rule satisfies all requirements of the BBA of 2018, the TEP did not in fact meet all of the requirements of the BBA of 2018. Specifically, the BBA of 2018 required CMS to consider alternative case mix models submitted during the 2017 rulemaking process, but this did not occur. We urge CMS to consider alternative case mix models which accurately reflect the needs of the Medicare home health benefit.

ii. The TEP Report Does Not Accurately Reflect Input and Recommendations Provided by TEP Participants

One example relates to a statement made regarding using cost reports as the basis of calculating resource use and thus case mix weights. The TEP Report states that "…some commenters…supported the shift to using cost report data." Some commenters at the TEP supported the shift to using cost report data *when and if* CMS begins to audit cost reports and can verify and guarantee their accuracy in order to use them. This clarification is a critical one and was omitted in the TEP Report.

The TEP Report clearly shows many concerns raised by the TEP members that remain unaddressed in the TEP Report. In addition, the industry is concerned about a lack of meaningful TEP followup concerning the following:

1. Why has CMS not held a subsequent meeting or phone call with the TEP members?

2. Have the TEP member concerns been adequately researched and addressed? If so, what information has been developed and made available to stakeholders? If not, why not?

3. Why have no changes been made to the HHGM except the minor change to the comorbidity adjustment element when so many other recommendations were made that have gone unchanged and without much explanation from CMS?

E. Change in the Low-Utilization Payment Adjustment ("LUPA") Threshold

CMS proposes to vary the LUPA threshold for a 30-day period of care under the PDGM depending on the PDGM payment group to which it is assigned. Under the PDGM, consistent with the CY 2018 HHA PPS proposed rule, CMS proposes the 10th percentile value of visits or 2 visits, whichever is higher, in order to target approximately the same percentage of LUPAs – approximately 7.1 percent of 30-day periods would be LUPAs, assuming no behavior change.

It should be noted that there is a much higher level of complexity associated with processing fluctuating LUPA thresholds, an outcome that CMS could avoid with a more streamlined approach of keeping the current LUPA threshold intact within the PDGM. For example, a patient episode that gets coded under HIPPS 2EB11 for the first 30 days and has 5 visits would be paid as a LUPA while during the second 30 days, being coded as 3EB11 with 2 visits would be paid an episodic rate. We have concerns whether this approach results in the best payment model for the industry.

More critically, since the LUPA change results in such a significant behavior change assumption by CMS, the Partnership questions whether the current LUPA threshold can remain intact upon implementation. This should be an element of the PDGM that is revisited in future years to determine if it should be modified and/or included.

F. Payments for High-Cost Outliers Under the PDGM

CMS's proposal to maintain the current methodology for payment of high-cost outliers upon implementation based on calculating payment for high-cost outliers on 30-day periods of care will have unintended consequences on HHAs. We are concerned that there are a significant number of HHAs that have low outliers today that are under the 10 percent payment cap, but will reach and exceed the outlier cap under a 30-day period of care measurement. For example, as a best practice many HHAs frontload care on appropriate patient episodes in order to better match the intensity of services provided with the acuity of the illness and impairments

being treated. This approach has proven to reduce hospitalizations during this critical time, early in the episode. As a result, many of these 30-day payment periods under the PDGM will fall into outlier payment periods whereas under a 60-day episode they were not. The 10 percent outlier cap was developed under the current payment model and needs to be significantly changed and adapted to any payment model overhaul including the PDGM. CMS should revisit the outlier calculation under the PDGM and ensure that the 10 percent cap does not impose unintended consequences in this new payment system that result in a disruption in care patterns that are currently having significant positive outcomes for the Medicare program and patients.

G. Home Health Value Based Purchasing Model ("HHVBP")

We appreciate the positive changes CMS has made to the HHVBP and support moving forward with this without delay.

CMS's proposal to remove the two OASIS-based measures, Influenza Immunization Received for Current Flu Season and Pneumococcal Polysaccharide Vaccine Ever Received, from the set of applicable measures represents a positive change. We also recommend CMS remove the pneumococcal vaccine measure from the Home Health Compare website as the measure does not reflect current ACIP guidelines and this will help make reporting consistent across programs.

We are also supportive of replacing the three OASIS-based measures (Improvement in Ambulation-Locomotion, Improvement in Bed Transferring, and Improvement in Bathing) with two proposed composite measures on total normalized composite change in self-care and mobility.

Overall, we are concerned that all of the measures are focused on improvement, when stabilization sometimes is a more appropriate goal for certain patients and believe this should be taken into consideration. We are supportive of reweighting the claims measures, especially with CMS's proposal to increase the weighting of the hospitalizations measure. However, now one measure will have a significant impact on the Total Performance Score ("TPS") and should be carefully reviewed by CMS for accuracy and proper risk-adjustments each measurement period.

We support a 60-day hospitalization measure being weighted slightly more than emergency department utilization. We are also supportive of CMS's goal of reducing the maximum number of points allowed for improvement. Weighting improvement in scores equal to absolute performance has been a significant flaw in this program and it is important to fully address this issue to reward absolute performance above improvement over prior performance.

Finally, we are concerned with the public display of TPS at this time given that the methodology is still evolving and this data only represents a subset of HH providers participating in the

demonstration. Furthermore, consumers already have access to the quality measures in VBP as the measures themselves are still publicly reported on Home Health Compare.

H. Split Percentage Payment Approach for a 30-day Unit of Payment

It is important that CMS be cognizant of the fact that home health providers are required to complete significantly more paperwork than other providers, including hospice providers. HHAs are highly dependent upon physicians who establish the plan of care and must have a face-to-face encounter with the patient, and facilities that provide the necessary paperwork for HHAs to submit to the MACs.

Any proposal to use split percentage payments based on 30-day periods of care should not slow down or impede providers' ability to bill for services on a monthly basis. CMS should ensure providers have adequate time before payments are recouped or canceled by Medicare.

CMS's proposal to prohibit newly-enrolled HHAs from receiving RAP payments beginning in CY 2020 is a constructive change. We also support CMS's proposal that HHAs, that are certified for participation in Medicare effective on or after January 1, 2019, still be required to submit a "no pay" RAP at the beginning of care in order to establish the home health episode, as well as every 30 days thereafter. In such cases, we believe that a "no-pay" RAP approach represents the best approach for the Medicare and providers. Adopting a contrary approach will pose a significant burden for healthcare technology vendors who would be forced to build a separate billing approach for new providers. Because the RAP submission is not difficult, it is therefore preferable.

Finally, we support the elimination of RAPs for all providers over time. Eliminating RAP payments is an important program integrity effort to reduce incentive for providers to enter this marketplace by giving upfront monies to providers who lack experience and financial viability to offer Medicare beneficiaries home health services.

I. HH PPS Group Software Release

CMS's proposal to discontinue the October release of the HH PPS Grouper software and provide a single HH PPS Grouper software release effective January 1 of each calendar year is an important step forward to ensure timely access of data and simplify the process.

J. Certifying and Recertifying Patient Eligibility

CMS's proposal to amend the regulations to align the regulatory text with current sub-regulatory guidance to allow medical record documentation from the HHA to be used to support the basis for certification and/or recertification of home health eligibility is an important change. CMS should explicitly confirm that home health patients only need to be recertified every 60-days – not for each 30-day period – under PDGM.

K. Remote Patient Monitoring Offers Medicare and Patients Improved Value

CMS's proposal to encourage and expand remote patient monitoring is a valued step forward for home health patients. We request that CMS support the ongoing inclusion and growth in telecommunication technologies and supporting data used to improve patient care delivered in the home, infusing it more into the Medicare home health benefit. We encourage CMS to explore reimbursement models for these technologies and care approaches for home health providers.

Telehealth is a proven and important component of health care today and vital to reducing acute care episodes and the need for hospitalizations for a growing chronic care population. Given the financial constraints on agencies under PPS, providers of care should be granted maximum flexibility to utilize cost- effective means for providing care, including non-traditional services such as telehomecare that have been proven to result in high-quality outcomes and patient satisfaction.

L. Home Health Quality Reporting Training ("HHQRP")

While generally supportive of the approach proposed by CMS governing the removal and addition of specified measures, the Partnership believes that more work must be done to ensure that any measure accounts for beneficiaries who do not have the goal of improvement. Further, the Partnership believes that measures should be tested to ensure their validity and reliability within the home setting. The home setting, as we often assert, is different than other standardized institutional care settings and presents unique challenges to caregivers and beneficiaries alike.

The Partnership is generally supportive of the CMS proposals to remove and add measures. Of the seven measures CMS proposes to be removed from the Home Health Compare instrument in 2021, the Partnership supports all of them for the reasons described below.

- Depression assessment conducted: remains too high and is in need of risk adjustment
- Diabetic foot care and PT/CG education: too high (M2401(a))
- Fall risk assessment conducted: too high no longer reported
- Pneumococcal Polysaccharide Vaccine received: does not reflect current ACIP guidelines
- Improvement of stats of surgical wounds: too limited in scope needed for risk adjustment
- ED use without hospital readmission within 30 days: consider a more broadly applicable measure, such as all-cause 60 day readmission
- Re-hospitalization first 30 days: the measure only reports whether an HHA is "Better", "Worse", or "Same" as other HHAs of this outcome (in a risk-adjusted manner). The

measure should instead report the actual percentage, rather than the categories presently used.

CMS also proposes considering the total cost associated with a measure that outweighs the benefit of its continued use when considering the removal of a quality measure. The Partnership is supportive of this approach.

M. Home Infusion Therapy Benefit

The proposed rule includes information on the implementation of the temporary transitional payments for home infusion therapy services for CYS 2019 and 2020; solicits comments regarding payment for home infusion therapy services for 2021 and subsequent years; proposes health and safety standards for home infusion therapy; and proposes and accreditation and oversight process for home infusion therapy suppliers.

Congress and CMS have made great strides to bring this essential clinical benefit into patient's homes, and that planning is underway on a transitional and permanent basis to design coverage, reimbursement and quality systems for it. Medicare-certified HHAs already play a role in delivering this critical resource to patients they serve, and so we offer our experiences as a model for future policymaking and would urge CMS to look to the experience of HHAs in delivering this benefit to patients in their homes, even before the recent statutory and regulatory expansions began to take shape.

We ask CMS to state clearly in the final rule that the new home infusion therapy benefit does not alter infusion services currently provided under the Medicare home health benefit. In particular, the Partnership suggests that Medicare-certified HHAs be allowed to bill under their existing provider number (TOB 34x) and do not require a separate supplier number, enrollment process, or state licensure regime.

HHAs provide Part B covered services currently under their HHA number (e.g. outpatient therapy) and we do not believe that has to change to continue administering home infusion services. Moreover, because of HHA's experience and since they are governed by Conditions of Participation, the application of new and additional state licensure requirements for compliant HHAs continuing to deliver home infusion therapy to Medicare beneficiaries eligible for it is not necessary.

The new Medicare home infusion benefit should be available for only those beneficiaries not eligible for the Medicare certified home health benefit. For Medicare beneficiaries eligible for home health and infusion therapy, those beneficiaries should receive their infusion therapy under the home health benefit as it currently exists.

V. Request For Information: Advancing Interoperability

There are obstacles to the effective electronic exchange of patient clinical information. We support CMS's efforts to implement a universal patient identifier ("UPI") or national patient identifier ("NPI").

The use of UPIs would also help serve CMS's goal of encouraging more efficient and cost effective care as providers would be able to access patient information more quickly and reduce instances of misdirected or duplicative care.

Today's patient matching systems have lots of room for error. Providers can mistakenly enter a duplicate name (i.e., if there is more than one John Smith), or enter patient information incorrectly (i.e., entering Sara instead of Sarah, and vice-versa). This could cause physicians to access the incorrect patient files and make treatment decisions based off of inaccurate information. UPIs would help reduce such problems.

We also want to note that the HITECH Act did not include HHAs as eligible for the payment incentives that were available to physician office or hospitals. In evaluating methods of advancing interoperability, including adding EHR use as a condition of participation, we encourage CMS to consider the need for federal investment and incentives to be developed to facilitate the widespread adoption of EHR systems.

VI. General Policy Issues

CMS's efforts to reform the health care system, including the home health payment system, are to focus it more on value, rather than volume. We agree and support these efforts to focus the HH PPS so that it more accurately aligns with patient characteristics and quality, and removes utilization based incentives. This shift is particularly important as we move to a post-acute care, value-based system.

Congress and CMS recognize the value of a unified post-acute care system. We believe such a system should be based on the needs of the patient, and not on the site of service. We believe such a system must be based on data, experience, and discussion with those who provide post-acute care within the community.

We welcome the opportunity to engage in constructive dialogue so that we can ensure that we are meeting the needs of all home health patients, while simultaneously working with CMS to control Medicare spending, and improve the value of this benefit for beneficiaries both now and in the future.

Sincerely,

Keith Myers
Chairman
Partnership for Quality Home Healthcare

cc:

Demetrios Kouzoukas
Principal Deputy Administrator & Director of the Center for Medicare

Laurence Wilson
Director, Chronic Care Policy Group

Hillary Loeffler
Director, Division of Home Health & Hospice

Enclosures

Partnership for Quality Home Healthcare

THERE'S NO PLACE LIKE HOME

Exhibit List

Exhibit A: Letter from the Partnership for Quality Home Healthcare to The Honorable Seema Verma, July 31, 2018

Exhibit B: Medicare Home Health Prospective Payment System Summary of the Home Health Groupings Model Technical Expert Panel Meeting and Recommendations, Abt Associates, June 2018

Exhibit C: Partnership for Quality Home Healthcare Comment Letter on CY 2018 Home Health Proposed Rule, September 21, 2017

Exhibit D: Legal Memorandum prepared by Greenberg Traurig LLP, August 30, 2018

Exhibit E: Evaluation of the Patient Driven Groupings Model on the Home Health Marketplace, Dobson Davanzo, August 30, 2018

Partnership for Quality Home Healthcare

THERE'S NO PLACE LIKE HOME

July 31, 2018

The Honorable Seema Verma
Administrator
Centers for Medicare & Medicaid Services
7500 Security Boulevard
Baltimore, MD 21244

Re: Responsibly Strengthening the Medicare Home Healthcare Benefit

Dear Administrator Verma:

Today, I am writing to you on behalf of the Partnership for Quality Home Healthcare ("PQHH"). We are a national coalition of skilled home healthcare providers who are proud to offer a skilled care benefit to Medicare beneficiaries. Every year, 3.5 million patients rely on skilled health care services delivered in their own home to recover after an illness or injury. Our patients and their families count on us for exceptional care and unparalleled service. We take seriously the trust patients and families have placed in us to help them. Homecare uniquely provides patients with dignity and compassion during their recovery. We are also proud that the Centers for Medicare & Medicaid Services ("CMS") has consistently recognized the quality, value and growth of this benefit to patients, and the value it creates through savings for the Medicare program. The Medicare home healthcare benefit is particularly important to the vulnerable population of seniors who tend to be older, sicker, and poorer than all other beneficiaries.

At the PQHH we are committed to improving the core components of this benefit. We recognize that payment models need to be periodically reviewed and evaluated, and balanced between the needs of patients and the needs of the Medicare program. We believe that we can find practical solutions that serve these important goals.

Retaining value for all communities served is always critically important. However, as home health providers – along with physicians and patients we serve – we want to offer our expertise in the core competencies to improve and implement CMS's significant new payment reform for the home health benefit. We want to improve the Medicare program payment model so that this valued benefit can grow for patients, allowing them to be cared for in their home as an alternative to institutional services, in turn providing savings to the Medicare program.

Background

In 2017, CMS proposed a new payment model for the Medicare home health benefit. This was a model proposed to quickly transform the payment for these services, yet little data was available and it had not been tested. CMS received many comments on the proposed rule from providers, patients, and even Congress. In the short comment period, we invested time and resources evaluating all components of the proposed payment model and shared our research, data, and legal and policy analysis regarding the impact with CMS in our comment letter. We also made recommendations that CMS could undertake to ensure there would be no disruption in the benefit, including convening a Technical Expert Panel ("TEP").

Earlier this year, CMS convened a TEP. That panel included representatives from all types of providers and organizations with a "hands on" understanding of the benefit – including its strength and weaknesses. CMS experts participated as did CMS consultants, Abt Associates ("Abt"). Many of those that participated viewed the meeting as very helpful and the final report included many of our recommendations. However, the CY 2019 Home Health proposed payment rule made very minimal changes to the CY 2018 proposed payment rule retaining some areas of significant concern.

I would like to request a meeting with you so that we can discuss a way to engage with CMS in productive discussions regarding these proposed rules. We support CMS's efforts to reform the home health prospective payment system to more accurately align payment with patient characteristics, quality, and to remove utilization based incentives. We believe that by working together we can meet the needs of the patients, help control Medicare spending, and improve the value of the home health benefit.

We are drafting comments to this year's proposed rule that will be consistent with our previously submitted comments, containing many of the same points we have previously raised. However, we want to raise the four issues that continue to be of concern.

I. Concerns with the Patient Driven Groupings Model ("PDGM")

As highlighted, we appreciate the opportunity we had to work with CMS and Abt during the February 1, 2018 TEP. During this TEP, we provided feedback on many critical issues with PDGM, including issues relating to the clinical groupings, certain behavioral assumptions that have not yet been observed, and our concern about the use of cost reports.

We were pleased to help inform the TEP and encouraged to see the TEP acknowledge many of our recommendations in the final report. Expert panels, like the TEP, are critical pieces to helping provide hands on expertise on the impact of changes and how they will affect the program ensuring that patients continue to receive the high-quality care that they require and that we are dedicated to providing. However, we are concerned that the proposed rule does not include many of the critical policy recommendations of TEP members.

Clinical Groupings

The clinical groupings approach presents several concerns that have not been addressed by the PDGM. While more than 55% of all episodes fall into a single clinical grouping (MMTA) and the TEP summary report stated that "[t]he majority of TEP members indicated that the MMTA subgroup should be split into subgroups," the PDGM does not adopt this recommendation. We would like to better understand why this policy recommendation has not been included so that we can work with CMS to address any concerns it has regarding this recommendation.

The r^2 value of the PDGM is also lower than desired, in large part because providers do not determine their treatment based on a patient's clinical diagnoses, but rather the patient's impairments. Further, home health providers do not treat a patient's diagnosis; instead we treat the body structure and impairments derived from the diagnosis within each patient's unique environment. Therefore, we would like to work with CMS to build a "Patient Driven Groupings Model" that uses the best available data, looking to how providers deliver care to patients.

Behavioral Assumptions

In addition, the behavioral assumption in the proposed rule – 6.42% – is concerning. We want to work with CMS to ensure that any assumptions made do not impact or have unintended consequences to the way in which patients receive care and the way in which home health services are delivered. The proposed behavior change would significantly exceed past actual behaviors exhibited by the industry since the development of the current payment system. For example, included in the assumed behavior change is an assumption that 100% of the time if a secondary diagnosis would result in higher reimbursement, it would be moved to primary.

Cost Reports

Further, we have concerns about the use of cost reports that are not audited by CMS and are inconsistent from provider to provider. As with CMS, our ultimate goal is to make certain that the data upon which payment is based represents the most accurate and reliable dataset available. The TEP also agreed that cost reports may not be the best basis of payment determination until they can be audited and are consistent in their reporting. Until that time, we welcome the chance to work with CMS to find a reliable source of accurate data upon which to base the payment. We also believe that the Wage-Weighted Minutes of Care (WWMC) method could continue to be used as the basis for payment determination and fail to understand the basis for changing this long standing and well tested approach.

Budget Neutrality

Another issue of particular concern with the proposed rule is that it appears to seek to interpret implementation of the PDGM in a non-budget neutral fashion, which is inconsistent with the requirements of the Bipartisan Budget Act of 2018. The proposed rule states at page 152: "if expenditures are estimated to be $18 billion in CY 2020, but expenditures are actually $18.25 billion in CY 2020, then we can reduce payments (temporarily) in the future to recover the $250 million." **We do not believe that the intent of the law was to create this type of cap on reimbursement that fails to consider other relevant reasons for changes such as the growing base of Medicare beneficiaries.** CMS has highlighted that an increase in volume of Medicare beneficiaries receiving home health care "may represent a positive outcome of the PDGM", but while recognizing the value of the benefit for patients, CMS has also expressed a desire to cap home healthcare spending.

It is also important to emphasize that there are many reasons, aside from the introduction of a new payment model, as to why total Medicare home healthcare spending can vary from estimates. For example, patient volumes may be greater than projected because the patients have been shifted to home-based care from more expensive care settings. Additionally, patients shifted to home healthcare may have conditions or illnesses which require longer stays. We are concerned that the present model does not appear to reflect the other attributes or reasons that may affect the amount of spending on home healthcare.

II. Home Healthcare Stakeholders are Eager to Work with the Administration on Sensible Solutions

We would greatly appreciate the opportunity to meet with you to discuss ways we can help CMS move from volume-driven to value-driven payments based on patient characteristics. We are ready and willing to work with CMS to get the policy right by collaborating with CMS in providing data, information, the patient's perspective, and policy options to improve the home healthcare benefit.

Sincerely,

Keith Myers
Chairman
Partnership for Quality Home Healthcare

cc:

Demetrios Kouzoukas
Principal Deputy Administrator & Director of the Center for Medicare

Laurence Wilson
Director, Chronic Care Policy Group

Hillary Loeffler
Director, Division of Home Health & Hospice

Medicare Home Health Prospective Payment System

Summary of the Home Health Groupings Model Technical Expert Panel Meeting and Recommendations

Report to the Committee on Ways and Means and the Committee on Energy and Commerce of the House of Representatives and the Committee on Finance of the Senate

June 2018

Prepared for:
Centers for Medicare & Medicaid Services
7500 Security Blvd
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Table of Contents

Introduction

The Centers for Medicare & Medicaid Services (CMS) contracted with Abt Associates (Abt) to reassess the current Home Health Prospective Payment System (HH PPS) and develop potentially large-scale payment methodology changes to better align payment with patient needs, to address payment incentives and vulnerabilities in the current system, and to respond to the concerns laid out in the prior 3131(d) Home Health Study Report to Congress and by the Medicare Payment Advisory Commission (MedPAC).

As discussed in prior rulemaking, Abt and CMS have developed a new case-mix system called the Home Health Groupings Model (HHGM). The HHGM was developed to address criticisms of the current payment system and draws upon extensive research that paved the way for reform efforts by examining how the current payment system is used. The HHGM is further described in a technical report[1] and the 2018 Home Health Prospective Payment System (HH PPS) proposed rule (82 FR 35270).[2]

Abt Associates, as part of their contract with CMS, convened a Technical Expert Panel (TEP) meeting on February 1, 2018 to gain insight from industry leaders, patient representatives, clinicians, and researchers with experience with home health care and/or experience in home health agency management. This TEP satisfies the requirement of section 51001(b)(1) of the Bipartisan Budget Act of 2018 (Pub. L. 115-123), which requires CMS to hold at least one technical expert panel during the period beginning January 1, 2018 through December 31, 2018. The law also stipulated that the TEP must identify and prioritize recommendations regarding the HHGM and alternative case-mix models that were submitted during 2017 as comments to the CY 2018 HH PPS proposed rule.[3] Finally, section 51001(b)(3) the Bipartisan Budget Act of 2018 requires CMS to issue a report on the recommendations from the TEP to the Committee on Ways and Means and Committee on Energy and Commerce of the House of Representatives and the Committee on Finance of the Senate, no later than April 1, 2019. This report summarizes the recommendations from the TEP held on February 1, 2018 and satisfies the requirement set forth in section 51001(b)(3) of the Bipartisan Budget Act of 2018.

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1 https://downloads.cms.gov/files/hhgm%20technical%20report%20120516%20sxf.pdf

2 https://www.gpo.gov/fdsys/pkg/FR-2017-07-28/pdf/2017-15825.pdf

3 We note that we received only one comment that included a different case-mix model as a possible alternative to the HHGM in response to the CY 2018 HH PPS proposed rule. The commenter referred to the alternative case-mix model as the Risk-Based Grouper Model (RBGM).

Panel Overview

Purpose

The purpose of this meeting was to gather perspectives and identify and prioritize recommendations regarding the HHGM, as described in the CY 2018 HH PPS proposed rule (82 FR 35270), and alternative case-mix models submitted during 2017 as comments to the CY 2018 HH PPS proposed rule.

Structure

The all-day TEP meeting on February 1st, 2018 covered the following topics:

- Summary of Public Comments from CY 2018 HH PPS proposed rule
- Resource Use
- Clinical Groups
- Comorbidity Groups
- 30-Day Periods
- Case-Mix Weights
- Open Discussion and Next Steps

For each topic, Abt Associates led a discussion and sought feedback and recommendations from the TEP members on how to strengthen the HH PPS.

Materials

Prior to the TEP, Abt Associates conducted a webinar with the TEP participants. The webinar, conducted on January 25, 2018, was intended to provide background on home health payment reform and to provide an explanation for how the current payment system and proposed HHGM works. Abt Associates began by providing a brief overview of the project and discussing how Abt is using the Technical Expert Panel to get feedback on the payment reform analyses they've explored. Abt described components of the proposed payment system, such as resource use, 30-day periods, clinical groups, functional levels, comorbidity groups, and other variables used to group periods into respective case-mix groups. The creation of case-mix weights under the HHGM was also discussed. Additionally, Abt provided summarized comments from the rule and set expectations for the February 1st meeting. Panelists were encouraged to read the public technical report on the

HHGM, which summarizes the analysis from the first version of the HHGM.[4] Panelists were provided an agenda and a logistics document prior to the meeting. At the TEP, participants were provided with hard copies of the agenda, participant list, presentation slides, and supplementary analysis.

Members

The TEP was composed of industry members, patient representatives, and researchers. When convening the TEP, several groups were contacted that represented home health agencies and staff employed at home health agencies. We asked these groups to nominate one participant with clinical and health management experience. Ultimately, we deferred to each organization to nominate the participant they wished to represent their respective group/association. Panelists who participated in the meeting and the organizations they represent are as follows:

- Evan Christman, Medicare Payment Advisory Commission (MedPAC)
- William Dombi, National Association for Home Care and Hospice (NAHC)
- Kathleen Holt, Center for Medicare Advocacy (CMA)
- Luke James, representing the Partnership for Quality Home Healthcare (PQHH)
- Robert (Bud) Langham, representing the American Physical Therapy Association (APTA)
- Jenny Loehr, representing the American Speech-Language-Hearing Association (ASHA)
- Melanie Morris, representing Elevating Home
- Peter Notarstefano, LeadingAge
- Timothy Peng, Visiting Nurse Service of New York (VNSNY)
- Karen Vance, Representing the American Occupational Therapy Association (AOTA)

Additionally, three researchers accepted an invitation to participate on this TEP:

- David Grabowski, Ph.D., Professor of Health Care Policy, Harvard Medical School
- Bruce Kinosian, MD, Associate Professor of Medicine, University of Pennsylvania
- Sally Clark Stearns, Ph.D., Professor of Health Policy and Management, University of North Carolina, Chapel Hill

[4] https://downloads.cms.gov/files/hhgm%20technical%20report%20120516%20sxf.pdf

Summary of Public Comments from CY 2018 Home Health Prospective Payment System Proposed Rule (82 FR 35270)

Topics Addressed

Major topics addressed in the public comments that CMS received in response to the Calendar Year (CY) 2018 HH PPS proposed rule (82 FR 35270) were as follows:

- **Length of payment period**: The HHGM changes the unit of payment from a 60-day episode to 30-day period. If a 60-day episode has visits provided only during the first 30 days, home health agencies (HHAs) would only be paid for one period under the HHGM. Some commenters were concerned that frontloading visits within the first 30 days can be beneficial for the patient, and the 30-day periods would result in an incentive to not frontload so that the agency could generate a second 30-day period. There was also concern that a 30-day period may discourage agencies from admitting patients needing care that spans multiple periods.
- **Admission source:** A patient's admission source is determined by the care the patient receives in the 14 days prior to the start of the 30-day period. Under the HHGM, being admitted into home health following an institutional stay results in more resource use under the home health benefit (and therefore higher case-mix weights and payment). There were concerns that HHAs would be disincentivized from taking community admissions (there were mixed comments on whether this is beneficial). Commenters recommended including emergency room and observational stays that occurred in the 14 days prior to home health admission as "institutional." Because a late period with institutional admission source is paid more than an early period with a community admission source, commenters recommended a 5-day lookback period instead of a 14-day lookback period for designating institutional/community admission.
- **Episode timing:** Under the HHGM, the first 30-day period is early and any subsequent 30-day period is considered late. Under the current payment system, first and second 60-day episodes are early. The early period is paid more than late periods. There were concerns that the early and late designation would discourage necessary therapy or other service provision that was needed after the first 30-day period. Commenters also suggested that the length of the 60-day gap that determines whether a 30-day period is in a particular sequence of episodes should be re-evaluated to allow for a new sequence to start with a hospitalization.
- **Clinical groupings:** In the HHGM, one way to categorize patients is by a clinical grouping based on a principal diagnosis code. Commenters indicated that two of the clinical groups are focused heavily on therapy (Neuro/Stroke Rehabilitation and

Musculoskeletal Rehabilitation). The Medication Management, Teaching and Assessment (MMTA) group accounts for over 60 percent of 30-day periods. TEP members thought MMTA was too broad a category because it captured too many periods and there are not enough clinical groups that focus on therapy. Commenters thought the MMTA and behavioral health clinical groups are paid too low. Commenters also thought the clinical grouping relied too heavily on the principal diagnosis.

- **Comorbidity adjustment:** Under the HHGM, there is a comorbidity adjustment that is based on secondary diagnoses. There were concerns that many patients have multiple comorbidities and the adjustment should account for multiple comorbidities. Commenters recommended that the same adjustment should not be made for all patients (i.e., some comorbidities are more severe, or there are interactions with comorbidities and other characteristics of the patient).
- **Low Utilization Payment Adjustment (LUPA) thresholds:** Under the HHGM, each case-mix group has its own LUPA threshold. In the current payment system, all episodes (regardless of case-mix group) with four or fewer visits are paid as LUPAs. There were concerns that varying the LUPA threshold by case-mix group was complex and that the upper threshold of seven visits (which occurred for some payment groups) was too high.
- **Non-Routine Supplies (NRS) bundling:** Currently, NRS is paid separately from the model used to create the case-mix weights for the 153 Home Health Resource Groups (HHRGs). Two-thirds of NRS payments are made when no NRS were actually provided. Under the HHGM, NRS payment was proposed to be included with the base payment rate. Some commenters felt this would result in overpaying for some cases and underpaying for others (similar to the current system).
- **Regression-determined case-mix weights:** Under the HHGM, a regression was used to determine the payment weights for each group. Regressions have been used to construct the case-mix weights since 2000, at the inception of HH PPS. The regression smooths the payment weights and allows for adjustment of various HHA-level characteristics. One commenter recommended using actual costs in each payment group to form the case-mix weights, rather than a regression-adjusted cost.
- **Resource use data sources and methods:** The HHGM uses cost reports to calculate resource use (which is the dependent variable in the regression used to construct the case-mix weights). The current payment model calculates resource use using wage-weighted minutes of care (WWMC) from the Bureau of Labor Statistics (BLS). Commenters thought that the cost reports may contain questionable data. In particular, some commenters thought that using cost reports would favor facility-based versus freestanding agencies since facility-based agencies can allocate costs

differently. However, some commenters expressed concerns with the WWMC approach not being indicative of all the costs incurred by HHAs in providing care to beneficiaries (e.g., transportation costs) and supported the shift to using cost report data.

- **Other comments:** Additionally, there were comments that under the HHGM there is no longer a categorization for therapy visits. Commenters suggested incorporating age, caretaker's availability, vision, and cognitive status in the payment model. There were also comments on eliminating the Partial Episode Payment (PEP) adjustment and ensuring adequate payments for rural agencies.

Questions

The following questions were posed to the TEP members for discussion:

- Which comments should be explored further?
- What further analyses do you recommend?
- Other comments you have?

Discussion

Major issues raised were as follows:

- **Dual-eligibility:**
  One TEP member mentioned the HHGM payment model doesn't include a control for dual eligibles. The TEP member indicated that duals are associated with lower resource use, which would put them at a disadvantage. They made a distinction that dual eligibility could be controlled for in the regression but it does not have to be a payment adjustor in the payment model. It was noted that duals are more likely to be treated at a skilled nursing facility and less severe duals will be more likely to receive care from a home health agency. That may cause it to look like duals are receiving less home health care. Related to duals, there was discussion about including measures related to social determinants of health.

- **Estimate model on different sets of data:**
  TEP members suggested many different ways of estimating the model. Other data (such as private insurance or Medicare Advantage) could be used to estimate the HHGM model and would not have data that is contaminated by the current payment system. TEP members suggested that payment models should be estimated separately for different regions since there is variation in utilization and cost across different areas (e.g., health system in Oregon will look different from Vermont). For patients in managed care-heavy areas, TEP members said some of those areas may have practices in place that will incentivize hospitalization while others will not – which

will have implications for the relationships the HHGM model measures. The HHGM model could be estimated separately for those coming from the community versus an institutional stay to determine if the relationships between the other variables in the model and resource use are the same. There was a suggestion of looking at rural areas separately because patients in those areas often have different patterns of care due to staffing shortages. TEP members thought models could be run on patients from PACE programs. TEP members said PACE programs identify red flags about a patient's health quickly and address those concerns quickly. TEP members thought this would also be important for home health.

- **Institutional vs community:**
  One TEP member wanted to better understand how admission source (and the underlying characteristics of patients in different admission source categories) impacts payment.

- **Align payment mechanisms:**
  TEP members wanted to make sure the Home Health Value Based Purchasing (HHVBP) Model aligns with any changes to the Home Health PPS.

- **Other Comments:**
  Some TEP members thought the 144 proposed groups in the HHGM was too small and more groups should be used. Some members indicated that adding more characteristics to the model that would be used to group patients would make payment more accurate.

  One TEP member noted that patient characteristics alone may not do a good job in predicting resources used by patients during a home health episode, and further stated that other Medicare prospective payment systems have service thresholds and those thresholds are not necessarily a bad thing. One TEP member encouraged CMS to step back and think about what making changes to the payment system will ultimately do. Another TEP member was interested in understanding unintended consequences that may result from the HHGM.

Recommendations

Recommendations were as follows:

- Include a control variable for dual eligibles in the payment model. However, don't use the coefficient from that variable to calculate case-mix weights.
- Estimate the HHGM model on subsets of HHAs or subsets of patients.
- Estimate the HHGM model using Medicare Advantage or private insurance data.
- Run a pilot of the HHGM before fully implementing it.
- Include more than 144 different payment groups in the HHGM.

Calculation of Resource Use

Topics Addressed

Within the section, Abt reviewed the (1) the Cost Per Minute + Non-Routine Supplies (CPM + NRS) approach to calculating resource use (using cost report data) and (2) the Wage Weighted Minutes of Care (WWMC) approach (using data from the BLS) to calculating resource use. Data on the ratio of costs by discipline for each approach were shown.

Questions

The following questions were posed to the TEP members for discussion:

- Do you favor one resource use method over another – and why?
- Do you have suggestions for improving the measurement of resource use?
- What (if any) are the unintended consequences of selecting either approach?

Discussion

Major themes that were discussed by TEP members during this session were as follows:

- **Cost Report vs. BLS:**
  Some TEP members expressed concerns with using cost reports for payment due to perceived inaccuracies in cost reports and said the WWMC approach better reflects their perceptions of costs for therapy versus nursing. It was not clear if a subset of accurate cost reports could be identified. Some TEP members thought the BLS data was timelier and perceived it to be more accurate although it was noted that information from the BLS (used to construct resource use currently) also is not audited and MedPAC indicated that if there are concerns pertaining to the accuracy of cost report data, then the same concerns exist for BLS data. Some TEP members suggested that CMS audit cost reports. Abt and some TEP members indicated that costs reports should reflect actual costs (beyond just the direct cost of the staff) and therefore would be a better estimate of the total costs that agencies incur.
- **Therapy thresholds:**
  Because the CPM +NRS approach to determining resource use weights therapy costs less than the BLS, some TEP members were worried that that change along with moving away from therapy thresholds would make it difficult to treat therapy patients.

- **Cost report accuracy:**
  The specific trimming methodology used for cost reports in the HHGM was discussed and it was suggested that a larger number of agencies be trimmed. One TEP member recommended investigating the accuracy of cost reports, suggesting some home health agencies may put administrative costs under nursing. It was noted that CMS could audit cost reports, but they cannot audit the BLS data. In addition, the TEP discussed that cost reporting can be adjusted in the future to fit the needs of the HHGM while the BLS cannot.

- **Model HHGM on best practices:**
  One TEP member recommended modeling not on past behavior (i.e., what you see in cost reports) but instead to create a system based on best practices (i.e., what do patients actually need?). The TEP discussed that modeling the HHGM on current data (that is driven by incentives in the current payment system) could produce flawed results.

- **NRS:**
  There was concern that bundling the NRS into the model could have a negative effect on wound patients.

Recommendations

Recommendations were as follows:

- CMS should audit cost reports.
- Trim more cost reports when using the CPM + NRS method.
- Introduce the HHGM as a series of changes rather than implementing all aspects of the HHGM simultaneously.
- Set up the HHGM based on best practices instead of past behavior.

Clinical Groups

Topics Addressed

The construction of the clinical groups in the HHGM was quickly reviewed. A number of potential MMTA subgroups were shown as suggestions for breaking up the large size of the MMTA group.

Questions

The following questions were posed to the TEP members for discussion:

- How should 30-day periods be grouped in order to account for differences amongst patient diagnoses?
- Should the MMTA clinical group be divided into additional sub-groups?
    - Is the added complexity of having additional case-mix groups worthwhile?

Discussion

Major issues raised by TEP members during this session were as follows:

- **MMTA:**
  The majority of TEP members indicated that the MMTA group should be split into subgroups. Potential subgroups that Abt presented included:
    - Surgical/Procedural Aftercare
    - Cardiac/Circulatory
    - Endocrine
    - Infectious/Blood Forming Diseases/Neoplasms
    - Respiratory
    - Other

  TEP members indicated these subgroups seemed reasonable. Some TEP members indicated that having more subgroups would be preferable to having fewer subgroups.

  One TEP member noted that MMTA isn't really just one group, that it is also divided into 24 other groups already (i.e., mixtures of admission source, timing, functional level, and comorbidity adjustment). The biggest of those consists of 10% of 30-day periods. One TEP member saw MMTA being a reference group. One TEP member suggested categorizing patients by secondary diagnosis under MMTA. One suggestion was that if clinical groups are retained, more groups are needed. TEP members suggested that CMS should control for risk factors of hospitalization and social determinants of health.

- **Additional clinical groups:**
  One TEP member suggested making a clinical group based on the instrumental activities of daily living (IADLs) items on the OASIS. It was mentioned there should be a dementia group, but it was not clear how exactly that group would be constructed. Similarly there was a suggestion for a complex rehabilitation clinical group but it was also unclear how that group would be constructed.

- **Comprehensive models:**
  One TEP member suggested a model where instead of a person being categorized into one specific clinical group, the patient could be categorized into a mixture of clinical groups. A fuzzy set model should be used to classify patients by the percent they were a member of each group (i.e., a patient could be 75% MMTA, 15% wound, and 10% behavioral). This is a more complex model, but some TEP members indicated they would prefer the model to be more accurate even if it meant more complexity.

- **OASIS items:**
  There was some discussion about where those with a urinary tract infection would be grouped. One TEP member indicated the groupings and corresponding functional levels did not take into account enough functional and cognitive items; specifically that IADLs should be used. There was a suggestion for adding an adjustment for those with dementia, which could be based on a set of symptoms instead of diagnoses. One TEP member noted that the explanatory power of OASIS items isn't as strong as the experience of the people in the field and that adding more OASIS items to the model will not help that much.

- **Unintended consequences:**
  There was some concern that a person with a non-therapy diagnosis may not get therapy (even if it is needed). One TEP member was concerned that some groups (like Complex) may have some users that need a high level of therapy and they wouldn't get it under the HHGM. One TEP member indicated that there are always tradeoffs and the HHGM better addresses those patients with high nursing needs, but this may cause less emphasis to be placed on therapy. One TEP member was concerned that this model will only capture the needs of the patients who are already able to get care. The TEP member believed that if there are potential patients that could be getting home health (and would benefit from home health) but aren't currently receiving home health, then the construction of the HHGM will not address their needs.

- **Comorbidities:**
  One TEP member suggested that comorbidities need to be considered with this discussion and those comorbidities are really more than just diagnoses. The TEP member suggested that there are issues shoehorning patients into discrete buckets.

- **Outcomes:**
  Outcomes were suggested as a way to adjust for payment, but it was also mentioned that it would be difficult to incorporate outcomes into a prospective payment system since the outcomes would happen well after the episode began. One TEP member suggested using more variables to capture functional level, but another member noted that in their past experience this would not change how the functional level was created (i.e., patient characteristics can only do so much to capture the functional level). Another TEP member argued that their functional needs are accounted for based on their admission. TEP members indicated that a patient's status and plan of care evolves after several weeks of care and figuring out what a patient needs is like "peeling an onion." Speech-language pathology needs may be identified in the back half of the episode so under the HHGM the TEP thought it may be less likely that a patient would receive those services.

- **Purpose of the clinical group:**
  One TEP member indicated that the patient's status and needs change throughout a home health episode and the clinical group is informative in understanding those changes. One TEP member indicated that there is a disconnect in trying to base care on clinical diagnoses and that isn't really how agencies provide services. It was also said that clinicians focus on impairments not diagnoses.

- **Risk adjustment:**
  One TEP member wanted to use the risk adjustment methodology from the CMS quality measures within the HHGM functional model.

Recommendations

Recommendations were as follows:

- Add IADLs to the functional model.
- Split MMTA into subgroups. The subgroups that Abt presented seemed reasonable. Also consider splitting the MMTA subgroup labeled as "other".
- The TEP recommended a "dementia group" and a "complex rehabilitation clinical group" but did not yet have clear recommendations for how to construct those groups.
- Set up clinical groups so a patient can be classified into multiple groups (e.g. 50% MMTA and 50% Behavioral Health).
- Consider the alternative case-mix model idea (Risk-Based Grouper Model) that was included in the comments in response to the CY 2018 HH PPS proposed rule (see Appendix A for more information).
- Using the International Classification of Functioning to help identify the clinical and functional nature of patients.
- Adjust for payments using outcomes.
- Put more emphasis on other characteristics, including impairments and comorbidities.
- Control for risk factors of hospitalization and social determinants of health.

Comorbidity Adjustment

Topics Addressed

Information on comorbidities for home health users using the Chronic Condition Warehouse (CCW) Chronic Condition Flags were shown. The comorbidity adjustment within the HHGM was reviewed. Alternative approaches to the comorbidity adjustment were also shown (e.g. multiple comorbidity adjustment levels, different comorbidity adjustments for different clinical groups, and different numbers of home health 30-day periods within each comorbidity adjustment level).

Questions

The following questions were posed to the TEP members for discussion:

- Is it more desirable to have more 30-day periods receive a smaller comorbidity adjustment or fewer periods receive a larger comorbidity adjustment – and why?
- What is the best approach to adjust for comorbidities?

Discussion

Major themes that were discussed by TEP members during this section were as follows:

- **Number of comorbidity adjustment levels:**
  TEP members indicated it would be an improvement to have multiple comorbidity adjustment levels (to account for multiple comorbidities), instead of having a binary adjustment as was described in the HHGM in the proposed rule. TEP members suggested having the data guide which levels to set.
- **Comorbidity adjustment by clinical group:**
  TEP members preferred having different magnitudes of comorbidity adjustments based on the clinical group of the patient. That is, the comorbidity adjustment may have a larger impact for someone in the neurological rehabilitation clinical group compared to the MMTA clinical group. Additionally, TEP members said the percentage of 30-day periods that receive a comorbidity adjustment does not need to be fixed across the clinical groups. TEP members suggested letting the data help determine how many comorbidity adjustment levels there should be within each clinical group and what percentage of 30-day periods should be in each level. TEP members liked specificity and complexity over simplicity if the complexity improved accuracy.
- **Interaction between comorbidities:**
  TEP members suggested including interactions between comorbidities in the model. One member mentioned that CMS has already identified a number of dyads and triads

of comorbidities using the chronic conditions. Some of those may or may not be relevant for the HHGM. Some TEP members suggested examining all interactions.

- **Impairments vs. primary diagnoses vs. secondary diagnoses:**
  Some TEP members suggested creating the case-mix groups using impairments instead of primary and/or secondary diagnoses. Using OASIS assessments was suggested although it was unclear what the best source of information would be for those impairments.

- **Important comorbidities** :
  One TEP member said using comorbidity interactions might make some comorbidities stand out. Some important comorbidities include pulmonary, psychological, or diabetes-related. When looking at a list of comorbidities, one TEP member indicated Atrial Fibrillation can be a stable diagnosis in certain situations so it would have little bearing on costs of care in certain situations so it may not be appropriate to control for that. There was discussion around whether to include or exclude secondary diagnoses that are closely related to the primary.

- **Unintended consequences:**
  One TEP member indicated that regardless of how the system is set up, the home health agency will focus on the impairment, comorbidity, primary diagnosis, or secondary diagnosis that brings in the highest reimbursement.

- **Effects of the condition:**
  Another TEP member agreed that the effects of a condition (e.g., shortness of breath) are what is most important, rather than the diagnosis itself (e.g., COPD).

Recommendations

Recommendations were as follows:

- Include multiple comorbidity adjustments in the HHGM instead of a binary adjustment.
- Set the levels for the comorbidity adjustment groups based on the data.
- Model the impact of the comorbidity adjustment so it varies by the clinical group of the home health user.
- Include interactions of comorbidities in the model.
- Instead of using diagnoses, use impairments. There were no clear recommendations yet of what impairment information to use.

Admission Source

Topics Addressed

The admission source adjustment in the HHGM was briefly discussed. Information showing the infrequent nature of emergency department visits and observational stays without hospitalizations prior to home health episodes was shown.

Questions

The following questions were posed to the TEP members for discussion:

- How should admission source be controlled for?
- Are there concerns with only accounting for institutional versus community admission source?
- Should a shorter or longer lookback be used?

Discussion

Major themes that were discussed by TEP members during this section were as follows:

- **Important adjusters:**
  Some members of the TEP indicated that multiple hospitalizations and the length of hospital stay are important adjusters. Additionally, it was suggested that there should be different controls for whether a hospitalization was planned or unplanned. They suggested that it is important to understand the trajectory of the patient's care (e.g., whether the patient had a hospitalization followed by a skilled nursing facility stay).
- **Weighting incentivizes institutional admissions:**
  Since institutional admissions have higher case-mix weights in the HHGM there was a concern that those institutional admissions would be over-incentivized.
- **Other issues:**
  There was discussion around whether or not 14 days was an appropriate lookback period. One TEP member wondered if there should be an adjustment based on socio-economic status. There was discussion that how admission source is paid for could influence how health systems are set up, and if paying more for institutional admissions could incentivize ACOs to buy home health agencies and create pathways from hospitals to their own agencies. There was concern about the mismatch between the length of the 30-day period and the timing of the OASIS (every 60 days). One TEP member thought that paying by admission source could encourage admission to

a high-cost setting. Resources are placed to keep patients out of institutions and there are fears this model would incentivize institutional admission.

Recommendations

Recommendations were as follows:

- Include adjustments for multiple hospitalizations and the length of the hospital stay in the HHGM.
- Adjust for whether an inpatient stay was planned or unplanned in the HHGM.
- Run the HHGM model interacting the admission source variable with the clinical group variable.
- Do not include emergency department visits and observational stays in the institutional admission source.
- Although unrelated directly to community versus institutional admission source, during the discussion there was discussion that CMS should use an Area Deprivation Index to adjust for differences across geographic areas.

Episode Timing

Topics Addressed

Episode timing in the HHGM and the HHGM 30-day period length were discussed. Average visits were shown for 60-day episodes by 15-day increments (showing that the first half of a 60-day episode has more visits on average than the second half). A number of different HHGM payment regression models were reviewed. These models show differences in coefficients and goodness of fit when there are variations such as using 30-day periods versus 60-day episodes, the inclusion versus the exclusion of fixed effects, the use of CPM+NRS versus the WWMC to calculate resource use, and the use of different combinations of HHGM adjustors.

Questions

The following questions were posed to the TEP members for discussion:

- What time period should episodes cover? What are the trade-offs between having a shorter versus a longer episode?
- How should episode timing be accounted for?
- Other thoughts?

Discussion

Major themes that were discussed by TEP members during this section were as follows:

- **Justification for 30–day period:**
  TEP members were not convinced that a difference in the number of visits across 60-day episodes (i.e., more visits on average during the first 30 days compared to the last 30 days of an episode) should lead to a 30-day period. TEP members indicated the 30-day threshold was arbitrary and smaller thresholds (e.g., 15 days) could have been chosen but it would make the system look more like fee-for-service. Some TEP members indicated the 30-day periods did not increase the model fit enough to justify the switch from a 60-day episode.
- **Stakeholder burden:**
  There was concern that having a shorter period would lead to more stakeholder burden (e.g., a claim for the first 30-days and another claim for the second 30-days would need to be submitted).

- **System manipulation:**
  TEP members thought home health agencies would manipulate payment around the new time period. For example, agencies could discharge a patient after 30 days and readmit them again after 60 days (so a new sequence of periods begins) in order to get a higher first episode payment for the subsequent payment. In addition, there was concern that the length of the period could impact when visits are performed (e.g., HHAs would potentially spread out visits over two 30-day periods under the new system to receive additional reimbursement). Existing research supports frontloading visits, so more visits occur earlier in a home health episode, but TEP members fear that agencies will react to payment incentives even if research suggests otherwise.
- **Status quo:**
  TEP members noted home health agencies are used to 60-day episodes and other payers also operate using a 60-day episode.
- **Unmeasured resource use:**
  A few TEP members indicated that the data showing visits declined over the length of a 60-day episode did not take into account that there was more care coordination in the later part of the home health episode (which was not measured in the claim).
- **More accurate diagnoses**:
  One TEP member indicated that a 30-day period would allow home health agencies to put patients in a more appropriate diagnosis group sooner after learning more about the patient during the course of care. Other members thought this was too easy to manipulate.

Recommendations

Recommendations were as follows:

- More research should be done into the frontloading of visits and determine how the HHGM may impact that.

Case-mix Comparisons Between HHGM and Current Payment System

Topics Addressed

Average case-mix weights under three different payment systems (current payment system, HHGM with 30-day periods, and HHGM with 60-day episodes) were shown. Average case-mix weights were shown for a variety of categories including HHGM episode characteristics (e.g., by clinical group), home health agency characteristics (e.g., by ownership type), and patient characteristics (e.g. by risk of receipt of parenteral nutrition).

Questions

The following question was posed to TEP members:

- What are your thoughts or comments on the average case-mix comparisons between the HHGM and the current payment system?

Discussion

Major issues that were raised by TEP members during this section were as follows:

- **Neuro and wound clinical groups:**
  There was concern that episodes in the neurological rehabilitation clinical group did worse under the HHGM compared to the current payment system. TEP members indicated their neuro rehab patients are getting more complex as time goes on. TEP members said the wound clinical group looks like it may be doing much better under the HHGM because the HHGM calculation of resource use bundles together the NRS (which would impact the wound group) with visits.
- **Capturing data:**
  It was mentioned that comparisons of case-mix between the current payment system and the HHGM doesn't capture unmet services that the patient isn't being provided.
- **Interpretation of figures:**
  The TEP discussed that the figures showing average case-mix weights across the current payment system and the HHGM were designed so the total payments across both systems were identical, only the distribution of payments changed. One TEP member mentioned that since the regression has agency fixed effects that may be the cause of there being little difference in the average case-mix weight across the figures while looking at agency characteristics.

- **Unintended consequences:**
  One TEP member indicated the difference in average weights across the clinical groups would over incentivize caring for certain groups. However, it was also mentioned that the model is more complicated than just differences between clinical groups. TEP members said other aspects of the HHGM (timing, admission source, comorbidity adjustment, functional level) also play a role in the case-mix weight that is assigned.

Recommendations

Recommendations were as follows:

- Show average case-mix differences at the agency level so that each agency understands the impact of the HHGM on their business.

Open Discussion and Recommendations

Discussion

Each member of the TEP was given an opportunity to make closing remarks and indicate what they felt were the most important next steps to take regarding the HHGM.

Major themes that were discussed by TEP members during this section were as follows:

- **Take examples from other models:**
  It was noted that it is important to not inject distractions into the payment system. A 30-day period might inject distortions that CMS will have to clean up and patients could potentially suffer. CMS should model payments after what the agencies doing well on the HHVBP are doing. CMS should model payments based on agencies with a good star rating.
- **Approximating payment and accurate data:**
  It was noted that it may be better to have far more payment categories than 144. Additionally, it is important for CMS to have better quality cost report data.
- **Testing the model:**
  TEP members suggested testing the model for a limited number of agencies. There was also concern that the model's impact on agency margins should be better understood.
- **Incremental change:**
  Multiple TEP members indicated that payment reform should be incremental rather than many simultaneous changes and to proceed slowly so that this is an evidence-based system.

Recommendations

Recommendations identified were as follows:

- CMS should model payments after what the agencies doing well on the HHVBP are doing.
- CMS should model payments based on agencies with a good star rating.
- CMS should improve the quality of cost report data.
- More payment groups should be included in the HHGM.
- Test the HHGM on a limited number of agencies before implementing it for all HHAs.
- Payment reform should be incremental instead of having multiple large changes occurring simultaneously.

- CMS should better estimate how the HHGM will impact quality outcomes, access, and behavioral changes. There was no clear recommendation from the TEP on how to do this.
- Payments should be made on outcomes, not volume.
- CMS should consider the alternative case-mix model discussed in comments to the CY 2018 HH PPS proposed rule.
- CMS should ensure the HHGM allows that everyone who is entitled to the home health benefit can receive it.
- Interactions in the models (e.g., comorbidities, clinical versus functional) should be explored more.
- Safeguards should be implemented to reduce unintended consequences (like a dramatic reduction in therapy). There were no clear recommendations from the TEP on what safeguards should be implemented. CMS should consider which pieces of the model are essential and make sure the models don't prevent patients from receiving services.

Alternative Case-Mix Model

During the TEP meeting, TEP members recommended that Abt and CMS consider an alternative case-mix model, the Risk-Based Grouper Model (RBGM), submitted by a provider of home health services as a comment to the CY 2018 HH PPS proposed rule. This was the only comment submitted that included a case-mix model as a possible alternative to the HHGM. Originally, the Partnership for Quality Home Healthcare nominated an individual from the company that submitted the alternative case-mix model as comment to the CY 2018 HH PPS proposed rule. We were hoping to have more discussion about the RBGM during the TEP, as the comment submitted during the CY 2018 HH PPS proposed rule did not provide sufficient information for CMS to evaluate the model, but PQHH replaced that individual prior to the TEP with another nominee. As stated earlier, we asked these groups/associations to nominate one participant with clinical and health management experience and ultimately deferred to the organization on who they decided to represent the organization. Therefore, discussion regarding the RBGM was limited during the TEP as CMS did not receive sufficient information in the public comment materials regarding the RBGM to present information on that model to the TEP members. CMS prioritized this recommendation and following the TEP, Abt, CMS, and representatives from the provider had an in-person meeting to further discuss their alternative case-mix model the RBGM.

Based on material provided to CMS subsequent to the TEP, we understand the RBGM uses certain OASIS-based risk adjustment models developed and used for the home health quality reporting program to help set an episode's case-mix weight.

These risk adjustment models[5] included the following:

- Acute Care Hospitalization
- Emergency Room Use with Hospitalization
- Improvement in Ambulation / Locomotion
- Improvement in Bed Transferring
- Improvement in Toilet Transferring
- Improvement in Lower Body Dressing
- Improvement in Upper Body Dressing
- Improvement in Bathing
- Improvement in Management of Oral Medications

[5] The risk adjustment models were constructed by researchers from the University of Colorado and a document describing the models is available at https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HomeHealthQualityInits/Downloads/HHQILogisticRegressionModelsforRiskAdjustmentUpdated.pdf [Accessed March 1, 2018]

The basic premise of the RBGM is to determine a predicted value of each of the above measures for each home health episode. Those predicted values are then averaged together (note, the predicted values are weighted differently depending on the measure). Each episode's combined average predicted values from the models are compared to the overall combined average predicted value across all episodes to determine a case-mix weight. This approach to determining case-mix weights is correlated with costs, but does not appear to do a better job at estimating costs compared to the HHGM.

Many aspects of the RBGM are similar to how the HHGM is set up. For example, OASIS items are used in the risk adjustment process. The RBGM uses more OASIS items than the HHGM. However, many of the OASIS items the RBGM uses were tested for inclusion in the HHGM and were found to have an unreliable pattern of resource use or are too easy to manipulate.[6]

Abt Associates and CMS have other concerns with the RBGM that include:

- Certain risk adjustment models used in the RBGM use indicators of the number of therapy visits. As part of the Bipartisan Budget Act of 2018, CMS is required to eliminate the use of therapy thresholds as part of the case-mix adjustment process.
- The risk adjustment models used in the RBGM were created to be used with Start of Care and Resumption of Care assessments, but the RBGM would also use information from follow-up assessments to calculate predicted probabilities of each measure. It is unclear if the risk adjustment models behave as expected when using follow-up assessments.
- The RBGM may be difficult to implement in the claims processing system since there are nine measures and each has many variables associated with it.
- The RBGM is focused on outcomes. Focusing on outcomes is outside the scope of CMS's statutory authority for case mix adjustment under section 1895 of the Social Security Act, which charges CMS with using a case-mix adjustment process that explains variations in the costs of providing care. Furthermore, while the Center for Medicare and Medicaid Innovation is currently testing a value-based purchasing model for home health care, the results of that demonstration model are not known at this time.
- The RBGM may overemphasize high risk patients with the potential for improvement and not pay enough attention to patients that require maintenance care to prevent or slow further deterioration of their condition.

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[6] See Chapter 7.1 of the Technical Report "Overview of the Home Health Groupings Model" https://downloads.cms.gov/files/hhgm%20technical%20report%20120516%20sxf.pdf

Appendix A: Materials Presented to TEP

Home Health Prospective Payment System
Technical Expert Panel
February 1, 2018, 9:00 a.m. – 4:15 p.m.

Abt Associates
4550 Montgomery Ave # 800N
Bethesda, MD 20814

Agenda

9:00 – 9:15 **Welcome and Introductions (Michael Plotzke)**

9:15 –10:00 **Summary of public comments from CY 2018 Home Health Prospective Payment System Proposed Rule (82 FR 35270) (T.J. Christian)**

- **Overview of main themes related to the Home Health Grouping Model's case-mix adjustment methodology**
- **Comments from the audience**

10:00 – 10:45 **Calculation of Resource Use (Michael Plotzke)**

- **Comparison of the BLS and CPM + NRS approaches to calculating resource use**
- **Comments from the audience**

10:45 – 11:00 **Break**

11:00 – 11:45 **Clinical Groups (Michael Plotzke)**

- **Description of clinical groups**
- **Discussion of the size of the MMTA clinical group**
- **Comments from audience**

11:45 – 12:30 **Lunch**

12:30 – 1:15 Comorbidity Adjustment (Michael Plotzke)

- **Explanation of comorbidity adjustment**
- **Alternative approaches to adjusting for comorbidity**
- **Comments from audience**

1:15 – 1:45 Admission Source (Michael Plotzke)

- **Explanation of Admission Source**
- **Comments from audience**

1:45 – 2:00 Break

2:00 – 2:45 Episode Length and Timing (Michael Plotzke)

- **Comparison of 30-day periods versus 60-day episodes**
- **Comments from audience**

2:45 – 3:15 Case-mix Comparisons Between HHGM and Current Payment System (T.J. Christian)

- **Examination of case-mix weights across the HHGM and the current payment system by characteristics of home health agencies**
- **Comments from audience**

3:15 - 4:15 Free response and next steps (Michael Plotzke)

- **Ideas for alternative case-mix systems**
- **Discussion of any topics previously or not previously discussed**
- **Next steps**

Home Health Prospective Payment System
Technical Expert Panel Meeting
February 1, 2018
Meeting Attendees

Participants

Evan Christman
Medicare Payment Advisory Commission (MEDPAC)

William Dombi
National Association for Home Care & Hospice (NAHC)

Kathleen Holt
Center for Medicare Advocacy

Luke James
Representing the Partnership for Quality Home Healthcare

Bud Langham
Representing the American Physical Therapy Association

Jenny Loehr
Representing the American Speech-Language-Hearing Association (ASHA)

Melanie Morris
Representing Elevating Home

Peter Notarstefano
LeadingAge

Timothy Peng
Visiting Nurse Service of New York

Karen Vance
Representing the American Occupational Therapy Association (AOTA)

Observers

Jennifer Bogenrief
Representing the American Occupational Therapy Association (AOTA)

Joy Cameron
Representing Elevating Home

Mary Carr
Representing the National Association for Homecare & Hospice

Kara Gainer
Representing the American Physical Therapy Association (APTA)

Steve Guenther
Representing the Partnership for Quality Home Healthcare

Sara Warren
Representing the American Speech-Language-Hearing Association (ASHA)

Researchers:

David Grabowski, Ph.D.
Professor of Health Care Policy
Harvard Medical School

Bruce Kinosian, MD
Associate Professor of Medicine
University of Pennsylvania

Sally Clark Stearns, Ph.D.
Professor of Health Policy and management
University of North Carolina, Chapel Hill

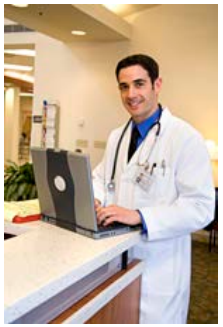
Abt Associates, Inc.

Michael Plotzke, Ph.D., Principal Investigator
Allison Muma, MHA, Project Director
Thomas Christian, Ph.D., Associate
Seyoun Kim, MHS, Analyst
Erica Granor, Associate Analyst

Home Health Groupings Model

Technical Expert Panel

February 1, 2018



Purpose of the Meeting

- Gather perspectives on the Home Health Groupings Model (HHGM) as described in the 2018 Home Health Prospective Payment System Proposed Rule (82 FR 35270)
- Abt and CMS will use feedback received today to strengthen the Home Health Grouping Model and/or consider alternative payment models

Introductions

- Please provide a short introduction and describe what you are hoping to achieve during today's meeting

Ground Rules

- CMS is observing the TEP meeting but will not participate in the discussions
- Abt is recording the audio of the meeting today.
  - We will provide a publically available summary of the main points made at the meeting
  - Notes will not attribute comments to individual people or organizations
- Topics discussed will relate to technical aspects of the case-mix adjustment model
  - Issues related to CMS policy decisions (i.e. budget neutrality adjustments) are better discussed in a different venue as those topics are unrelated to the work Abt does
- Do not distribute material provided or discussed in this meeting

Ground Rules

- We have a very large group today
  - Only participants seated at the table can participate in the conversation
  - We want to make sure everyone and every organization has the opportunity to participate
  - During the meeting I will be doing my best to make sure we hear from a variety of different people
  - We will have time at the end to circle back to unfinished topics if I need to limit the length of a conversation

Please consider the following

- Case-mix adjustment is only one aspect of a payment system – but it is the aspect we are tasked with discussing
- Additionally, by law, CMS is to:
  - "The Secretary shall establish appropriate case mix adjustment factors for home health services in a manner that explains a significant amount of the variation in cost among different units of services."
- Approaches to case-mix adjustment need to be actionable
  - CMS cannot case-mix adjust using data they aren't collecting

Agenda

1. Introductions
2. Background
3. Summary of Public Comments
4. Resource Use
5. Clinical Groups
6. Comorbidity Adjustments
7. Admission Source
8. Episode Length and Timing
9. Case-Mix Weights
10. Free Response and Next Steps

Background

Motivation – Section 3131(d) Report to Congress

- Examined costs associated with beneficiaries who were: low-income, lived in underserved areas, had high severity of illness

- Report found current payment system produced lower margins for those
  - needing parenteral nutrition
  - with traumatic wounds or ulcers
  - who required substantial assistance in bathing
  - admitted to HH following an acute or post-acute stay
  - who have a high Hierarchical Condition Category score
  - who had certain poorly controlled clinical conditions
  - who were dual eligible

Motivation – MedPAC Annual Reports (2011, 2015)

- The Medicare HH Benefit is ill-defined
- HH payment should not be based on the number of therapy visits
  - Current system incentivizes more therapy visits and fewer non-therapy visits
- HH payment should be determined by patient characteristics

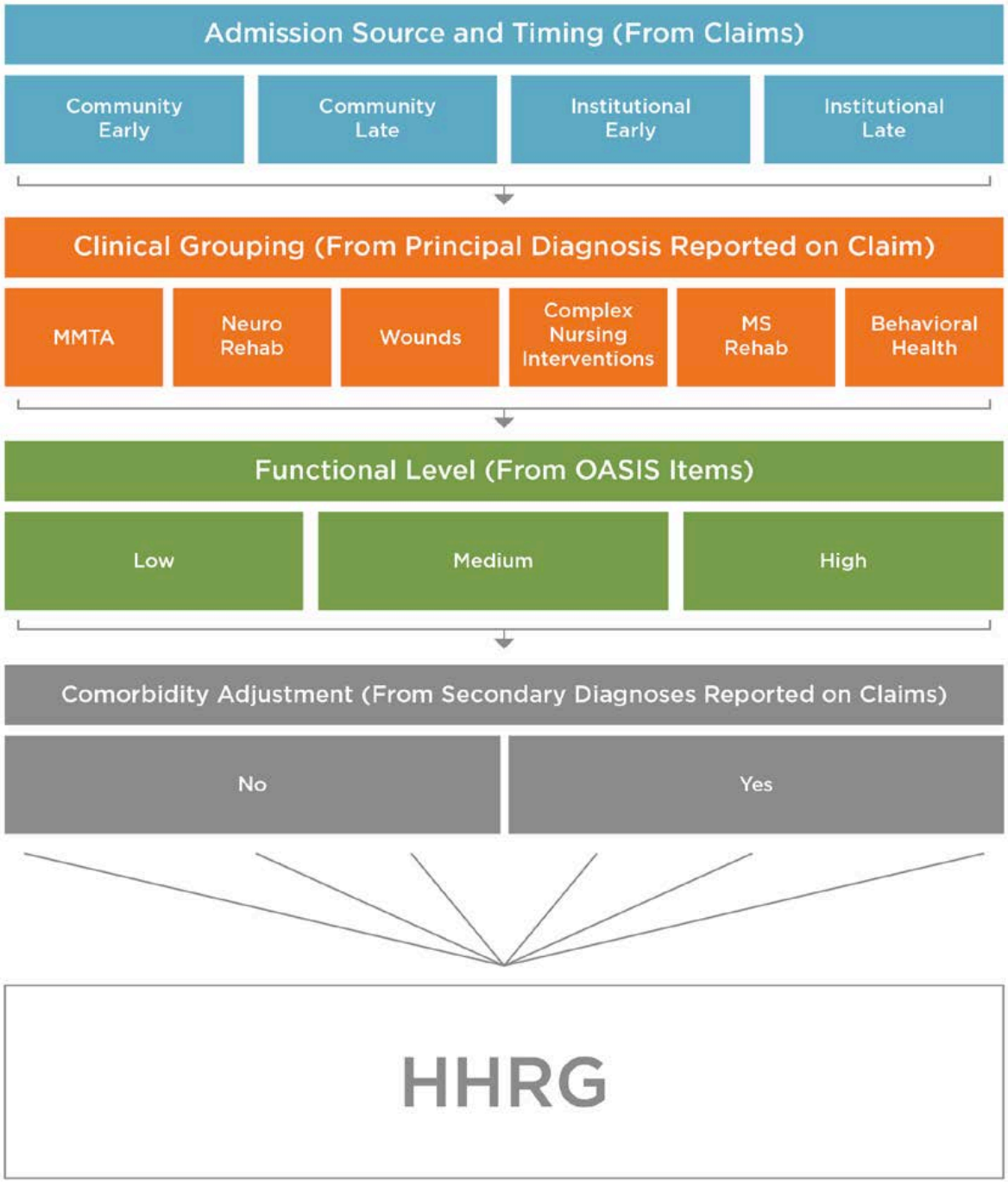
Overview of HHGM

- Each HH period is categorized into different sub-groups within each of the five categories below:
  - Timing (early or late; period is placed into 1 of 2 groups)
  - Referral source (community or institutional source; period is placed into 1 of 2 groups)
  - Clinical grouping (musculoskeletal (MS) rehab, neuro/stroke rehab, wounds, Medication Management Teaching and Assessment (MMTA), behavioral, or complex nursing care; period is placed into 1 of 6 groups)
  - Functional level (low or high; low, medium, or high; period is placed into 1 of 3 groups)
  - Comorbidity adjustment (no or yes; based on secondary diagnoses; period is placed into 1 of 2 groups)

- In total, HHGM produces 2*2*6*3*2 = 144 different payment groups

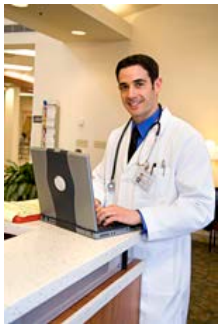
Data Used

- Home health episodes (matched to OASIS) from 2016
- Home health cost reports from 2015
- Provider of services files



Under the Home Health Groupings Model, a 30-day period is grouped into one (and only one) subcategory under each larger colored category. A 30-day period's combination of subcategories groups the 30-day period into one of 144 different payment groups.

Summary of Public Comments from CY 2018 Home Health Prospective Payment System Proposed Rule (82 FR 35270)



Comments from the HH Proposed Rule for FY 2018

- HHGM proposed in the FY 2018 rule published in June 2017
- Received 1,347 of comments from stakeholders
- We summarize and discuss comments related to technical components of HHGM
- Purpose: obtain feedback on topics brought up by stakeholders, further analyses needed, additional considerations

HHGM Comments Topics

1. Length of payment period
2. Admission source
3. Episode timing
4. Clinical groupings
5. Comorbidity adjustment
6. LUPA thresholds
7. NRS bundling
8. Regression-determined case-mix weights
9. Resource use data sources and methods
10. Other

Length of Payment Period

- From 60-day episode to 30-day period
  - 60-day episodes are split into equal payments for each 30-day period
  - If only visits during the first 30-day period, only paid for one period
- Concerns
  - Frontloading can be beneficial for the patient; would result in incentive to not frontload to generate a second period
  - Or, may discourage taking patients needing complex care that need multiple periods

Timing

- First 30-day period is early; subsequent periods are late
  - Currently, first and second 60-day episodes are early
  - Early period is paid more than late periods
- Concerns/Recommendations
  - Discourage necessary therapy or other service provision needed after the first 30-day period
  - 60-day gap should be reevaluated to allow for a new sequence to start with hospitalization

Admission Source

- 14-day admission source determines grouping
  - Institutional entrants receiving higher weight/payment
- Concerns/Recommendations
  - Disincentivizes providers from taking community admissions (mixed comments on whether this is beneficial)
  - Recommend including emergency room and observational stays as “institutional”
  - Late period with institutional admission source paid more than early period with community admission source
    - Recommend a 5-day window instead of 14 for designating institutional/community admission

Clinical Groupings

- Six clinical groupings based on principal diagnosis code
  - Two are more therapy heavy (Neuro and MS rehab)
  - MMTA accounts for over 60 percent of episodes
- Concerns/Recommendations
  - MMTA too broad a category (includes too many periods)
  - Not enough therapy groups
  - MMTA and behavioral health paid too low
  - Too much reliance on principal diagnosis

Comorbidity Adjustment

- Secondary diagnosis used to adjust for one of 15 comorbidities, covering these areas:
  - Heart Disease, Cerebral Vascular Disease, Circulatory Disease and Blood Disorders, Endocrine Disease, Neoplasm, Neurological Disease and Associated Conditions, Respiratory Disease, Skin Disease
- Concerns/Recommendations
  - Many patients have multiple comorbidities and adjustment should be made for multiple comorbidities
  - Same adjustment should not be made for all patients (i.e. some comorbidities are more severe, or there are interactions with comorbidities and other characteristics of the patient)

Comorbidities

- **Heart Disease 1:** includes hypertensive heart disease.
- **Cerebral Vascular Disease 4:** includes sequelae of cerebrovascular disease.
- **Circulatory Disease and Blood Disorders 9:** includes venous embolism and thrombosis.
- **Circulatory Disease and Blood Disorders 10:** includes varicose veins of lower extremities with ulcers and inflammation, and esophageal varices.
- **Circulatory Disease and Blood Disorders 11:** includes lymphedema.
- **Endocrine Disease 2:** includes diabetes with complications due to an underlying condition.
- **Neoplasm 18:** includes secondary malignant neoplasms.
- **Neurological Disease and Associated Conditions 5:** includes secondary parkinsonism.
- **Neurological Disease and Associated Conditions 7:** includes encephalitis, myelitis, encephalomyelitis, and hemiplegia, paraplegia, and quadriplegia.
- **Neurological Disease and Associated Conditions 10:** includes diabetes with neurological complications.
- **Respiratory Disease 7:** includes pneumonia, pneumonitis, and pulmonary edema.
- **Skin Disease 1:** includes cutaneous abscesses, and cellulitis.
- **Skin Disease 2:** includes stage one pressure ulcers.
- **Skin Disease 3:** includes atherosclerosis with gangrene.
- **Skin Disease 4:** includes unstageable and stages two through four pressure ulcers.

LUPA Thresholds

- LUPA thresholds will depend on case mix group
  - Currently: one threshold (5 visits) applies to all episodes
  - Proposed: higher of 10th percentile value of visits or 2 visits by payment group (for 30-day period)
- Concerns/Recommendations
  - Single LUPA threshold was simpler
  - Concerns with the upper threshold of 7 for some payment groups
  - Other commenters did support LUPA thresholds by payment group

Non-Routine Supplies Bundling

- NRS payments
  - Currently, NRS is paid separately using a payment model. However, 2/3s of NRS payments are made when no NRS were actually provided
  - Proposed to be included with base payment rate (cost per visit + NRS would be used to determine payment)
- Concerns/Recommendations
  - Commenter felt this would result in overpaying for some cases and underpaying for others (similar to the current system)

Regression-Determined Weights

- Regression method used to determine payment weights for each group
  - Regression used since 2000, inception of HH PPS
  - Smooths the payment weights and allows for adjustment of various HHA-level characteristics
- Concerns/Recommendations
  - One commenter recommended using actual costs in each payment group, rather than a regression-adjusted cost

Resource Use Data and Methods

- HHGM uses cost reports to determine costs per visits
  - Current model using wage-weighted minutes of care (WWMC) from the Bureau of Labor Statistics (BLS)
  - Propose to replace with Cost per Minute + NRS using cost report data
- Concerns/Recommendations
  - Questionable cost report data
  - Favors facility-based versus freestanding HHAs (facility-based can allocate costs differently)

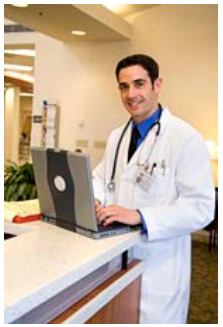
Other

- Disincentivizes therapy provision by removing the utilization component from the current payment model
- Incorporate age, caretaker's availability, vision, cognitive status in the payment model
- Eliminate PEP
- Ensure adequate payments for rural HHAs

Discussion

- Which comments should be explored further?
- What further analyses do you recommend?
- Other comments you have?

Calculation of Resource Use



Measuring Episode Costs

- Need to measure episode costs to design a payment system
- Resource use is an estimate of episode costs
- Multiple approaches considered; two main candidates:
  - Wage Weighted Minutes of Care (WWMC) [payment system currently uses this method]
  - Cost per Minute plus Non-Routine Supplies (CPM + NRS)

Comparison of Approaches

	Wage Weighted Minutes of Care (WWMC)	Cost per Minute plus Non-Routine Supplies (CPM + NRS)
Data Sources	BLS wage estimates, Home Health Medicare claims	Cost Reports, Home Health Medicare claims
General Approach	Wages multiplied by amount of care provided for each discipline	Total costs multiplied by amount of care provided for each discipline
Costs Represented	Wages and fringe benefits directly related to patient visit	Wages, fringe benefits, overhead costs, transportation costs, other non-visiting services labor costs
Imputation Needed?	No	Yes
Non-Routine Supply	Determined through separate model, used NRS cost-to-charge ratio to help set weights	Use NRS cost-to-charge ratio to obtain NRS costs per episode

Resource Use Distribution

	Mean	5th Percentile	25th Percentile	50th Percentile	75th Percentile	95th Percentile
Average Resource Use (WWMC)	$347.44	$42.71	$128.13	$266.23	$492.28	$907.23
Average Resource Use (CPM + NRS)	$1,404.45	$162.43	$528.80	$1,080.80	$1,941.27	$3,674.27
Average Resource Use (CPM)	$1,353.70	$153.38	$509.19	$1,040.43	$1,881.37	$3,543.12

Selecting a Resource Use Approach

- High correlation between methods (0.86 correlation coefficient)

WWMC advantages

- Incorporates labor categories (e.g., LPN versus RN)
- BLS data are available more quickly
- No imputation needed

CPM+NRS advantages

- NRS is incorporated into one payment system, rather than a separate model
- Includes direct (e.g. staffing) and indirect (e.g. transportation) costs
- More evenly weights skilled nursing and therapy services

- HHGM findings use the CPM+NRS method
- Exploration of differences and their implications continues

Resource Use Ratios by Discipline

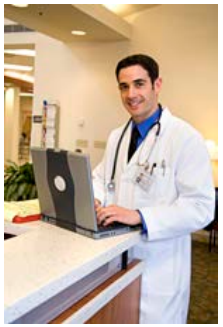
Estimated Cost per Hour	Skilled Nursing	Physical Therapy	Occupational Therapy	Speech Therapy	Medical Social Service	Home Health Aide
Average Resource Use (WWMC)	1.00	1.42	1.42	1.55	0.95	0.36
Average Resource Use (CPM + NRS)	1.00	1.19	1.20	1.30	1.69	0.50

- Ratio of therapy to skilled nursing costs per hour is lower for CPM + NRS
- Ratio of MSS to skilled nursing costs per hour is different directions for CPM+NRS and WWMC methods

Discussion

- Do you favor one resource use method over another – and why?
- Do you have suggestions for improving the measurement of resource use?
- What (if any) are the unintended consequences of selecting either approach?

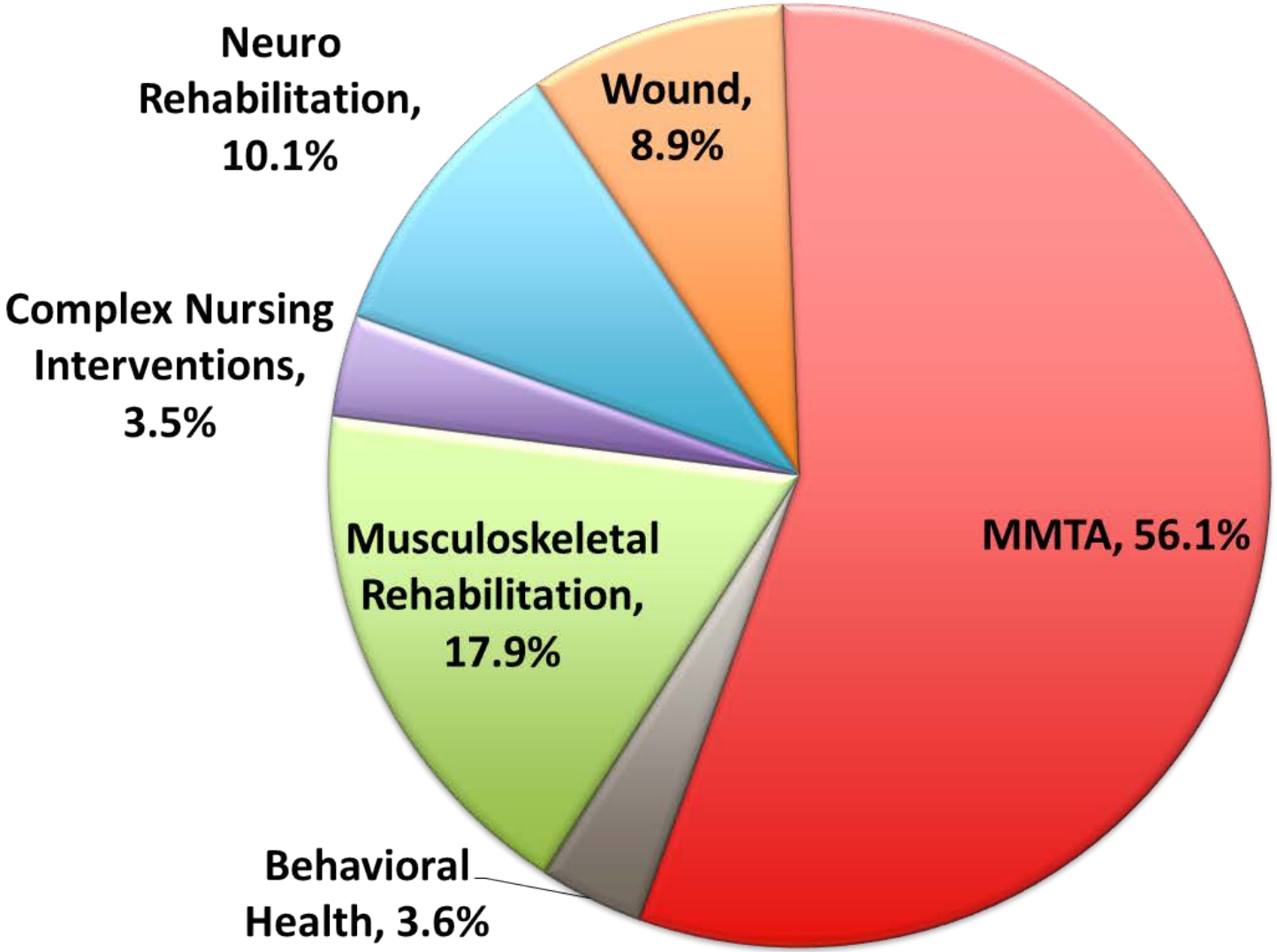
Clinical Groups



Description of the Six Clinical Groups

Clinical Group	Main reason for HH encounter is to provide:
Musculoskeletal Rehabilitation	Therapy (PT/OT/SLP) for a musculoskeletal condition
Neuro/Stroke Rehabilitation	Therapy (PT/OT/SLP) for a neurological condition or stroke
Wounds—Post-Op Wound Aftercare and Skin/Non-Surgical Wound Care	Assessment, treatment and evaluation of a surgical wound(s); assessment, treatment and evaluation of non-surgical wounds, ulcers burns and other lesions
Complex Nursing Interventions	Assessment, treatment, and evaluation of complex medical and surgical conditions including IV, total parenteral nutrition, enteral nutrition, ventilator, and ostomies
Behavioral Health Care	Assessment, treatment, and evaluation of psychiatric conditions
Medication Management, Teaching and Assessment (MMTA)	Assessment, evaluation, teaching, and medication management for a variety of medical and surgical conditions not classified in one of the above groups

Percentage of Periods by Clinical Group



MMTA Subgroups

Average Resource Use by MMTA Subgroup

Subgroup	N	%	Mean	Median
Surgical/Procedural Aftercare	306,069	6.0%	$1,602.37	$1,321.56
Cardiac/Circulatory	1,610,900	31.8%	$1,423.45	$1,108.80
Endocrine	435,313	8.6%	$1,493.07	$1,027.65
Infectious/Blood Forming Diseases/Neoplasms	488,469	9.6%	$1,439.33	$1,133.12
Other	1,518,941	30.0%	$1,362.78	$1,034.10
Respiratory	705,118	13.9%	$1,403.24	$1,111.27
Total	5,064,810	100.0%	$1,420.77	$1,095.87

Most Common Diagnoses: Surgical/Procedural Aftercare

- Encounter for surgical aftercare following surgery on the circulatory system (Z48.812): 42.3%
- Aftercare following surgery for neoplasm (Z48.3): 22.1%
- Encounter for surgical aftercare following surgery on the digestive system (Z48.815): 19.3%

Cumulative Percentage is 83.7%

Most Common Diagnoses: Cardiac

- Heart failure, unspecified (I50.9): 16.9%
- Unspecified atrial fibrillation (I48.91): 9.4%
- Hypertensive chronic kidney disease with stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease (I12.9): 7.5%
- Atherosclerotic heart disease of native coronary artery without angina pectoris (I25.10): 6.8%
- Venous insufficiency (chronic) (peripheral) (I87.2): 6.5%
- Hypertensive heart disease without heart failure (I11.9): 5.4%

Cumulative Percentage is 52.6%

Most Common Diagnoses: Respiratory

- Chronic obstructive pulmonary disease, unspecified (J44.9): 33.9%
- Chronic obstructive pulmonary disease with (acute) exacerbation (J44.1): 32.9%
- Pneumonia, unspecified organism (J18.9): 11.2%
- Chronic obstructive pulmonary disease with acute lower respiratory infection (J44.0): 5.7%

Cumulative Percentage is 83.7%

Most Common Diagnoses: Endocrine

- Type 2 diabetes mellitus with hyperglycemia (E11.65): 24.3%
- Type 2 diabetes mellitus with diabetic neuropathy, unspecified (E11.40): 20.3%
- Type 2 diabetes mellitus with diabetic polyneuropathy (E11.42): 17.6%
- Type 2 diabetes mellitus with diabetic chronic kidney disease (E11.22): 15.2%
- Type 2 diabetes mellitus with diabetic peripheral angiopathy without gangrene (E11.51): 3.4%

Cumulative Percentage is 80.7%

Most Common Diagnoses: Infectious /Blood Forming Diseases/Neoplasms

- Urinary tract infection, site not specified (N39.0): 29.7%
- Anemia, unspecified (D64.9): 5.3%
- Vitamin B12 deficiency anemia due to intrinsic factor deficiency (D51.0): 4.6%
- Malignant neoplasm of prostate (C61.): 3.1%
- Infection following a procedure, subsequent encounter (T81.4XXD): 3.1%
- Enterocolitis due to Clostridium difficile (A04.7): 2.8%
- Multiple myeloma not having achieved remission (C90.00): 1.8%

Cumulative Percentage is 50.3%

Most Common Diagnoses: Other

- Essential (primary) hypertension (I10.): 40.5%
- Type 2 diabetes mellitus without complications (E11.9): 21.7%
- Benign prostatic hyperplasia with lower urinary tract symptoms (N40.1): 1.7%
- Other chronic pain (G89.29): 1.7%

Cumulative Percentage is 65.6%

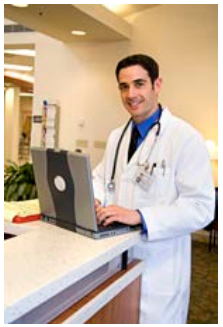
MMTA Subgroups

- If nothing else about the HHGM model changed, each additional clinical group would result in 2*2*3*2 = 24 additional case-mix groups
- Separation in case-mix weights between the groups likely would not be large due to the limited difference in resource use across the MMTA subgroups
  - Surgical/Procedural Aftercare looked like the MMTA sub-group with the largest difference in resource use, but it was only $100-$200 larger than the other groups

Questions

- How should periods be grouped in order to account for differences amongst patient diagnoses?
- Should the MMTA clinical group be divided into additional sub-groups?
  - Is the added complexity of having additional case-mix groups worthwhile?

Comorbidity Adjustment



Comorbidity Adjustment: Motivation

- The primary HH diagnosis determines the HHGM clinical group

- However, secondary diagnoses also contain relevant information indicating patient need for case-mix adjustment, even after accounting for other aspects of the HHGM

- A **comorbidity** is defined as a medical condition coexisting in addition to a primary diagnosis
  - Comorbidity is tied to worse health outcomes, more complex medical need and management, and higher care costs

Most Common CCW Chronic Condition Flags for Beneficiaries Receiving Home Health	% of Beneficiaries
Hypertension	94.7%
Hyperlipidemia	87.3%
Anemia	82.8%
Rheumatoid Arthritis/Osteoarthritis	79.5%
Ischemic Heart Disease	71.1%
Cataract	70.8%
Chronic Kidney Disease	60.5%
Depression	57.5%
Diabetes	55.4%
Heart Failure	55.0%
Chronic Obstructive Pulmonary Disease and Bronchiectasis	48.7%
Asthma	41.6%
Alzheimer's Disease and Related Disorders or Senile Dementia	38.9%

Most Common CCW Chronic Condition Flags for Beneficiaries Receiving Home Health	% of Beneficiaries
Acquired Hypothyroidism	38.5%
Osteoporosis	33.3%
Stroke	31.1%
Atrial Fibrillation	30.1%
Glaucoma	26.9%
Benign Prostatic Hyperplasia	23.2%
Alzheimer's Disease	14.9%
Hip/Pelvic Fracture	11.4%
Acute Myocardial Infarction	10.8%
Female/Male Breast Cancer	7.4%
Prostate Cancer	6.4%
Colorectal Cancer	5.0%
Lung Cancer	3.7%
Endometrial Cancer	1.6%

Comorbidities Specific to Home Health

- A HH specific comorbidity list was developed with broad clinical categories used to group comorbidities within the HHGM:
  - heart disease
  - respiratory disease
  - circulatory disease
  - cerebrovascular disease
  - gastrointestinal disease
  - neurological conditions
  - endocrine disease
  - neoplasms
  - genitourinary/renal disease
  - skin disease
  - musculoskeletal disease
  - behavioral health
  - infectious diseases

Comorbidities Specific to Home Health

- When evaluating comorbidities for HHGM inclusion, we assigned those with at least 0.1% of periods to subcategories

- For remaining comorbidities, we determined each subcategory's associated average resource use and flagged those with higher than average increased costs for a **comorbidity adjustment group**

- Periods having at least one comorbidity included with the adjustment group will receive an adjustment (roughly 16.7%)

Frequency of Periods and Resource Use Estimates by Comorbidity Presence

Comorbidity Group	# 30-Day Periods	% 30-Day Periods	Mean Resource Use	Median Resource Use
No Comorbidity Adjustment	7,522,067	83.26%	$1,486.34	$1,197.93
Comorbidity Adjustment	1,512,902	16.74%	$1,822.68	$1,466.23
Total	9,034,969	100.00%	$1,542.66	$1,239.91

Additional Approaches to Comorbidity Adjustment

- Comorbidity adjustment currently causes case-mix weight to increase by 0.174.
- Alternative Approach - Set it up just like functional levels
  - Each comorbidity contributes points to a comorbidity score
  - Multiple comorbidity levels (low, medium, high)
    - Medium comorbidity level increases case-mix weight by 0.0193
    - High comorbidity level increases case-mix weight by 0.1217
  - This approach causes the case-mix adjustment to impact weights less than previous approach
    - More 30-day periods receive an adjustment though

Additional Approaches to Comorbidity Adjustment

- Alternative Approach - Set it up just like functional levels
  - Three levels, but low is 80% of 30-day periods, medium is 10% of 30-day periods, and high is 10% of 30-day periods
    - Medium comorbidity level increases case-mix weight by 0.0741
    - High comorbidity level increases case-mix weight by 0.2301

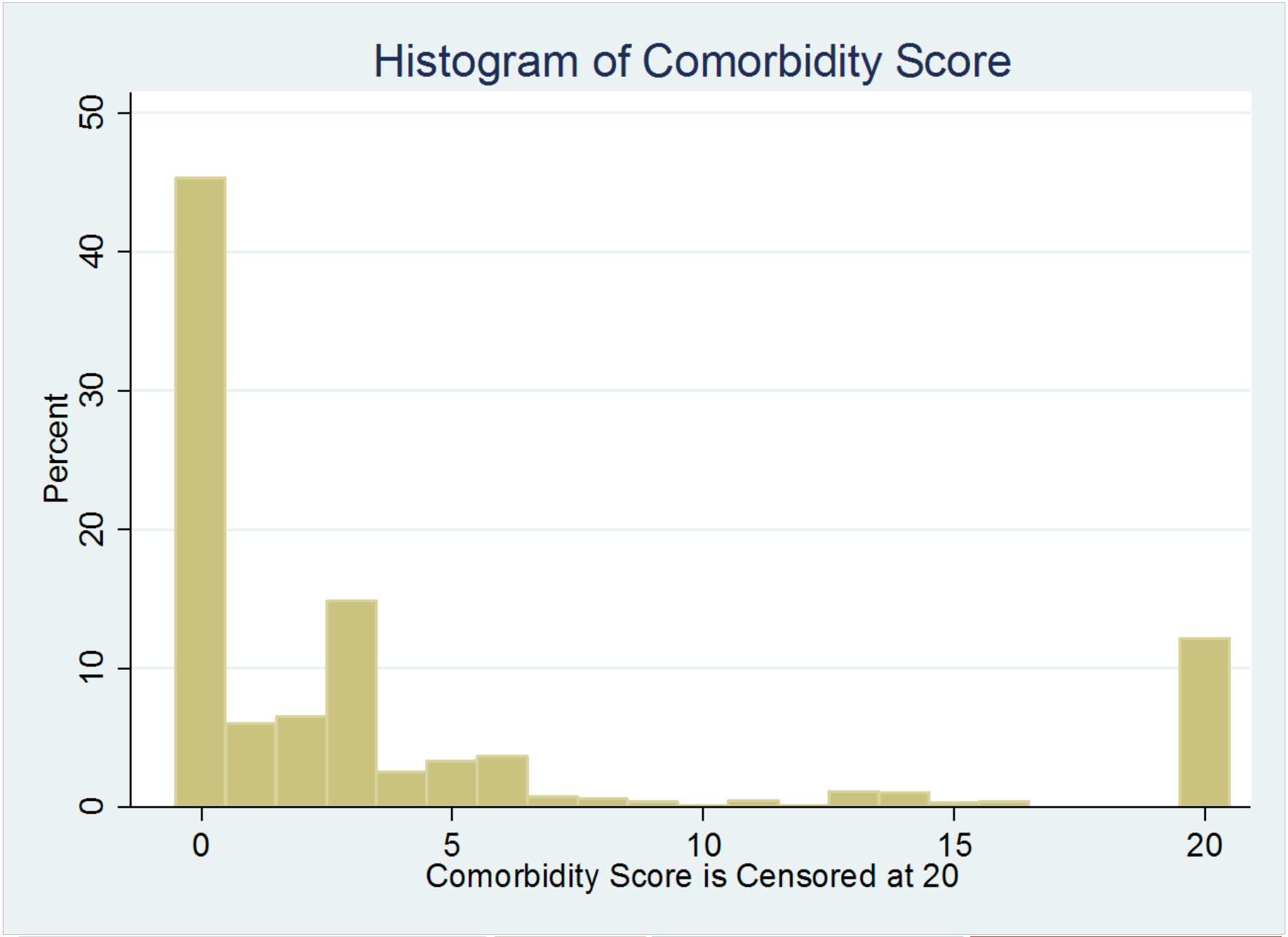
Additional Approaches to Comorbidity Adjustment

- Alternative Approach – Make comorbidity adjustment vary depending on clinical group.

	Option 1		Option 2	
	Medium (33% of Periods)	High (33% of Periods)	Medium (10% of periods)	High (10% of periods)
MMTA	0.0132	0.1023	0.0456	0.2357
Behavioral Health	0.062	0.0582	0.0321	0.0646
Complex	0.0143	0.0779	0.0089	0.2168
MS Rehab	0.0168	0.1113	0.0588	0.1942
Neuro	0.0348	0.2276	0.2613	0.3234
Wound	0.051	0.1838	0.1084	0.2358

Questions

- Is it more desirable to have more 30-day periods receive a smaller comorbidity adjustment or fewer periods receive a larger comorbidity adjustment – and why?
- What is the best approach to adjust for comorbidities?



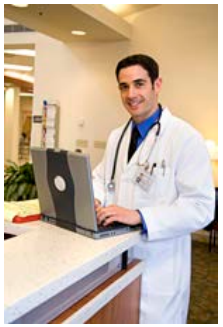
Option 1 - Points needed to be grouped into comorbidity levels

	Low (~33% of 30-day periods)	Medium (~33% of 30-day periods)	High (~33% of 30-day periods)
MMTA	0	1-3	4+
Behavioral Health	0	1	2+
Complex	0	1-3	4+
MS Rehab	0	1-2	3+
Neuro Rehab	0	1-3	4+
Wound	0-2	3-22	23+

Option 2 - Points needed to be grouped into comorbidity levels

	Low (~80% of 30-day periods)	Medium (~10% of 30-day periods)	High (~10% of 30-day periods)
MMTA	0-5	6-16	17+
Behavioral Health	0-3	4-5	6+
Complex	0-6	7-17	18+
MS Rehab	0-3	4-6	7+
Neuro Rehab	0-13	14-17	18+
Wound	0-41	42-45	46+

Admission Source



Admission Source

- **Institutional:** Acute or post-acute (skilled nursing facility, inpatient rehabilitation facility, long term care hospital) care in the 14 days prior to the HH admission

- **Community:** No acute or post-cute care in the 14 days prior to the HH admission

Admission Source	Average Resource Use	Number of Periods	Percent	SD	25th Percentile	Median	75th Percentile
Institutional	$2,125.21	2,295,678	25.4%	$1,289.02	$1,206.72	$1,875.19	$2,737.54
Community	$1,344.22	6,739,291	74.6%	$1,113.00	$559.97	$1,034.91	$1,792.79
Total	$1,542.66	9,034,969	100.0%	$1,209.05	$660.61	$1,239.91	$2,080.72

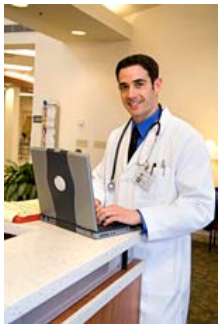
Admission Source

- Observational stays occur infrequently before a 30-day period of care
  - Roughly 2% of periods
  - Average resource use is very similar to the community admission source
  - Including observational stays with institutional admissions would slightly lessen the impact of institutional admission source

Questions

- How should admission source be controlled for?
- Are there concerns with only accounting for institutional versus community admission source?
- Should a shorter or longer lookback be used?

Episode Length and Timing



30 Day Periods: Overview and Motivation

- In the HH PPS, HHAs are paid for each (up to) 60 day episode of care
- However, we found significant resource usage differences across 60 day episodes' first and second halves
  - Separately paying each half in accordance with differential resource use better aligns payments with cost
- For the HHGM analysis, we simulate 30 day periods

Mean Visits & Resource Use in each 15 Day Segment of a (Full) and First 60-Day Episode among CY 2016 Episodes; n=856,014

	Days 1-15	Days 16-30	Days 31-45	Days 46-60
Total Visits	8.1	6.4	5.1	4.6
SN Visits	3.9	2.5	2.2	2.3
PT Visits	2.6	2.4	1.7	1.4
OT Visits	0.8	0.8	0.5	0.4
SLP Visits	0.1	0.2	0.1	0.1
Aide Visits	0.5	0.5	0.5	0.4
MSS Visits	0.1	0.1	0.0	0.0
Resource Use	$328.99	$233.01	$184.52	$171.60

Timing

- In the current payment system, early episodes are first or second in a sequence of episodes
  - When the most recent case-mix refinements went into effect in 2008, late episodes (3rd or later) had higher resource use on average (and therefore higher case-mix weights)
  - In recent years, the relationship is more mixed – sometimes late episodes have lower case-mix weight than a comparable early episode
- In the HHGM, early periods are only the first in a sequence of episodes
  - This was done to simplify the model and best reflect the relationship between episode timing and resource use

Benefits of Transition to 30 Day Periods

1. HHGM fit statistics (e.g., R^2) improve from reduced variation arising from a more constrained time window; in turn this creates more accurate case mix weights
2. Shorter episodes may promote HHAs to more frequently review patients' status and thereby respond more diligently to patient needs

Methodology

- Simulated 30 day periods were constructed using segments of current 60 day episodes
  1. A 30 day period comprised of days 1-30
  2. Where applicable (depending on episode length), a second period comprised of days 31-60
- *Example: a 58 day episode yields two new segments: a initial 30 day period (days 1-30) and a second 28 day period (days 31-58)*
- Home health episodes from the current payment system that are 30 days or less will not yield a second period in the HHGM

Results

- Overall, there were 5,710,726 60-day episodes
  - Of these, 1,513,958 episodes are 30 days or less
    - Those only produce a single 30-day period
  - The remaining 4,196,768 episodes exceed 30 days
    - Each produces two 30-day periods
    - However, we excluded 872,525 periods without visits or that would be considered a LUPA under the HHGM
- 1,513,958+2*4,196,768-872,525 = 9,034,969 30-day periods

Regression Results

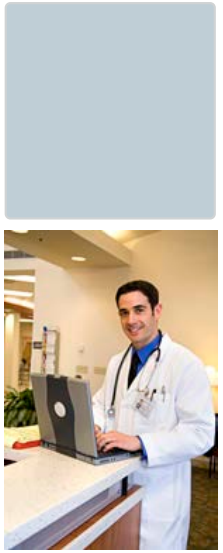
- Handout contains regression models showing coefficients from a HHGM 30-day period model and a HHGM 60-day episode model
- Results are similar across different models

Questions?

- What time period should episodes cover? What are the trade-offs between having a shorter versus a longer episode?
- How should episode timing be accounted for?
- Other thoughts?

Case-mix Comparisons Between HHGM and Current Payment System

T.J. Christian



Objectives

- Examine the case-mix weights across the HHGM and the current payment system by characteristics of episodes and home health agencies
- Collect feedback from TEP

Case-Mix Weights in Home Health Groupings Model Overview

- The **Home Health Groupings Model** (**HHGM**) assigns separate payment weights to episodes for patients with similar characteristics and needs

  1. Separate episodes into grouping "buckets"

     - Accounts for clinical grouping, functional level, timing, admission source, and comorbidity adjustment: 144 total "buckets" or buckets

  2. Calculate each group's **case-mix weight** as the group's predicted mean cost relative to the overall average

     - A group with higher (lower) than average cost is assigned a case-mix weight above (below) "1.00"

- Eventually, we will use the new case-mix weights to adjust the home health base payment amount

  - Higher resource need episodes are assigned higher case-mix weights and thereby receive more payment

Case-Mix Weights Calculation

- Calculate each group's **case-mix weight** as the group's predicted mean cost relative to the overall average
  - ***Resource use*** is our measure of episode cost
  - Groups with higher (lower) than average resource use are assigned case-mix weights above (below) "1.00"

Grouping	Group 1	Group 2	Group 3
Predicted Resource Use:	$600	$1,800	$4,800
Relative to Average: [= $2,400]	$600/$2,400 =	$1,800/$2,400 =	$4,800/$2,400 =
Implied ***Case-Mix Weight***:	0.250	0.750	2.000

Case-Mix Weights Impact on Payment

- Case-mix weights adjust the home health base payment amount
  - Higher case-mix weights → Higher episode payments

Home Health Groupings Model Episode Payment Determination
(Episode Base Payment Amount) x (***Case-Mix Weight***) x (Wage Index)
+
Outlier Payment Amount
=
Home Health Episode Total Episode Payment

Analytic Sample to Compare HHGM Payment Weights

- Medicare home health episodes ending in 2016
  - Exclude Low Utilization Payment Amount episodes (<5 visits) in the current payment system

- To current payment system case-mix weights, we compare HHGM weights (30-day and 60-day weights)

- We average 30-day weights to their originating 60-day episode for comparison

Simulating Case-Mix Weights: Two 30-day Periods

Current Payment System	HHGM (30-Day) System	Case-Mix Weight Comparison
60-day Episode (Case-mix Weight="X")	30-day Period #1 (Case-mix Weight="A")	"X" vs. [("A"+"B")/2]
	30-day Period #2 (Case-mix Weight="B")	

Simulating Case-Mix Weights: One 30-day Period

Current Payment System	HHGM (30-Day) System	Case-Mix Weight Comparison
60-day Episode (Case-mix Weight="X")	30-day Period #1 (Case-mix Weight="A")	"X" vs. "A"
	< Missing >	

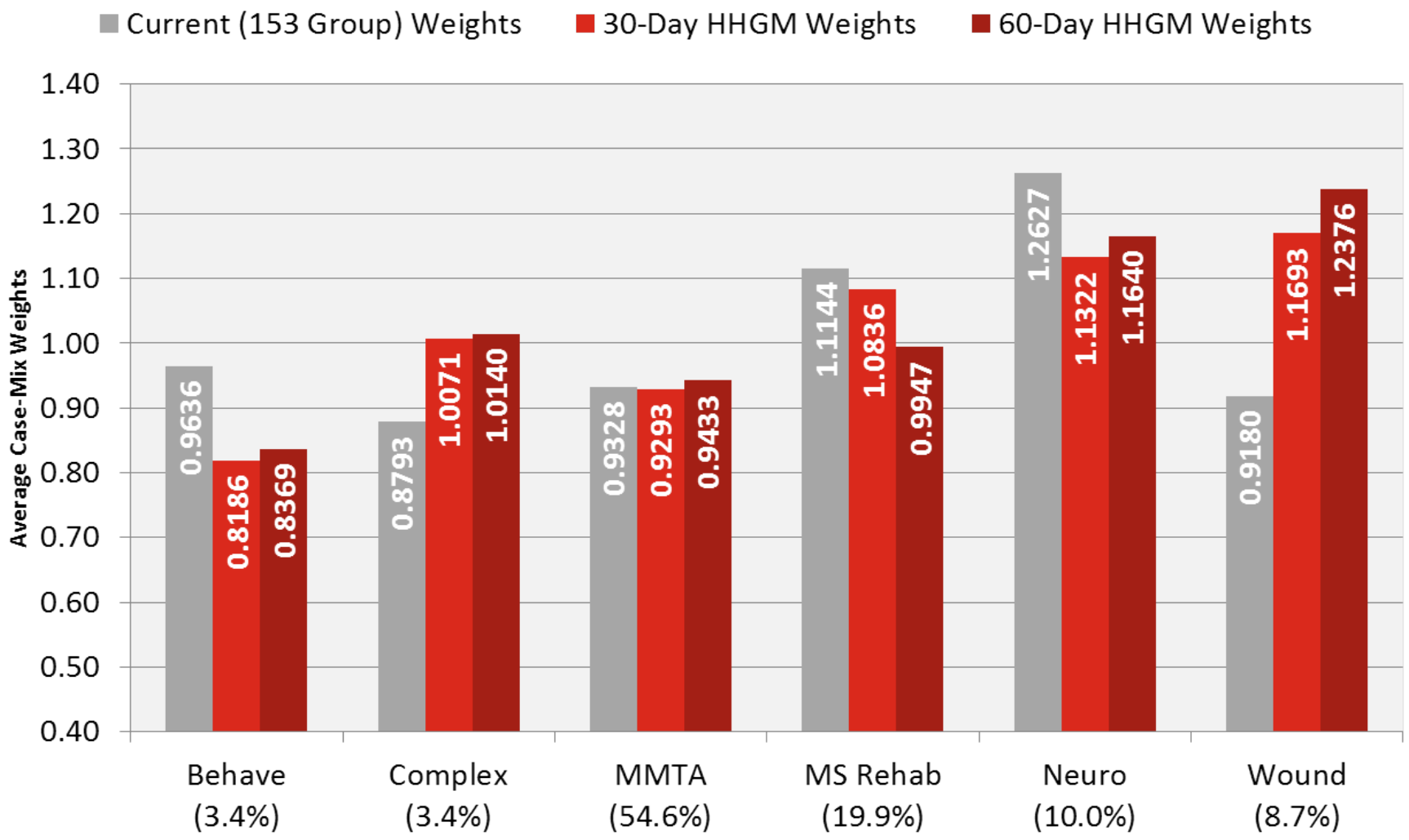
Results

- Three sets of results: Average Case-Mix Weights across…
  1. HHGM episode characteristics
  2. Home health agency characteristics
  3. Clinical characteristics of patients

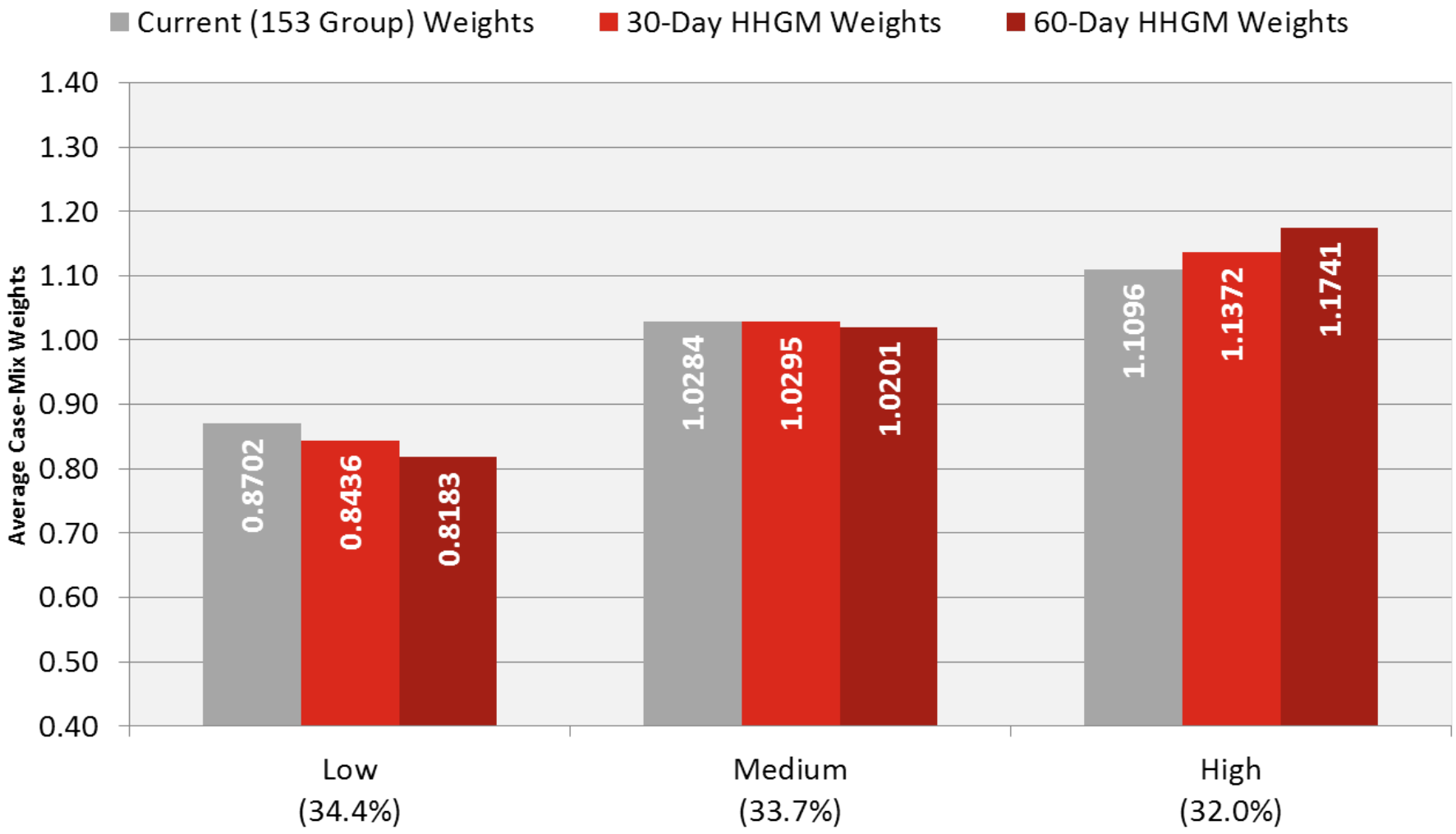
Average Case-Mix Weights across HHGM Episode Characteristics

- In this section we examine changes in case-mix weights across the characteristics that determine HHGM buckets/groupings:
  - Clinical grouping
  - Functional level
  - Admission source
  - Timing
  - Comorbidity adjustment

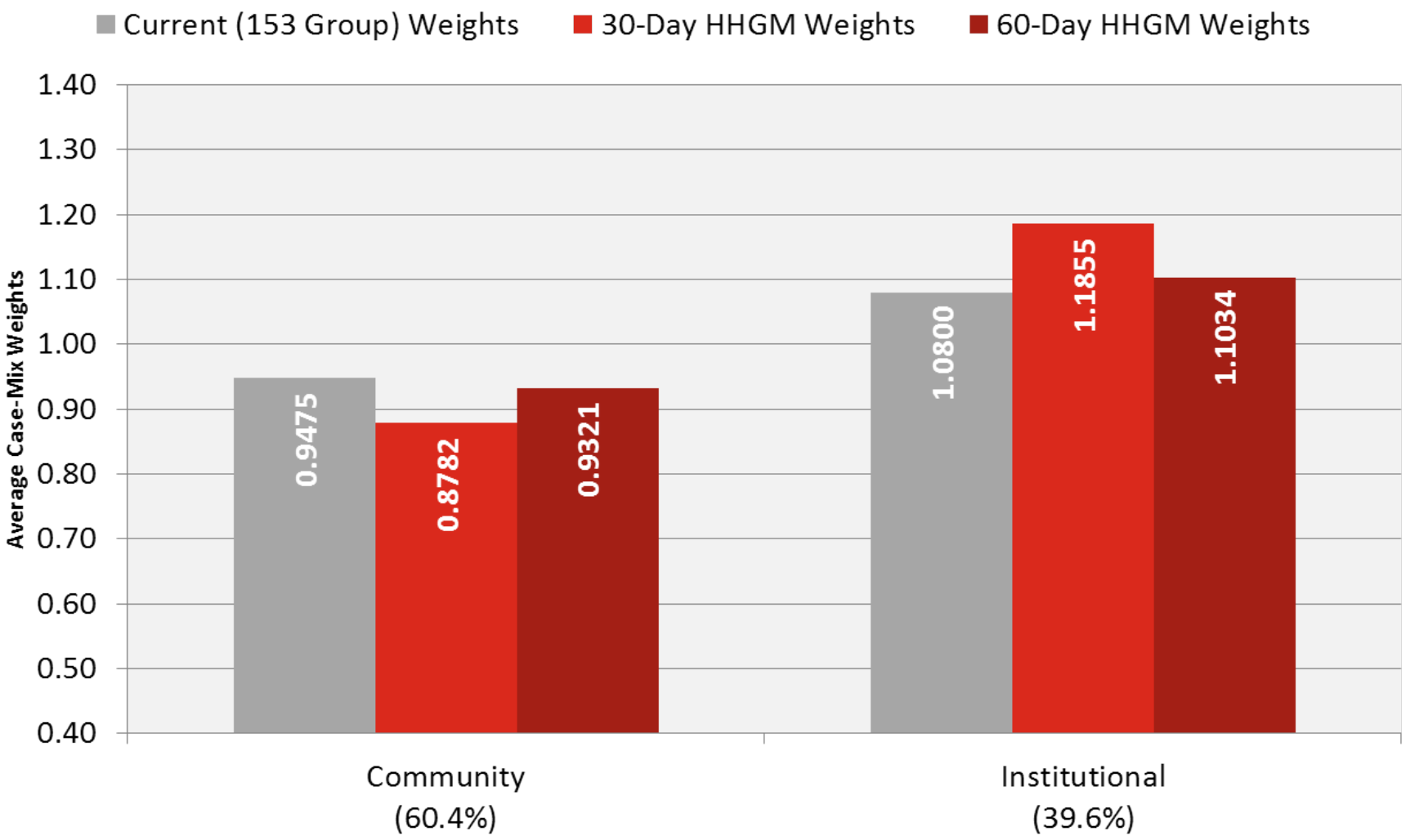
Average Case-Mix Weights, by Clinical Grouping



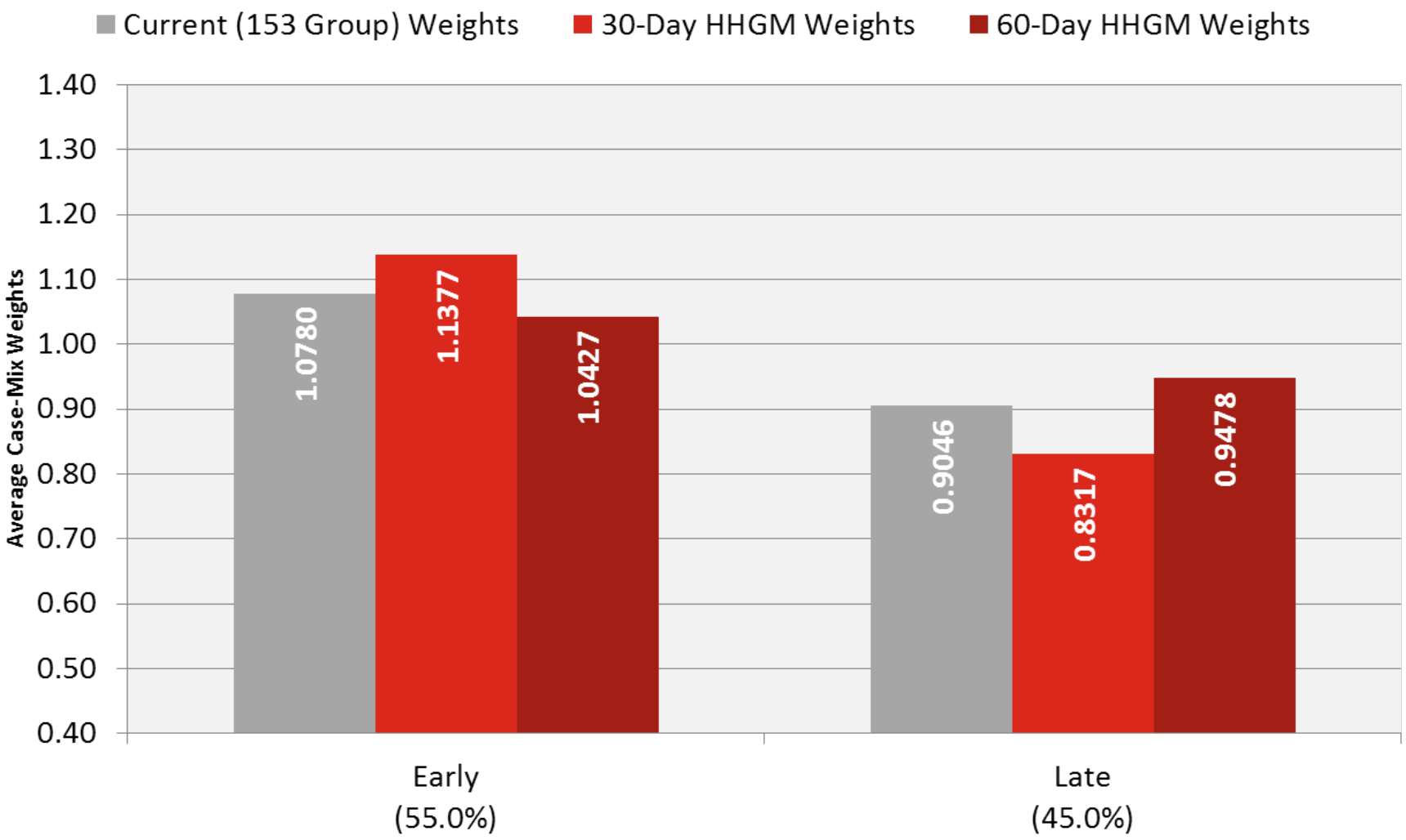
Average Case-Mix Weights, by Level of Functional Limitations



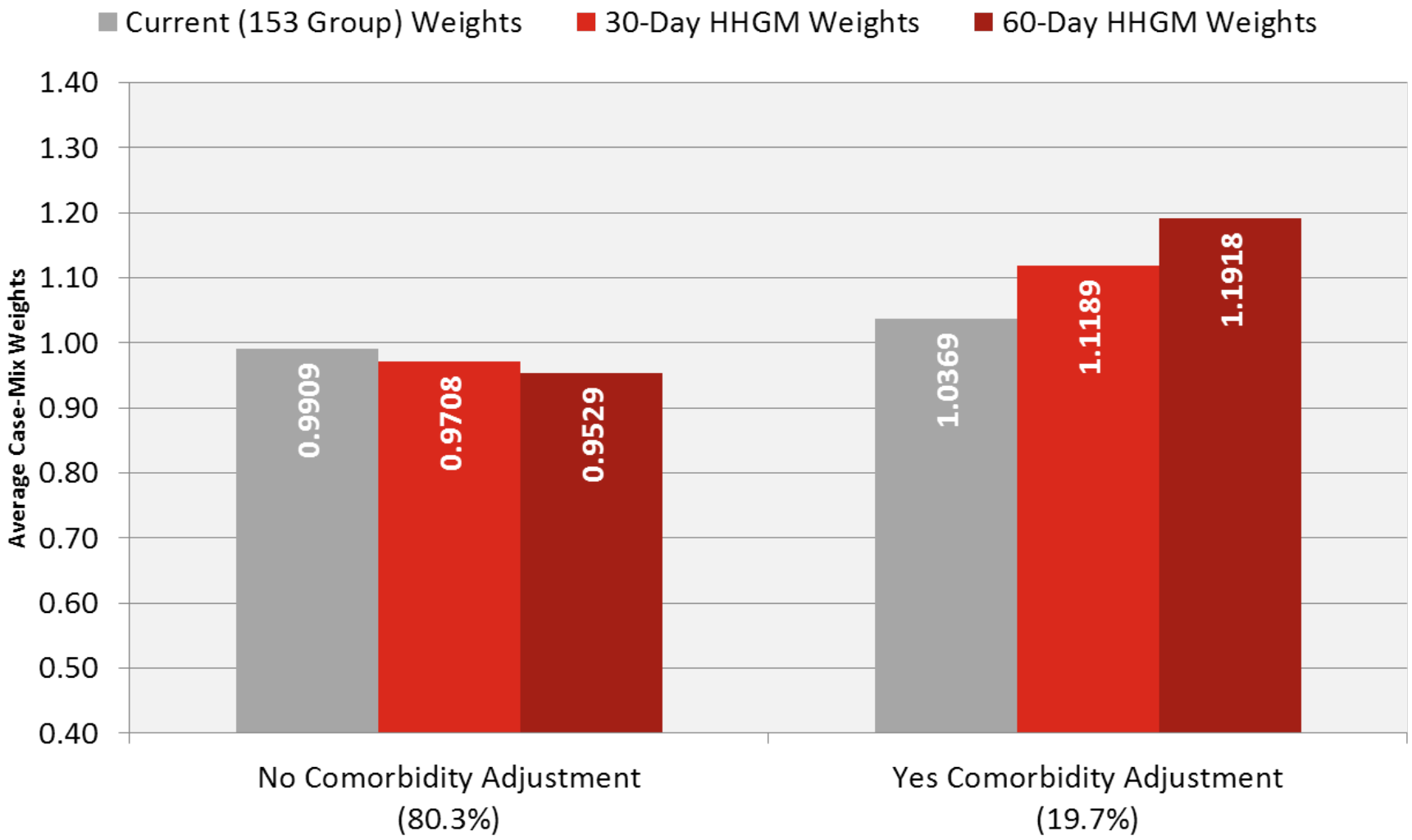
Average Case-Mix Weights, by Admission Source



Average Case-Mix Weights, by Timing



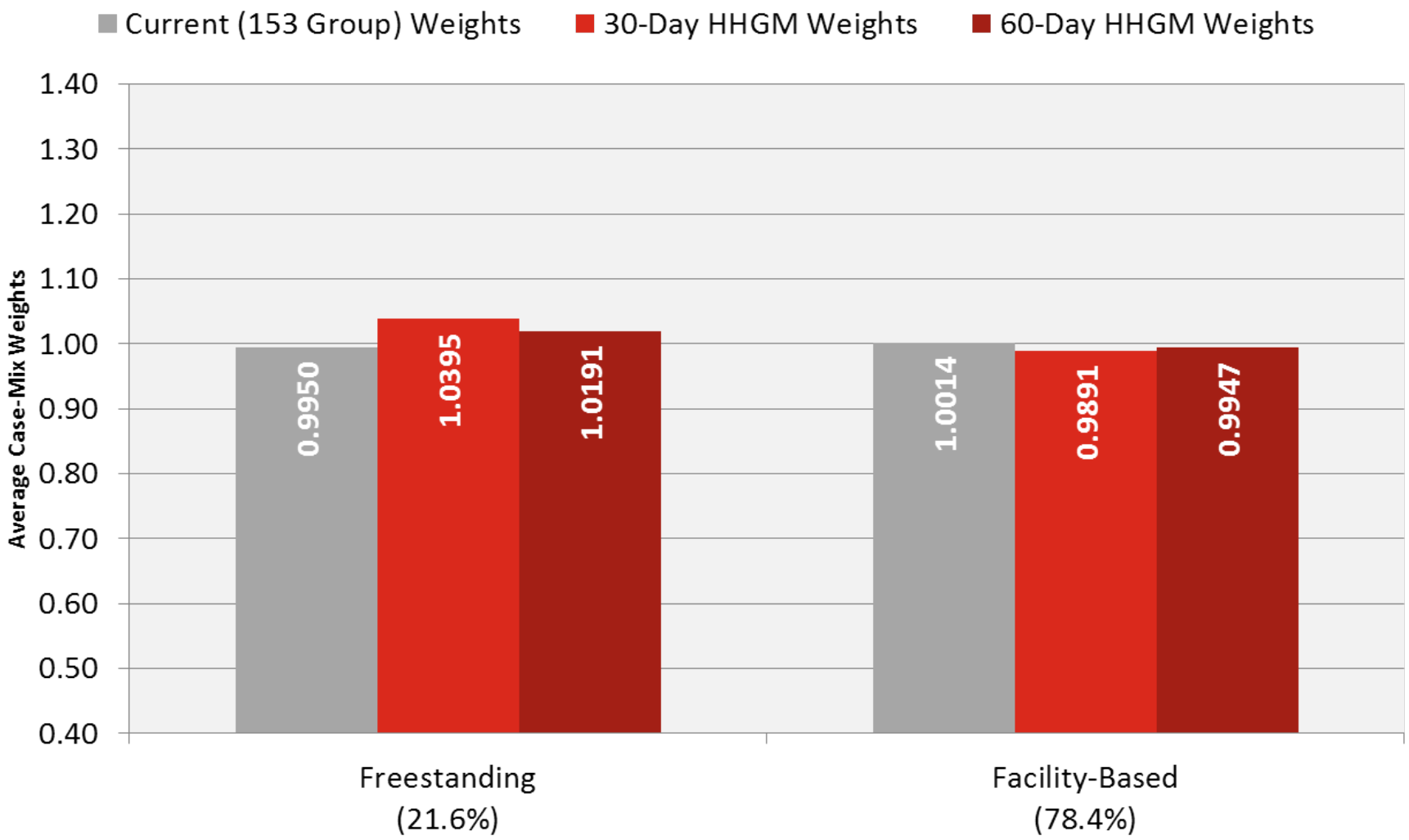
Average Case-Mix Weights, by Comorbidity Adjustment



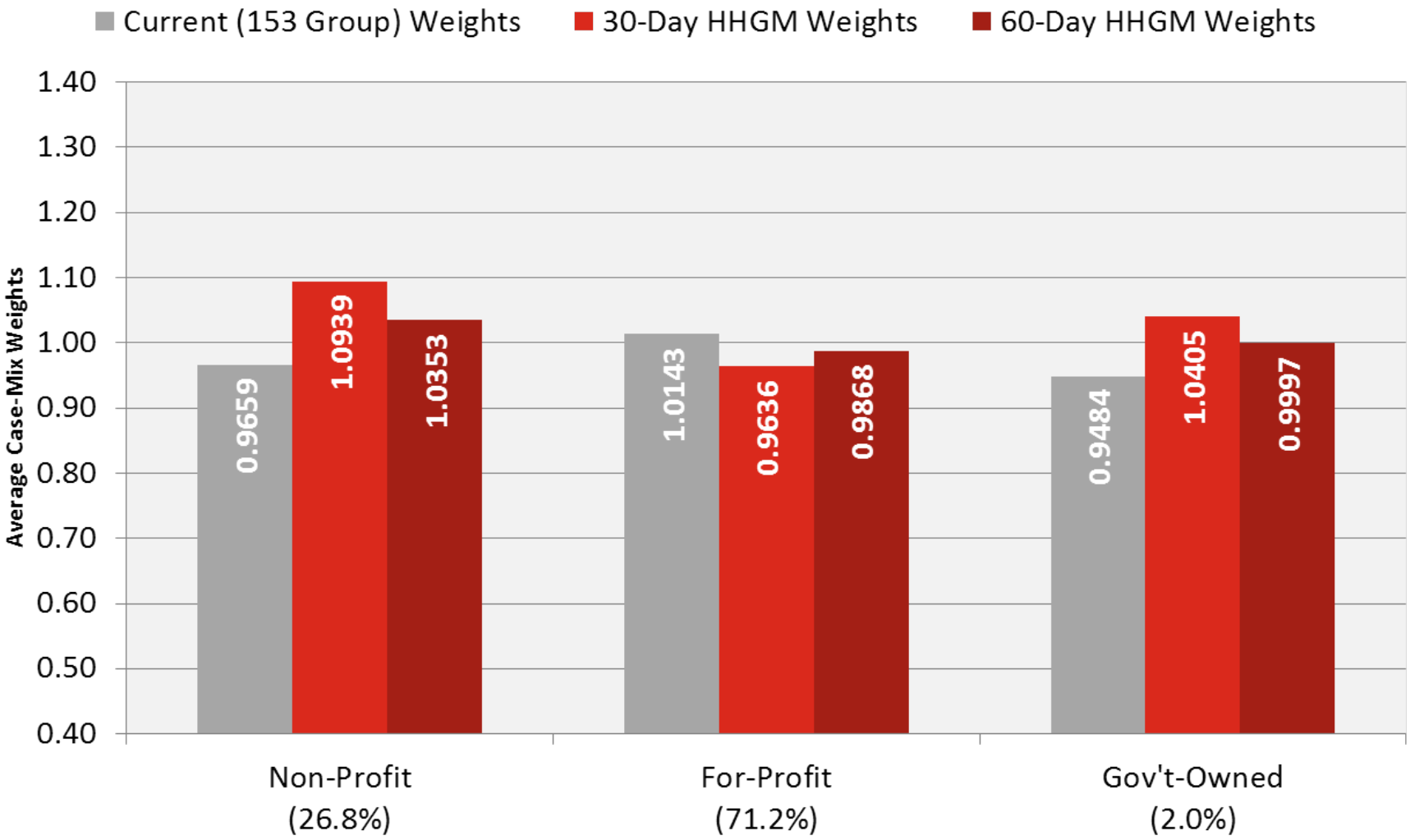
Average Case-Mix Weights across Home Health Agency Characteristics

- In this section we examine changes in case-mix weights across characteristics of home health agencies
  - Freestanding vs. facility-based status
  - Ownership type
  - Census region
  - Urban/rural status
  - Agency total nursing/therapy visits ratio
  - Size (# of episodes served)

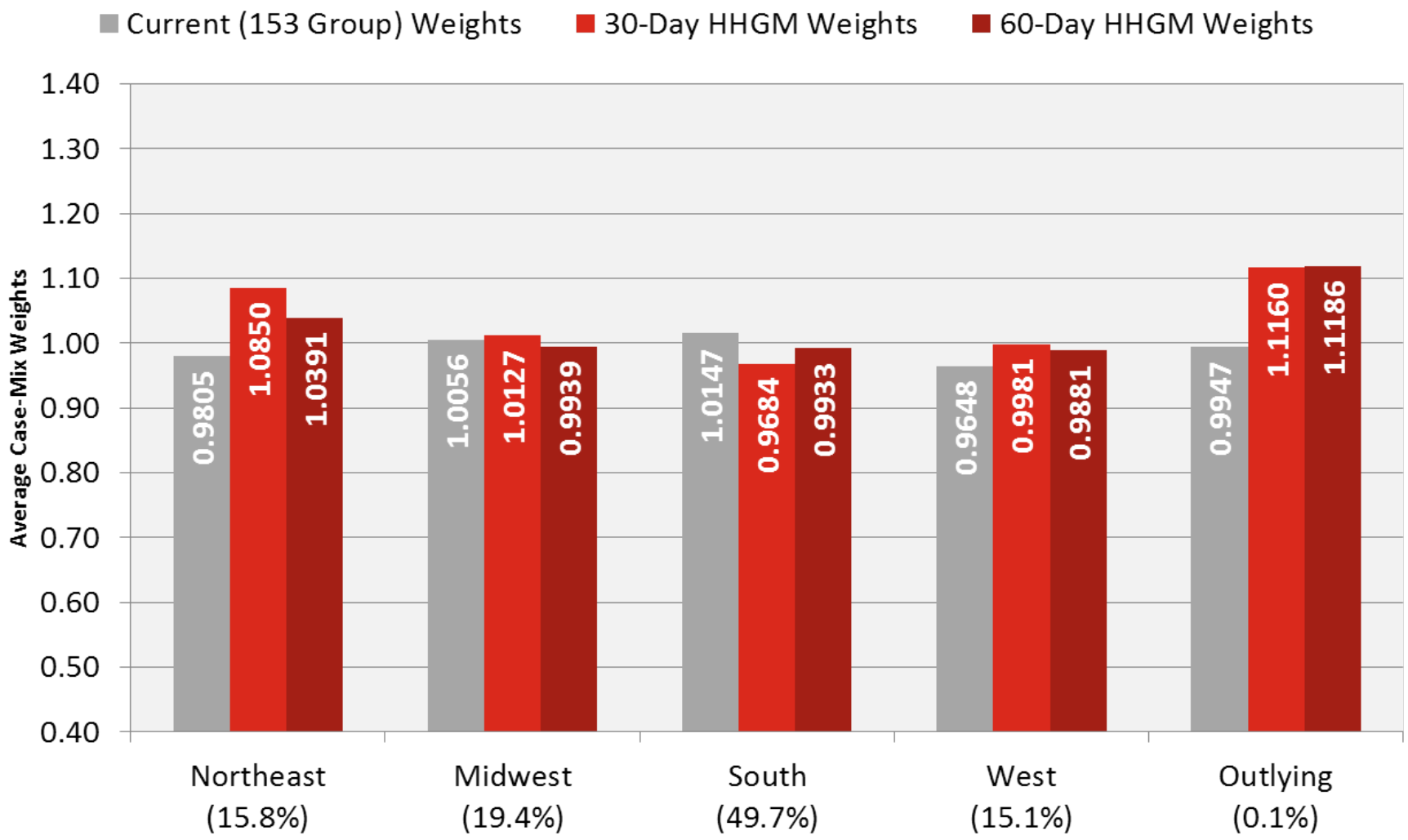
Average Case-Mix Weights, by Facility Type



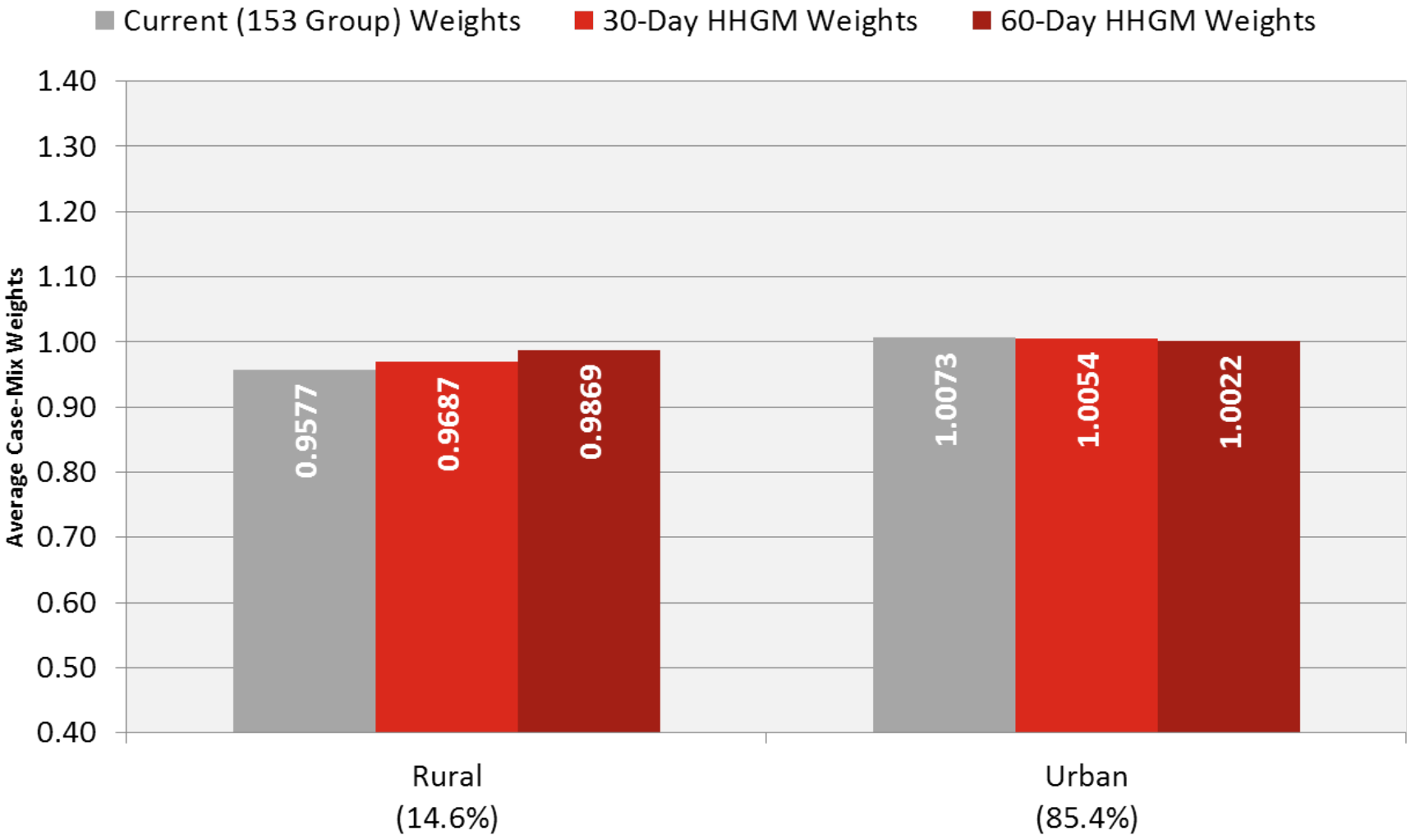
Average Case-Mix Weights, by Ownership Type



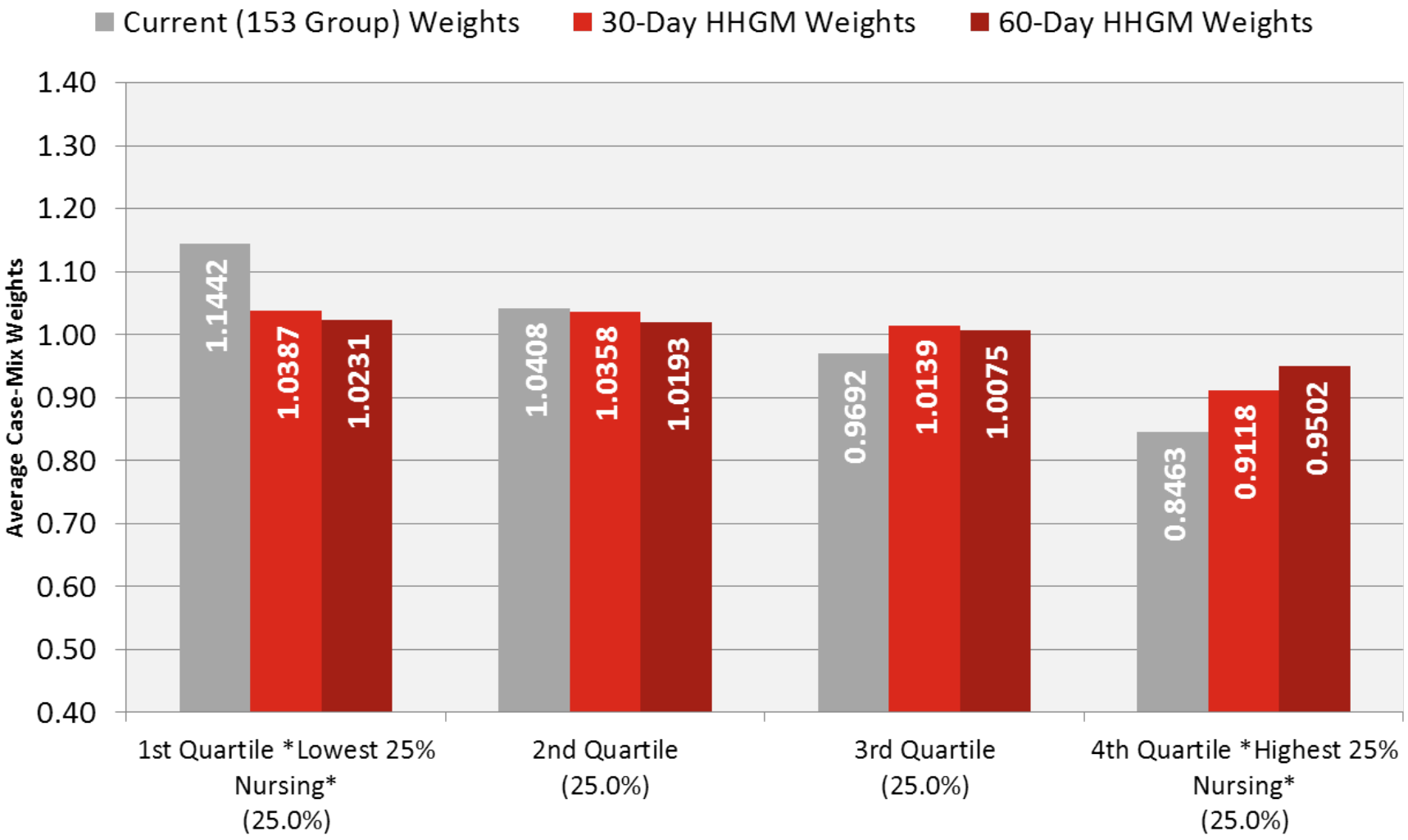
Average Case-Mix Weights, by Region



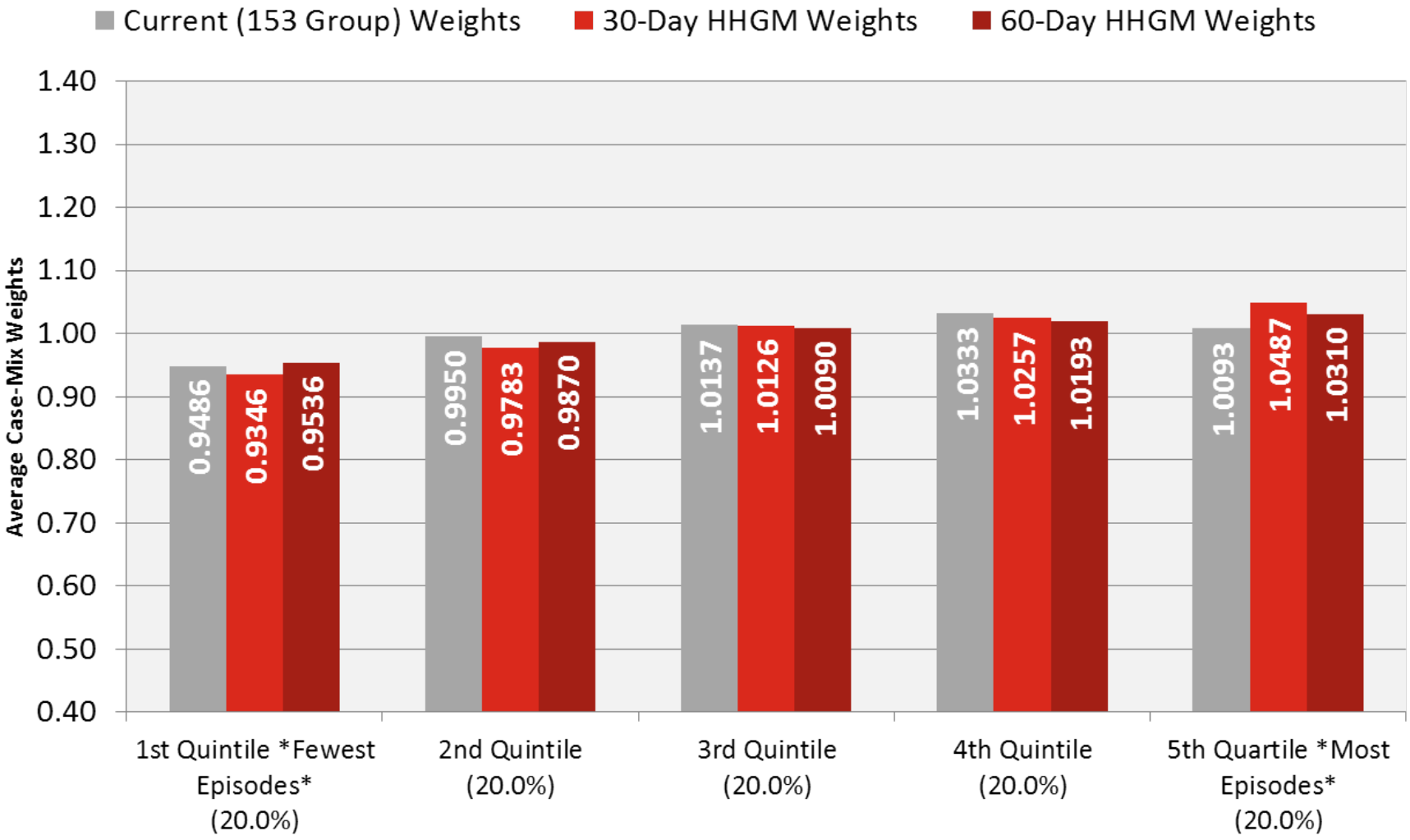
HHGM Case-Mix Changes, by Urban/Rural Status



HHGM Case-Mix Changes, by Total Nursing to Therapy Visits Ratio



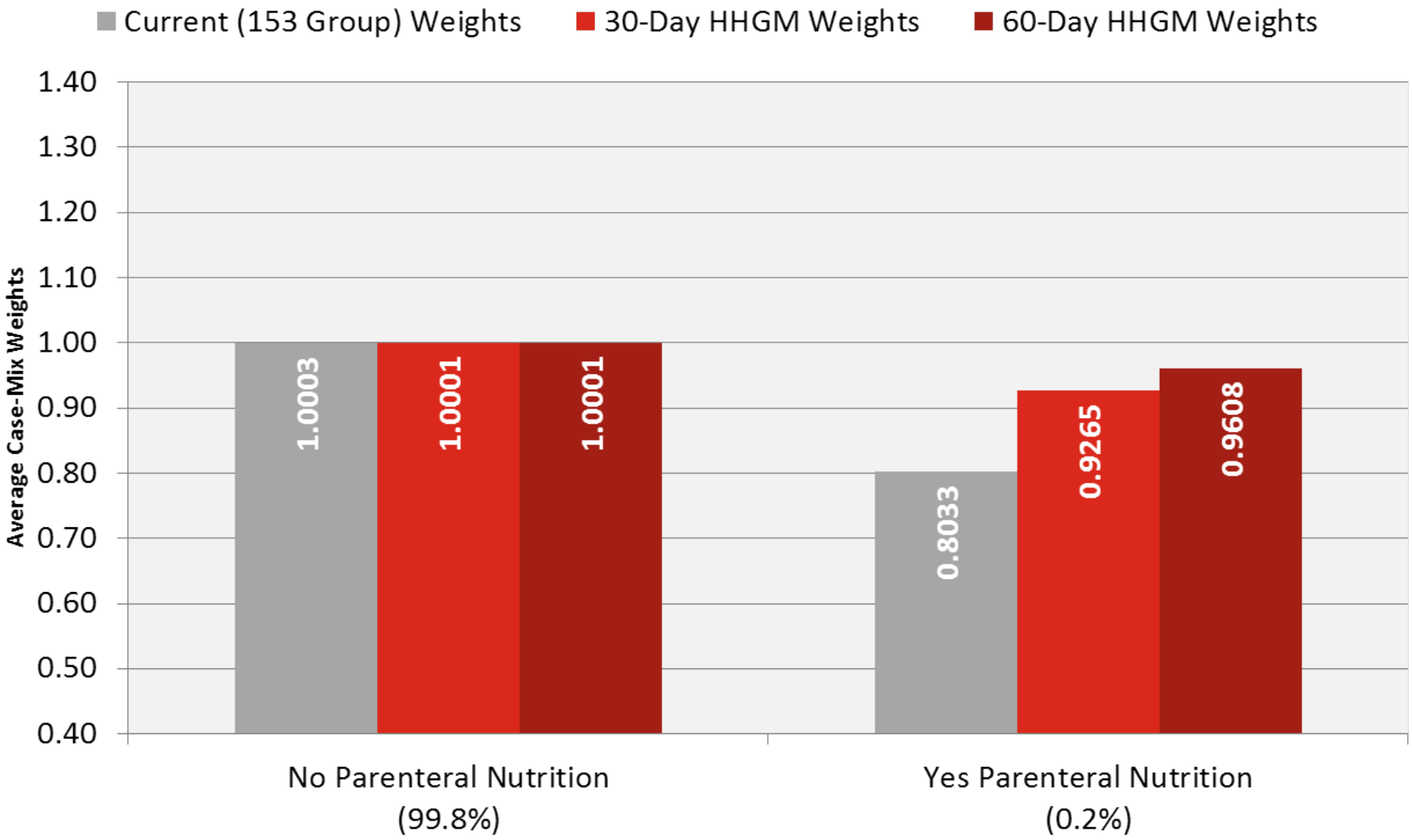
Average Case-Mix Weights, by Facility Size (in Episodes)



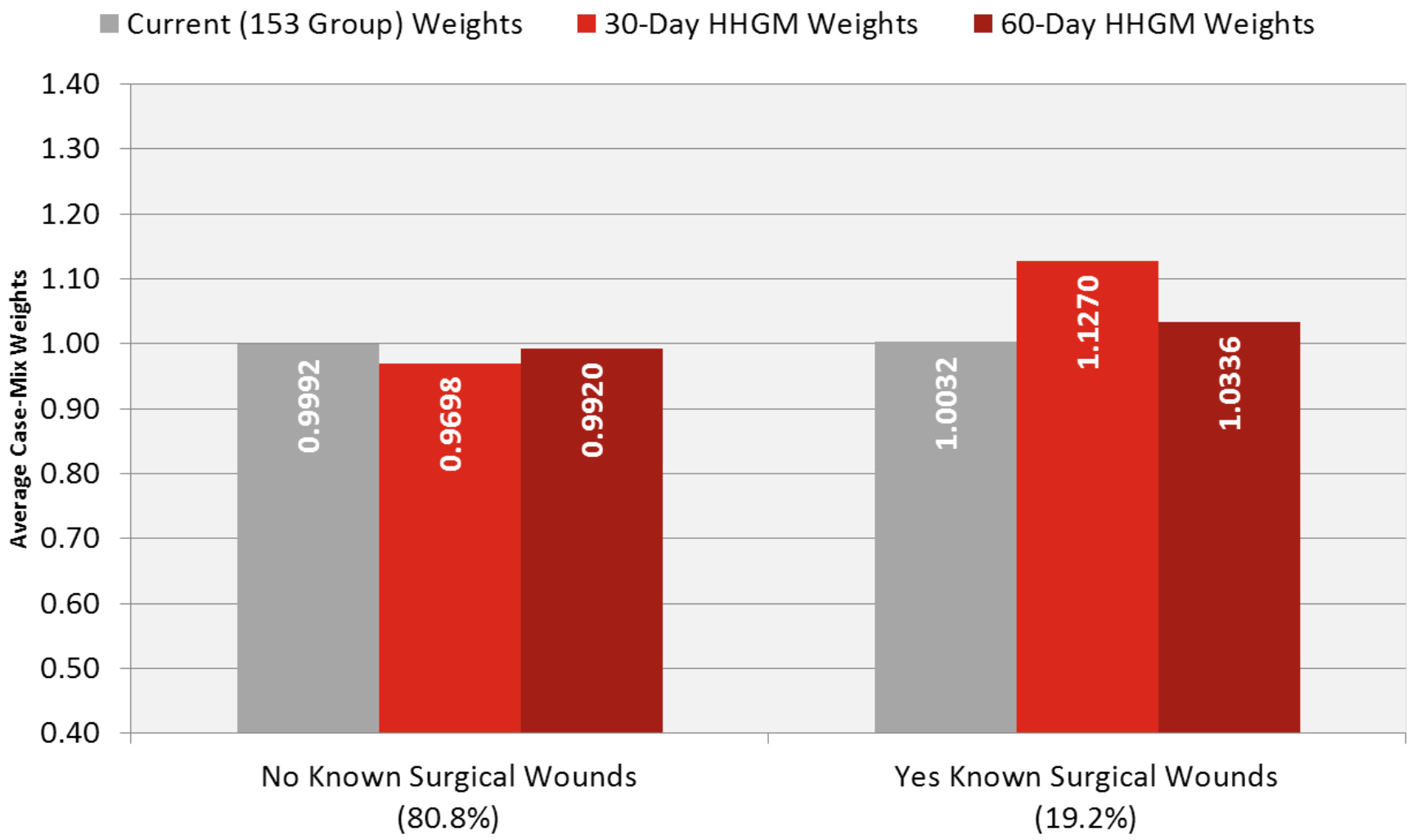
Average Case-Mix Weights across Patient Characteristics

- In this section we examine HHGM case-mix weight changes across clinical characteristics of the patient:
  - Parenteral nutrition
  - Surgical wounds
  - Ulcers
  - Bathing independence
  - Poorly-controlled cardiac dysrhythmia, diabetes, peripheral vascular disease, or pulmonary disorder
  - Open wound/lesion
  - Temporary or fragile/serious health risk
  - Grooming
  - Risk of hospitalization
  - Cognitive functioning

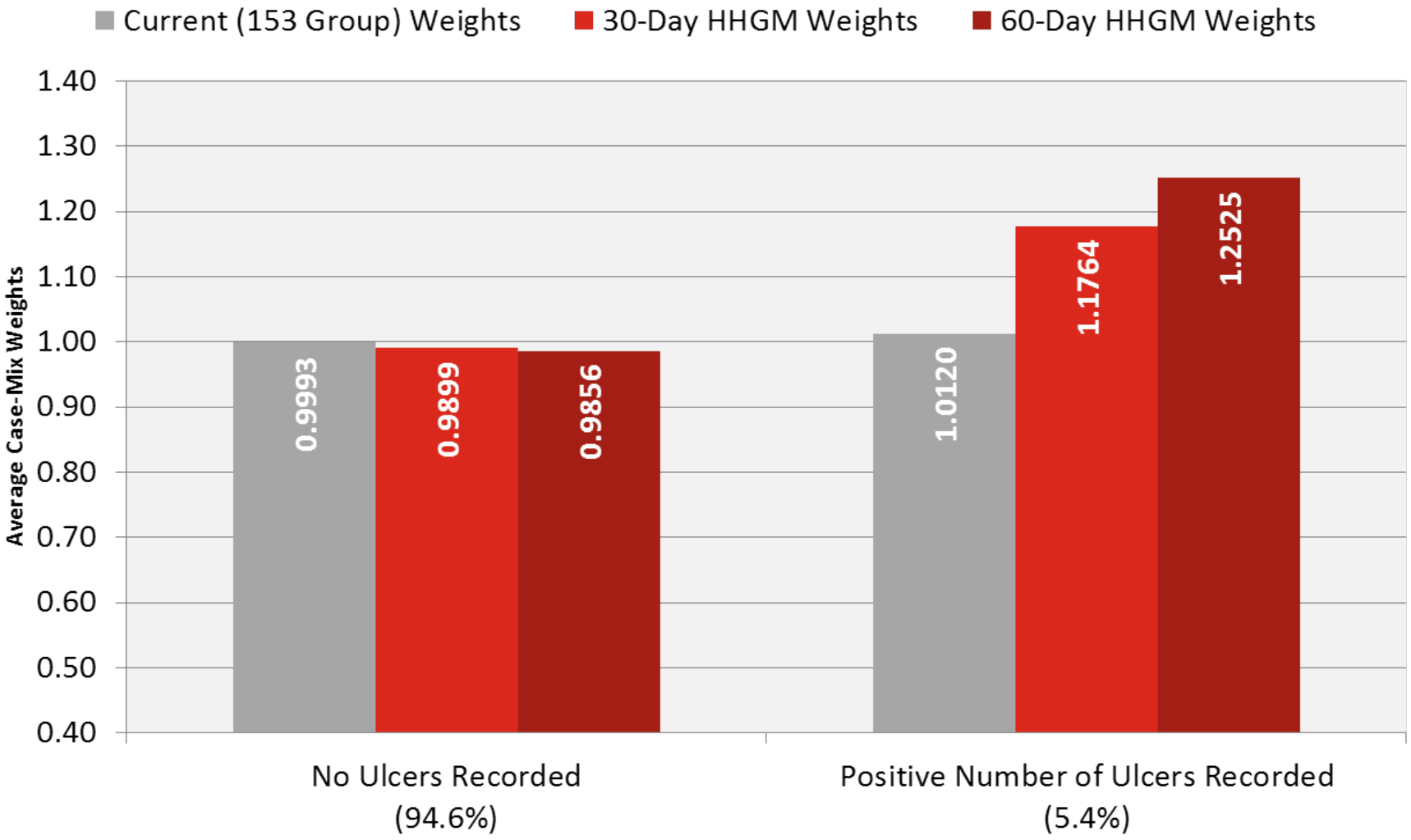
Average Case-Mix Weights, by Parenteral Nutrition



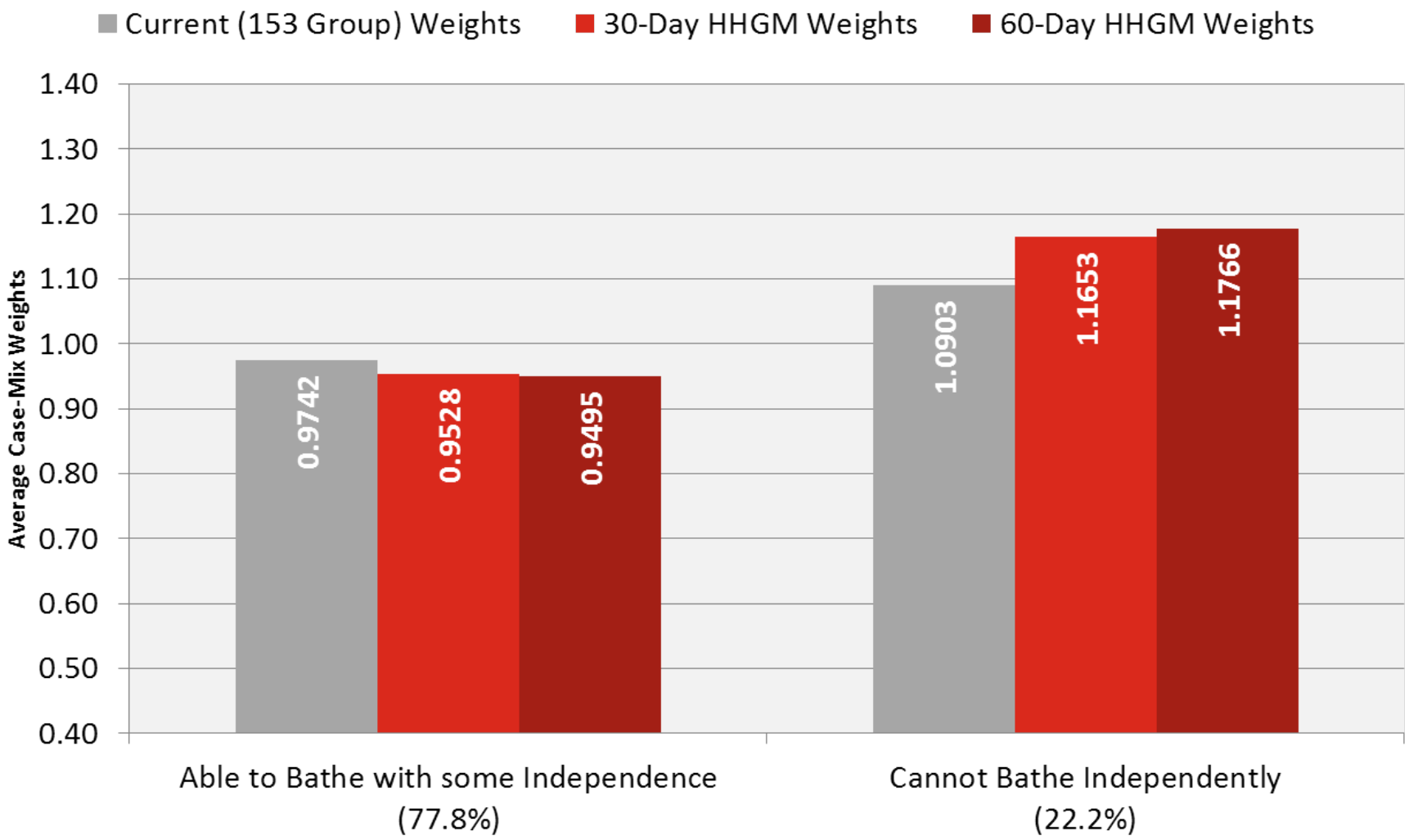
Average Case-Mix Weights, by Surgical Wounds



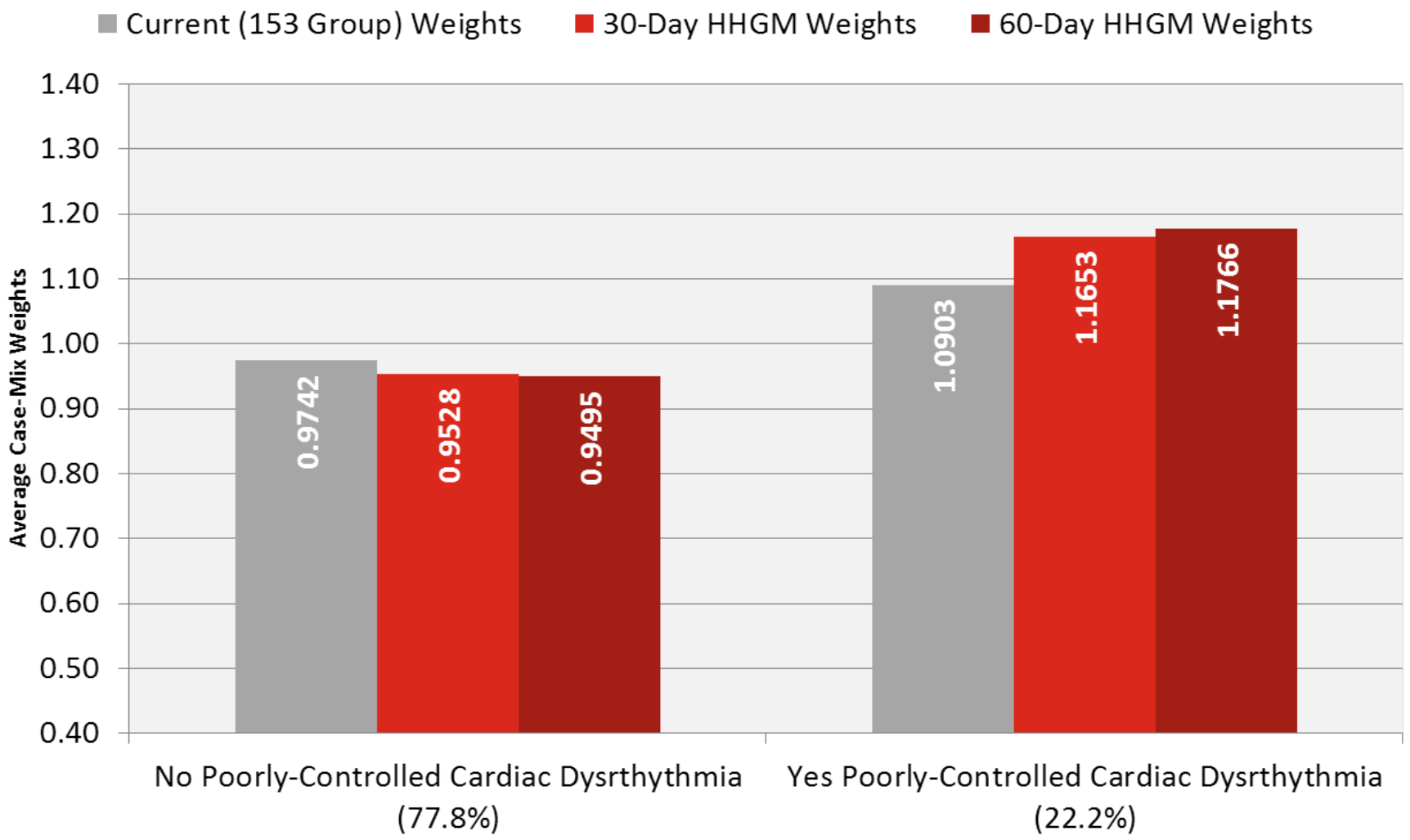
Average Case-Mix Weights, by Ulcers



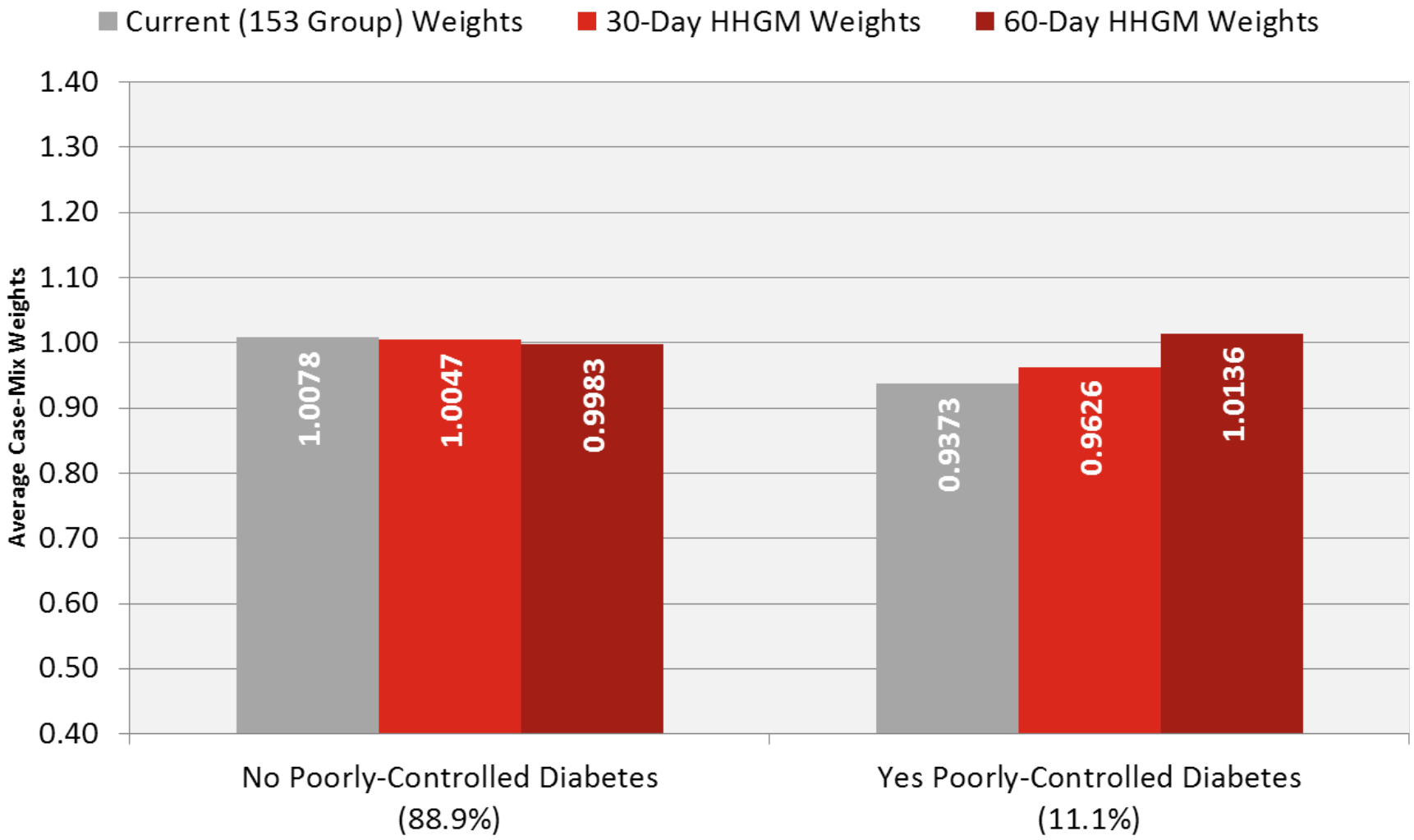
Average Case-Mix Weights, by Bathing



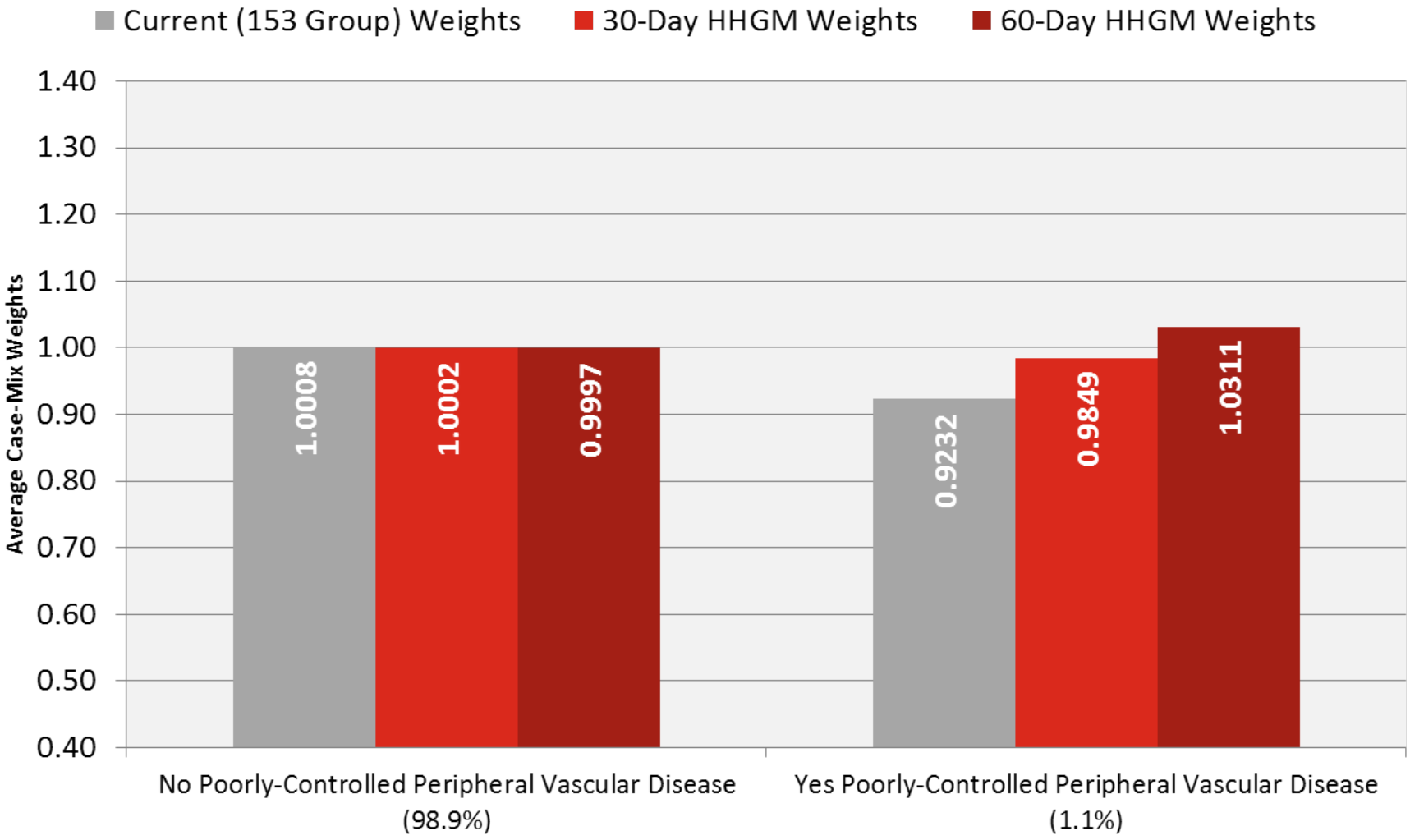
Average Case-Mix Weights, by Cardiac Dysrhythmia



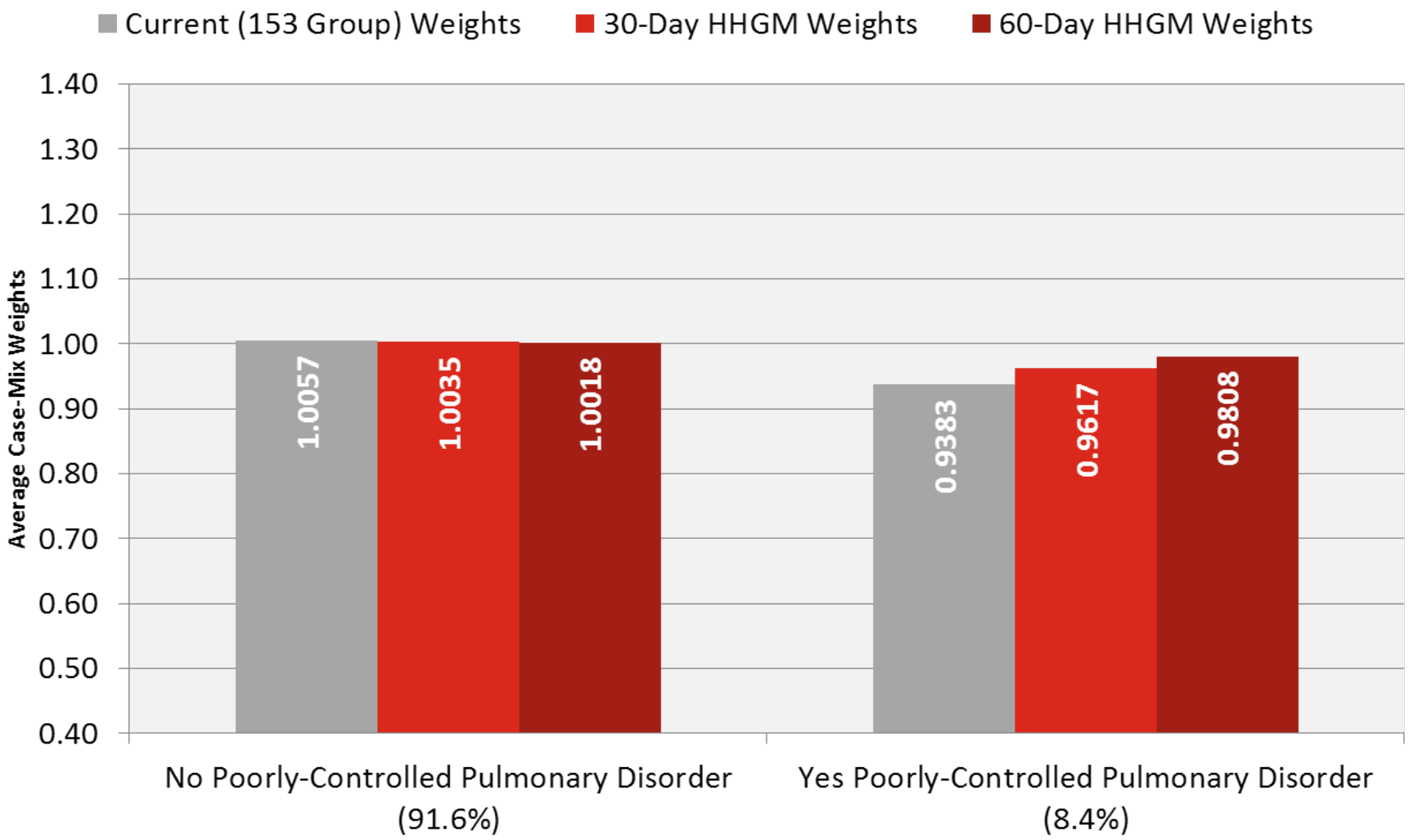
Average Case-Mix Weights, by Diabetes



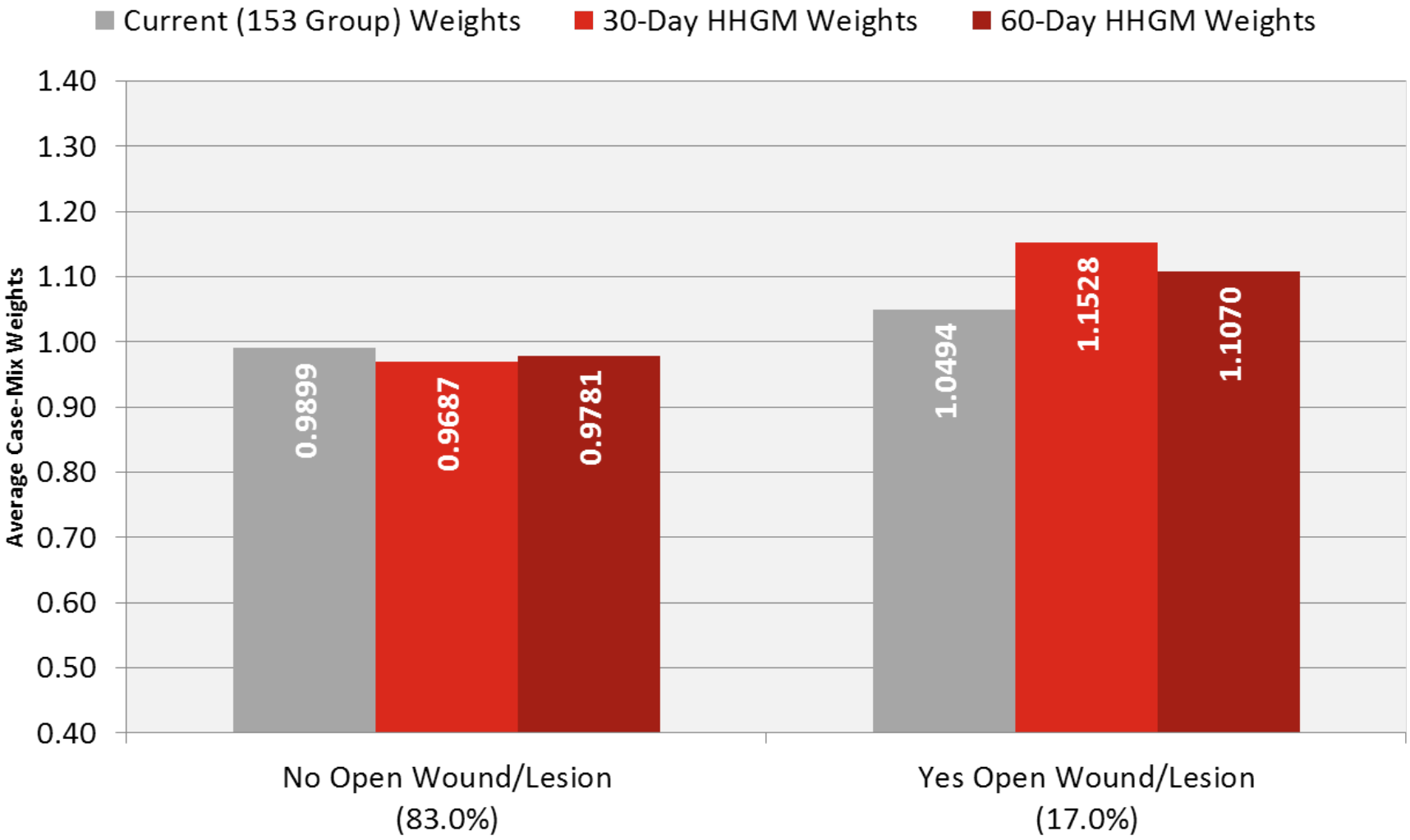
Average Case-Mix Weights, by Peripheral Vascular Disease



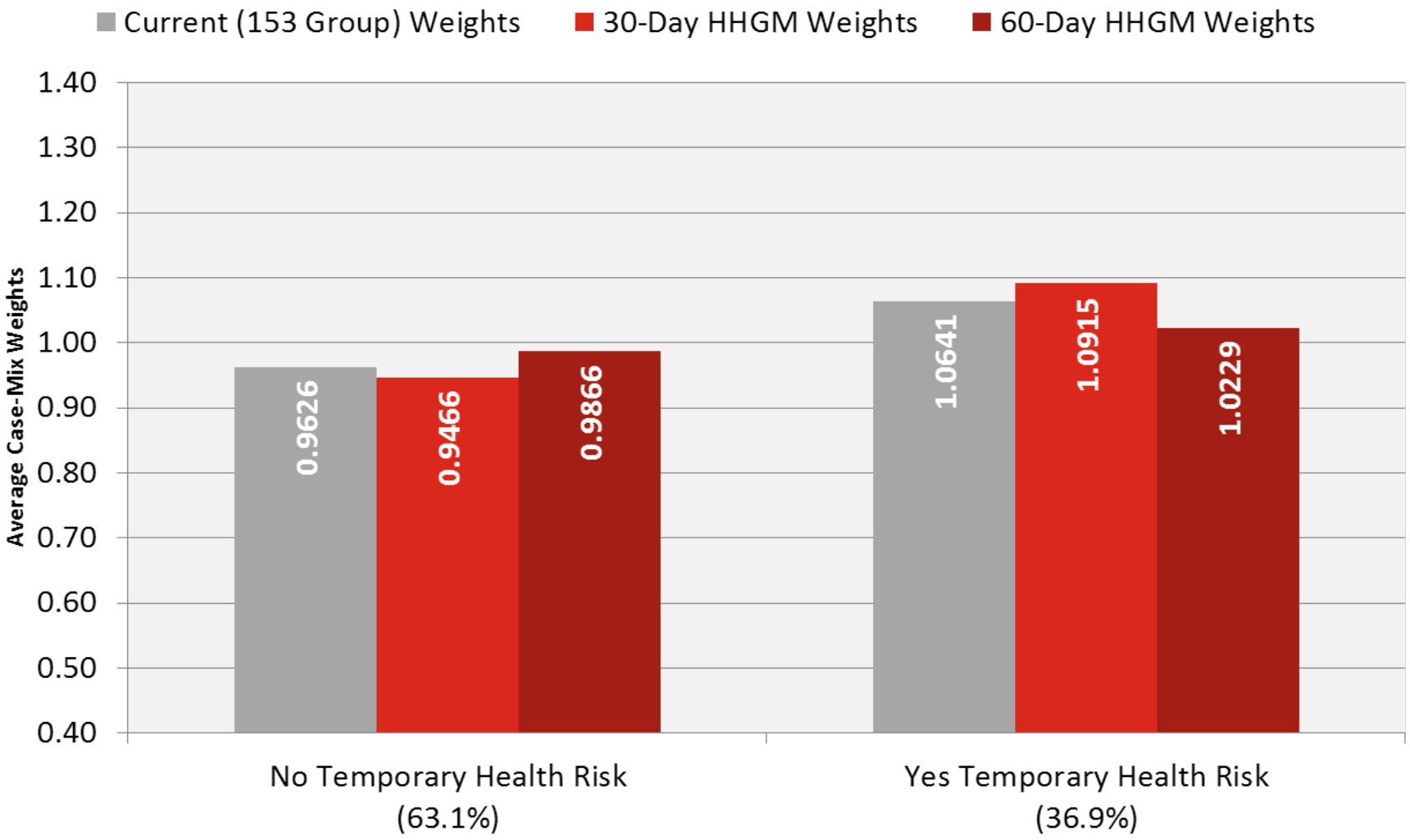
Average Case-Mix Weights, by Pulmonary Disorder



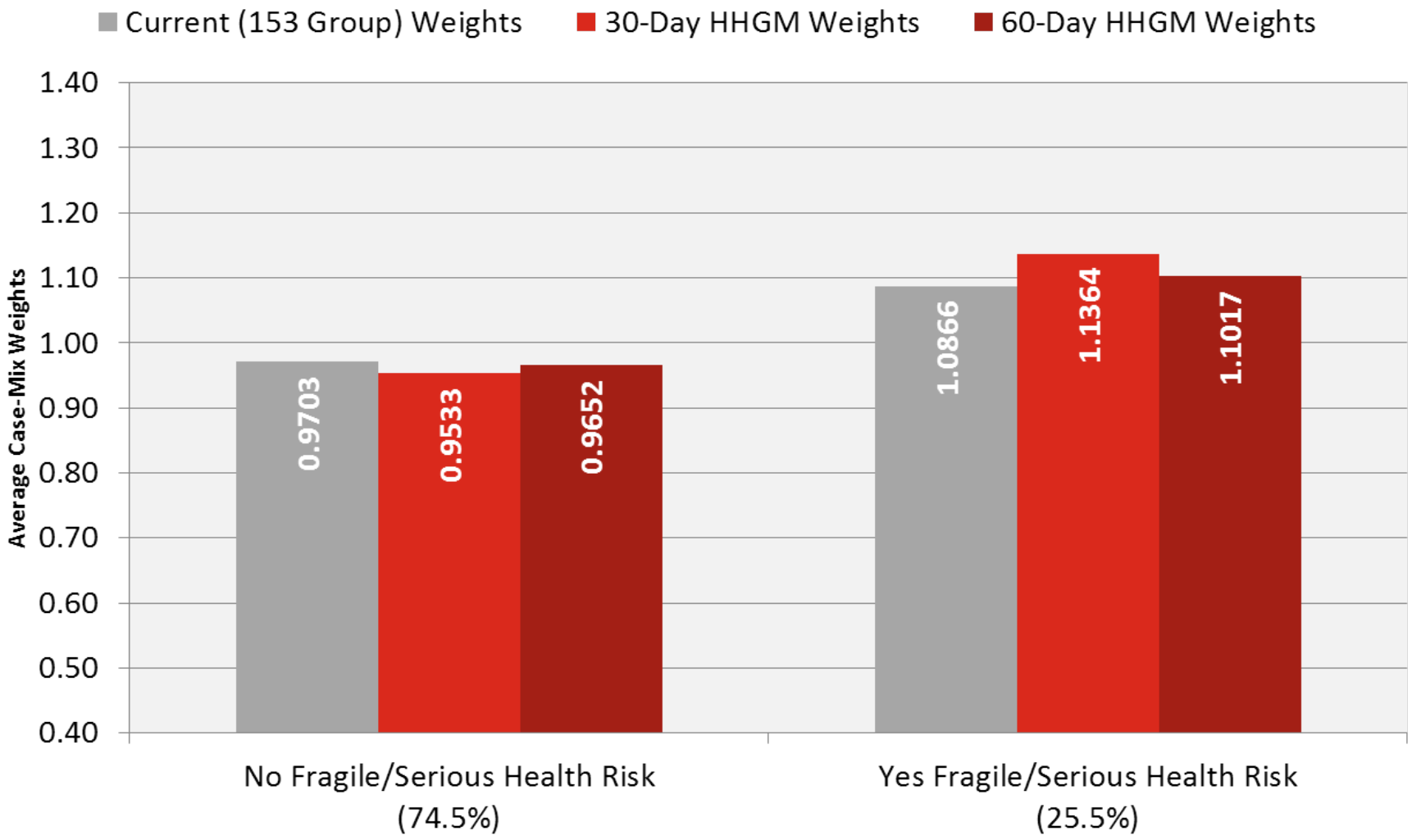
Average Case-Mix Weights, by Open Wound Presence



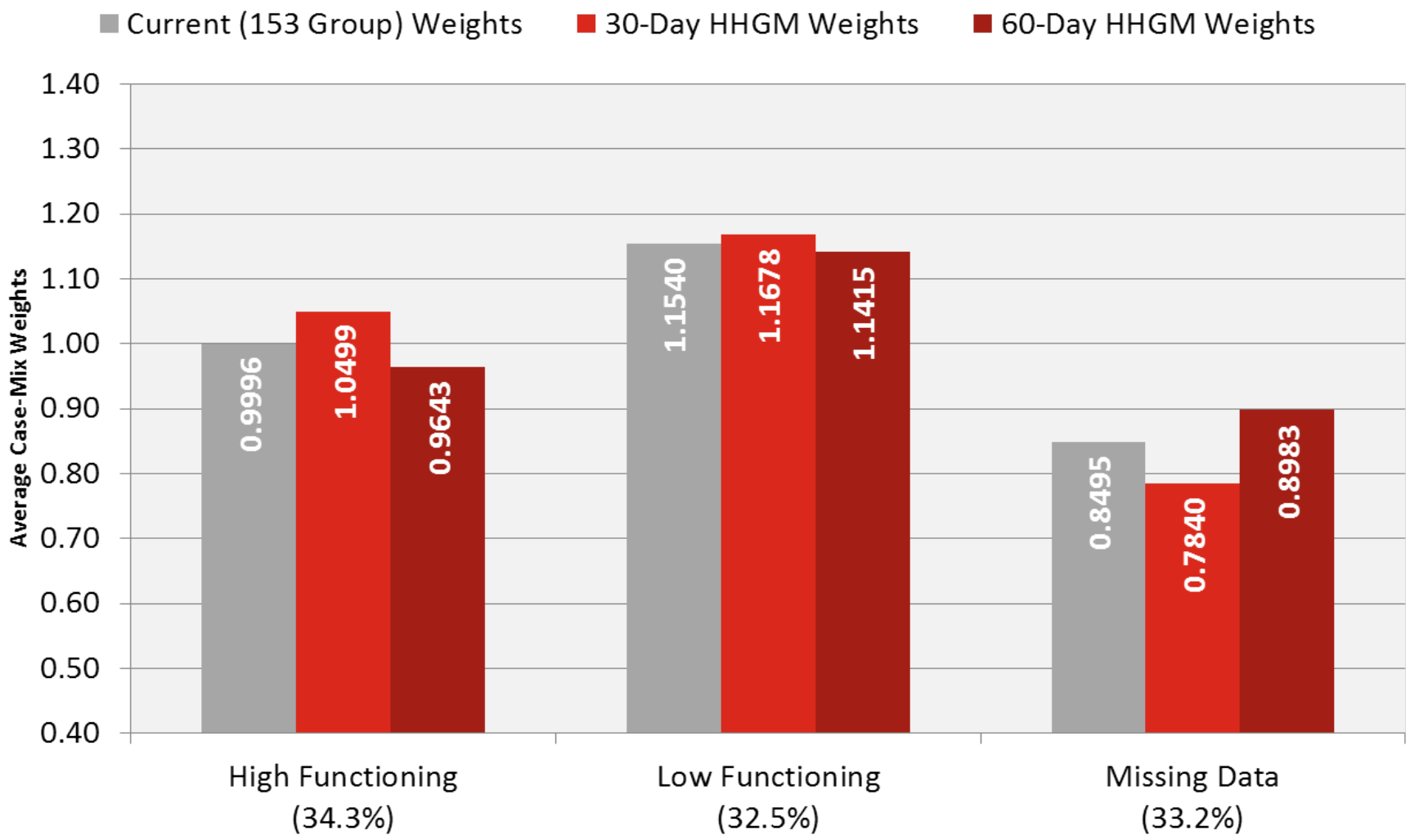
Average Case-Mix Weights, by Temporary Health Risk Status



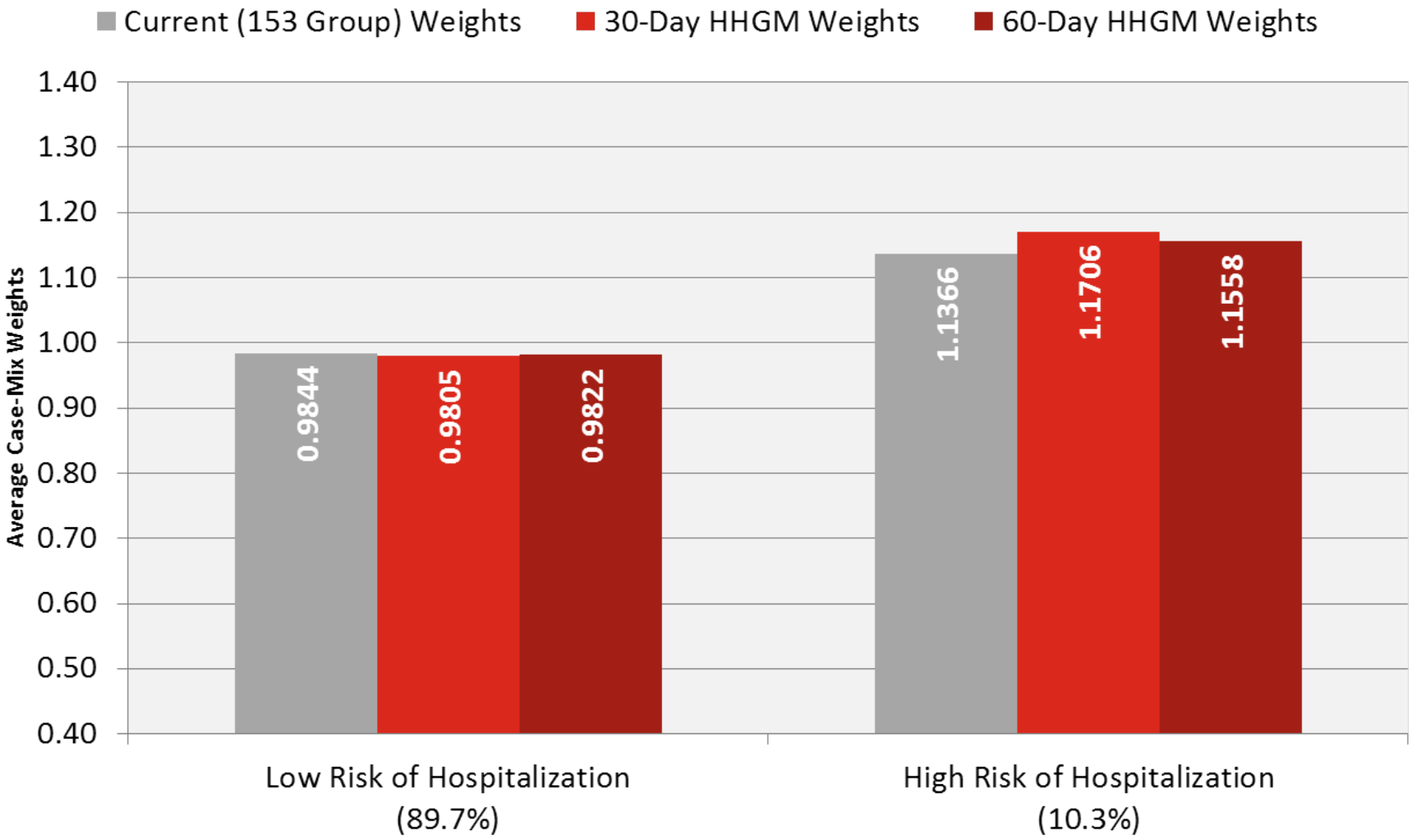
Average Case-Mix Weights, by Serious Health Risk Status



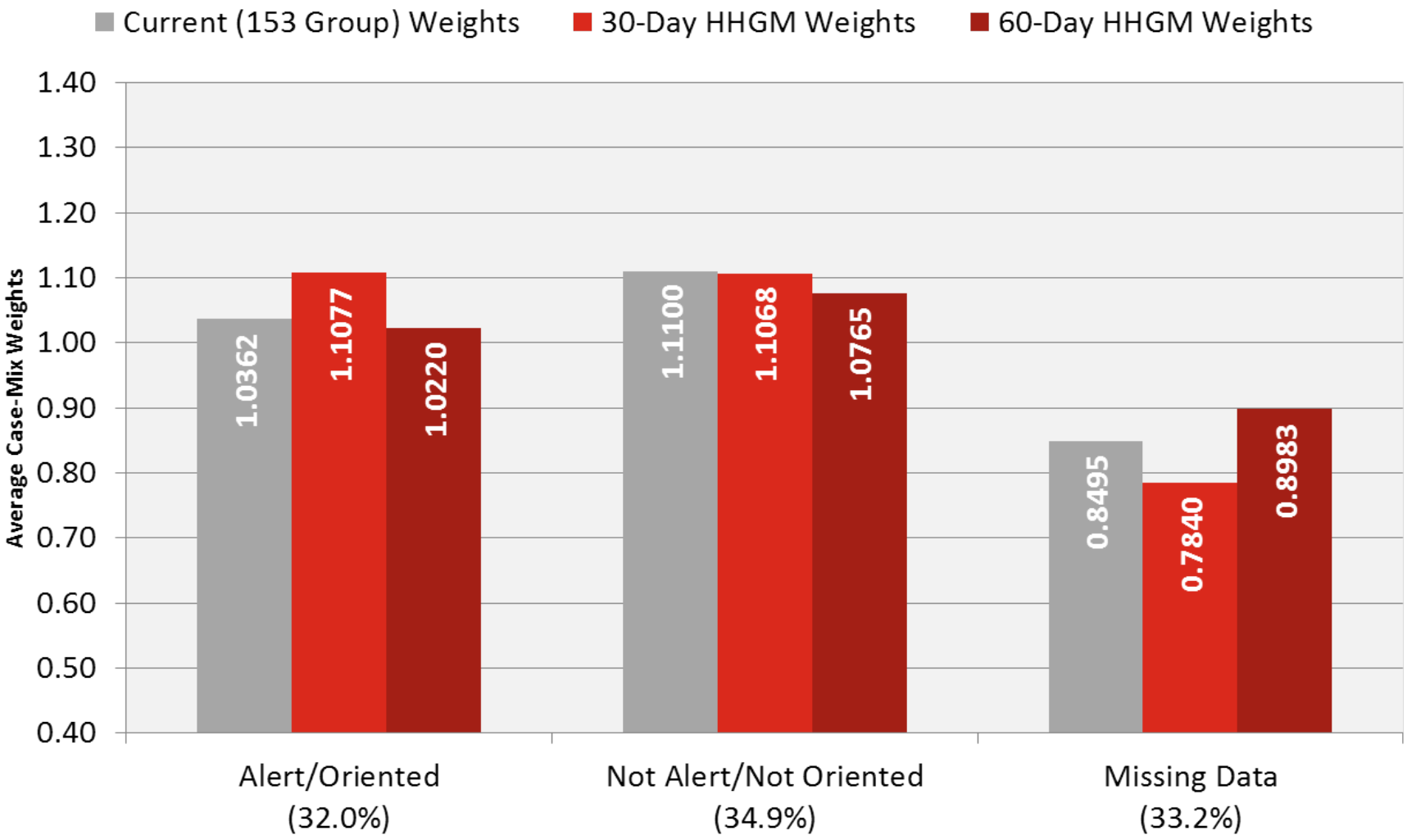
Average Case-Mix Weights, by Grooming



Average Case-Mix Weights, by Hospitalization Risk



Average Case-Mix Weights, by Cognitive Functioning



Summary of Findings

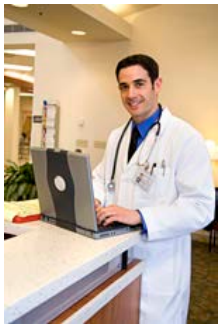
- Wound and complex episodes have higher payment weight, behavioral health, MS rehab and neuro rehab have lower; higher weights also with other indicators or higher severity

- Episodes treated by non-profits and those in the Northeast are simulated to have higher weights, agencies with a higher ratio of nursing will also have an average higher weight

Case-Mix Discussion

- Thoughts or comments?

Free Response



Alternative Approaches to Case-Mix Adjustment

- Tie payments to outcomes?
  - Beyond CMS's statutory authority
    - CMS is supposed to tie payments to costs. Case-mix adjustment is supposed to reflect variation in the cost of providing service
  - Difficult to pay claims timely
    - CMS will not know outcomes until well after the episode

Other topics?

- What other topics have we not discussed in relation to the case-mix model?
- How can the HHGM be improved?

Conclusions

Questions?

Please contact Erica Granor (Erica_Granor@abtassoc.com) and Michael Plotzke (Michael_Plotzke@abtassoc.com) regarding any questions you have

Thank you!

The regression results shown on pages 2–17 show the payment regression from the Home Health Groupings Model (HHGM). The payment regression estimates the relationship between resource use and the independent variables that make up the HHGM. Many different variations of the payment regression are shown.

- Pages 2–5 show regressions using the HHGM estimated using 30-day periods and where the Low Utilization Payment Adjustment (LUPA) threshold is set so that all 30-day periods with 2 or fewer visits are considered LUPAs.
- Pages 6–9 show regressions using the HHGM estimated using 30-day periods and where the LUPA threshold for each payment group is set using the 10th percentile value of visits to create a payment group specific LUPA threshold with a minimum threshold of at least 2 visits for each group.
- Pages 10–13 show regressions using the HHGM estimated using 60-day episodes and where the LUPA threshold is set so that all 60-day episodes with 4 or fewer visits are considered LUPAs.
- Pages 14–17 show regressions using the HHGM estimated using 60-day episodes and where the LUPA threshold for each payment group is set using the 10th percentile value of visits to create a payment group specific LUPA threshold with a minimum threshold of at least 4 visits for each group.

LUPAs are not included in the estimation of these models. Within each set of regressions, there are also many variations including estimates of the model:

- Using the Bureau of Labor Statistics (BLS) approach to construct resource use and using the Cost Per Minute + Non-Routine Supplies (CPM + NRS) approach to construct resource use
- With different sets of independent variables
- With and without the fixed effects term

The comorbidity regression on pages 18–22 show regression coefficients of the comorbidity model used to assign the comorbidity adjustment to the HHGM. The dependent variable in this model is resource use (calculated using CPM+NRS) and the HHGM adjustors besides comorbidity (timing, clinical level, functional level, and admission source) are included as independent variables. The highlighted variables and coefficients indicate those variables that have a coefficient above the median (where the median is calculated only looking at the positive coefficients). These highlighted variables are the comorbidity groups that trigger the comorbidity adjustment under this estimate of the HHGM model.

Pages 23–27 describe each comorbidity group that is included in the estimate of the comorbidity adjustment model.

30-Day Periods

All Periods with 2 or Fewer Visits are LUPAs

Variable	Model 1 Coefficient	Model 1 Impact on Case-Mix Weight (Coefficient Divided by Avg Resource Use)	Model 2 Coefficient	Model 2 Impact on Case-Mix Weight (Coefficient Divided by Avg Resource Use)	Model 3 Coefficient	Model 3 Impact on Case-Mix Weight (Coefficient Divided by Avg Resource Use)
MMTA - Medium Functional	$66.96	0.1699	$275.58	0.1736		
MMTA - High Functional	$113.48	0.2879	$483.29	0.3045		
Behavioral Health - Low Functional	-$19.21	-0.0487	-$157.64	-0.0993		
Behavioral Health - Medium Functional	$61.15	0.1551	$141.50	0.0892		
Behavioral Health - High Functional	$100.68	0.2554	$322.10	0.2029		
Complex - Low Functional	-$33.23	-0.0843	$29.62	0.0187		
Complex - Medium Functional	$60.27	0.1529	$438.30	0.2761		
Complex - High Functional	$108.27	0.2747	$607.23	0.3826		
MS Rehab - Low Functional	$59.84	0.1518	$202.26	0.1274		
MS Rehab - Medium Functional	$111.20	0.2821	$424.76	0.2676		
MS Rehab - High Functional	$163.22	0.4141	$645.72	0.4068		
Neuro - Low Functional	$106.73	0.2708	$309.92	0.1953		
Neuro - Medium Functional	$180.00	0.4567	$605.08	0.3812		
Neuro - High Functional	$204.94	0.5200	$745.16	0.4695		
Wound - Low Functional	$32.43	0.0823	$319.26	0.2011		
Wound - Medium Functional	$101.61	0.2578	$591.17	0.3724		
Wound - High Functional	$121.40	0.3080	$739.80	0.4661		
Community - Late	-$137.71	-0.3494			-$497.48	-0.3134
Institutional - Early	$70.64	0.1792			$234.62	0.1478
Institutional - Late	$16.08	0.0408			$140.52	0.0885
Comorbidity Adjustment	$43.38	0.1101				
Constant	$372.21	0.9444	$1,251.22	0.7883	$1,823.81	1.1490
Avg Resource Use	$394.13		$1,587.25		$1,587.25	
N	8,754,919		8,754,919		8,754,919	
Adj R-Squared	0.2503		0.1959		0.2248	
BLS or CPM+NRS?	BLS		CPM+NRS		CPM+NRS	
Fixed Effects	Yes		Yes		Yes	

Variable	Model 4 Coefficient	Model 4 Impact on Case-Mix Weight (Coefficient Divided by Avg Resource Use)	Model 5 Coefficient	Model 5 Impact on Case-Mix Weight (Coefficient Divided by Avg Resource Use)	Model 6 Coefficient	Model 6 Impact on Case-Mix Weight (Coefficient Divided by Avg Resource Use)
MMTA - Medium Functional			$246.79	0.1555	$270.63	0.1705
MMTA - High Functional			$448.14	0.2823	$463.19	0.2918
Behavioral Health - Low Functional			-$112.92	-0.0711	-$147.13	-0.0927
Behavioral Health - Medium Functional			$161.20	0.1016	$149.58	0.0942
Behavioral Health - High Functional			$326.04	0.2054	$321.69	0.2027
Complex - Low Functional			$16.22	0.0102	$34.43	0.0217
Complex - Medium Functional			$384.58	0.2423	$431.44	0.2718
Complex - High Functional			$591.86	0.3729	$557.63	0.3513
MS Rehab - Low Functional			$118.05	0.0744	$211.70	0.1334
MS Rehab - Medium Functional			$307.22	0.1936	$431.32	0.2717
MS Rehab - High Functional			$550.65	0.3469	$639.34	0.4028
Neuro - Low Functional			$308.67	0.1945	$298.46	0.1880
Neuro - Medium Functional			$589.64	0.3715	$585.38	0.3688
Neuro - High Functional			$753.41	0.4747	$703.77	0.4434
Wound - Low Functional			$402.12	0.2533	$252.14	0.1589
Wound - Medium Functional			$644.80	0.4062	$517.62	0.3261
Wound - High Functional			$827.83	0.5215	$642.41	0.4047
Community - Late			-$501.34	-0.3159		
Institutional - Early			$251.74	0.1586		
Institutional - Late			$107.10	0.0675		
Comorbidity Adjustment	$294.26	0.7466			$210.43	0.1326
Constant	$1,537.19	3.9002	$1,512.26	0.9528	$1,229.33	0.7745
Avg Resource Use	$1,587.25		$1,587.25		$1,587.25	
N	8,754,919		8,754,919		8,754,919	
Adj R-Squared	0.1719		0.2572		0.1998	
BLS or CPM+NRS?	CPM+NRS		CPM+NRS		CPM+NRS	
Fixed Effects	Yes		Yes		Yes	

Variable	Model 7 Coefficient	Model 7 Impact on Case-Mix Weight (Coefficient Divided by Avg Resource Use)	Model 8 Coefficient	Model 8 Impact on Case-Mix Weight (Coefficient Divided by Avg Resource Use)	Model 9 Coefficient	Model 9 Impact on Case-Mix Weight (Coefficient Divided by Avg Resource Use)
MMTA - Medium Functional			$189.29	0.1193	$240.55	0.1516
MMTA - High Functional			$334.03	0.2104	$423.92	0.2671
Behavioral Health - Low Functional			-$136.31	-0.0859	-$99.98	-0.0630
Behavioral Health - Medium Functional			$133.38	0.0840	$170.68	0.1075
Behavioral Health - High Functional			$270.40	0.1704	$325.18	0.2049
Complex - Low Functional			$44.12	0.0278	$22.35	0.0141
Complex - Medium Functional			$342.58	0.2158	$376.46	0.2372
Complex - High Functional			$473.62	0.2984	$533.25	0.3360
MS Rehab - Low Functional			$171.53	0.1081	$127.52	0.0803
MS Rehab - Medium Functional			$309.63	0.1951	$312.85	0.1971
MS Rehab - High Functional			$478.34	0.3014	$541.37	0.3411
Neuro - Low Functional			$306.55	0.1931	$294.35	0.1854
Neuro - Medium Functional			$535.31	0.3373	$565.26	0.3561
Neuro - High Functional			$675.02	0.4253	$703.54	0.4432
Wound - Low Functional			$350.57	0.2209	$322.23	0.2030
Wound - Medium Functional			$529.80	0.3338	$556.92	0.3509
Wound - High Functional			$685.30	0.4318	$712.09	0.4486
Community - Late	-$522.51	-1.3257	-$588.35	-0.3707	-$515.11	-0.3245
Institutional - Early	$240.14	0.6093	$250.28	0.1577	$250.30	0.1577
Institutional - Late	$112.26	0.2848	$58.22	0.0367	$91.85	0.0579
Comorbidity Adjustment	$359.98	0.9133	$262.21	0.1652	$254.30	0.1602
Constant	$1,778.16	4.5115	$1,571.02	0.9898	$1,495.54	0.9422
Avg Resource Use	$1,587.25		$1,587.25		$1,587.25	
N	8,754,919		8,754,919		8,754,919	
Adj R-Squared	0.237		0.1288		0.2628	
BLS or CPM+NRS?	CPM+NRS		CPM+NRS		CPM+NRS	
Fixed Effects	Yes		No		Yes	

30-Day Periods

LUPA Thresholds Vary by Payment Group (10th Percentile of Visits)

Variable	Model 1 Coefficient	Model 1 Impact on Case-Mix Weight (Coefficient Divided by Avg Resource Use)	Model 2 Coefficient	Model 2 Impact on Case-Mix Weight (Coefficient Divided by Avg Resource Use)	Model 3 Coefficient	Model 3 Impact on Case-Mix Weight (Coefficient Divided by Avg Resource Use)
MMTA - Medium Functional	$66.84	0.1746	$281.21	0.1823		
MMTA - High Functional	$112.57	0.2940	$489.06	0.3170		
Behavioral Health - Low Functional	-$21.91	-0.0572	-$173.00	-0.1121		
Behavioral Health - Medium Functional	$61.60	0.1609	$145.69	0.0944		
Behavioral Health - High Functional	$100.05	0.2613	$325.50	0.2110		
Complex - Low Functional	-$38.54	-0.1007	-$5.07	-0.0033		
Complex - Medium Functional	$56.73	0.1482	$421.11	0.2730		
Complex - High Functional	$99.39	0.2596	$563.57	0.3653		
MS Rehab - Low Functional	$61.23	0.1599	$223.82	0.1451		
MS Rehab - Medium Functional	$116.48	0.3042	$464.09	0.3008		
MS Rehab - High Functional	$169.28	0.4421	$687.78	0.4458		
Neuro - Low Functional	$105.84	0.2764	$313.86	0.2035		
Neuro - Medium Functional	$184.78	0.4826	$633.46	0.4106		
Neuro - High Functional	$208.69	0.5451	$767.16	0.4973		
Wound - Low Functional	$41.72	0.1090	$355.65	0.2305		
Wound - Medium Functional	$117.17	0.3060	$666.25	0.4319		
Wound - High Functional	$135.36	0.3535	$806.45	0.5228		
Community - Late	-$167.19	-0.4367			-$622.28	-0.4034
Institutional - Early	$75.60	0.1975			$249.57	0.1618
Institutional - Late	$7.43	0.0194			$102.35	0.0663
Comorbidity Adjustment	$47.33	0.1236				
Constant	$381.82	0.9972	$1,196.54	0.7756	$1,871.76	1.2133
Avg Resource Use	383		1,543		1,543	
N	9,034,969		9,034,969		9,034,969	
Adj. R-Squared	0.276		0.1925		0.2418	
BLS or CPM+NRS?	BLS		CPM+NRS		CPM+NRS	

Variable	Model 4 Coefficient	Model 4 Impact on Case-Mix Weight (Coefficient Divided by Avg Resource Use)	Model 5 Coefficient	Model 5 Impact on Case-Mix Weight (Coefficient Divided by Avg Resource Use)	Model 6 Coefficient	Model 6 Impact on Case-Mix Weight (Coefficient Divided by Avg Resource Use)
MMTA - Medium Functional			$247.44	0.1604	$275.80	0.1788
MMTA - High Functional			$447.22	0.2899	$467.69	0.3032
Behavioral Health - Low Functional			-$122.35	-0.0793	-$162.07	-0.1051
Behavioral Health - Medium Functional			$165.43	0.1072	$153.78	0.0997
Behavioral Health - High Functional			$326.31	0.2115	$324.73	0.2105
Complex - Low Functional			-$13.99	-0.0091	-$0.26	-0.0002
Complex - Medium Functional			$366.89	0.2378	$413.41	0.2680
Complex - High Functional			$557.44	0.3614	$510.39	0.3309
MS Rehab - Low Functional			$126.69	0.0821	$233.33	0.1512
MS Rehab - Medium Functional			$331.19	0.2147	$470.39	0.3049
MS Rehab - High Functional			$576.37	0.3736	$681.35	0.4417
Neuro - Low Functional			$310.12	0.2010	$301.85	0.1957
Neuro - Medium Functional			$611.59	0.3965	$614.07	0.3981
Neuro - High Functional			$772.33	0.5006	$725.72	0.4704
Wound - Low Functional			$442.04	0.2865	$286.50	0.1857
Wound - Medium Functional			$716.12	0.4642	$588.62	0.3816
Wound - High Functional			$894.64	0.5799	$703.73	0.4562
Community - Late			-$620.59	-0.4023		
Institutional - Early			$270.54	0.1754		
Institutional - Late			$73.01	0.0473		
Comorbidity Adjustment	$313.09	0.8177			$220.95	0.1432
Constant	$1,490.23	3.8922	$1,550.78	1.0053	$1,173.90	0.7610
Avg Resource Use	1,543		1,543		1,543	
N	9,034,969		9,034,969		9,034,969	
Adj. R-Squared	0.1656		0.2774		0.1966	
BLS or CPM+NRS?	CPM+NRS		CPM+NRS		CPM+NRS	

Variable	Model 7 Coefficient	Model 7 Impact on Case-Mix Weight (Coefficient Divided by Avg Resource Use)	Model 8 Coefficient	Model 8 Impact on Case-Mix Weight (Coefficient Divided by Avg Resource Use)
MMTA - Medium Functional			$240.61	0.1560
MMTA - High Functional			$421.30	0.2731
Behavioral Health - Low Functional			-$108.81	-0.0705
Behavioral Health - Medium Functional			$175.00	0.1134
Behavioral Health - High Functional			$325.04	0.2107
Complex - Low Functional			-$7.74	-0.0050
Complex - Medium Functional			$357.77	0.2319
Complex - High Functional			$494.16	0.3203
MS Rehab - Low Functional			$136.43	0.0884
MS Rehab - Medium Functional			$336.73	0.2183
MS Rehab - High Functional			$567.05	0.3676
Neuro - Low Functional			$295.07	0.1913
Neuro - Medium Functional			$587.45	0.3808
Neuro - High Functional			$722.05	0.4681
Wound - Low Functional			$359.03	0.2327
Wound - Medium Functional			$622.55	0.4036
Wound - High Functional			$771.46	0.5001
Community - Late	-$645.91	-1.6870	-$633.78	-0.4108
Institutional - Early	$255.26	0.6667	$269.23	0.1745
Institutional - Late	$72.89	0.1904	$57.37	0.0372
Comorbidity Adjustment	$382.93	1.0001	$268.57	0.1741
Constant	$1,823.05	4.7614	$1,532.92	0.9937
Avg Resource Use	1,543		1,543	
N	9,034,969		9,034,969	
Adj. R-Squared	0.2554		0.2835	
BLS or CPM+NRS?	CPM+NRS		CPM+NRS	

60-Day Episodes

All Periods with 4 or Fewer Visits are LUPAs

	Model 1		Model 2		Model 3	
	Coefficient	Impact on Case-Mix Weight (Coefficient Divided by Avg Resource Use)	Coefficient	Impact on Case-Mix Weight (Coefficient Divided by Avg Resource Use)	Coefficient	Impact on Case-Mix Weight (Coefficient Divided by Avg Resource Use)
MMTA - Medium Functional	$116.40	0.1639	$451.21	0.1583		
MMTA - High Functional	$205.56	0.2894	$860.19	0.3018		
Behavioral Health - Low Functional	-$13.20	-0.0186	-$181.53	-0.0637		
Behavioral Health - Medium Functional	$115.77	0.1630	$262.24	0.0920		
Behavioral Health - High Functional	$175.91	0.2476	$542.02	0.1902		
Complex - Low Functional	-$43.73	-0.0616	$115.61	0.0406		
Complex - Medium Functional	$116.75	0.1643	$787.27	0.2763		
Complex - High Functional	$227.13	0.3197	$1,269.98	0.4456		
MS Rehab - Low Functional	$47.65	0.0671	-$3.11	-0.0011		
MS Rehab - Medium Functional	$129.09	0.1817	$328.68	0.1153		
MS Rehab - High Functional	$244.36	0.3440	$857.21	0.3008		
Neuro - Low Functional	$168.41	0.2371	$444.72	0.1561		
Neuro - Medium Functional	$300.51	0.4230	$976.19	0.3426		
Neuro - High Functional	$371.78	0.5233	$1,359.90	0.4772		
Wound - Low Functional	$51.48	0.0725	$667.48	0.2342		
Wound - Medium Functional	$179.00	0.2520	$1,141.95	0.4007		
Wound - High Functional	$228.64	0.3219	$1,537.68	0.5396		
Community - Late	-$33.28	-0.0468			$41.52	0.0146
Institutional - Early	$57.65	0.0812			$170.34	0.0598
Institutional - Late	$114.94	0.1618			$647.74	0.2273
Comorbidity Adjustment	$85.03	0.1197				
Constant	$538.30	0.7578	$2,305.32	0.8090	$2,725.29	0.9563
Avg Resource Use	$710.38		$2,849.75		$2,849.75	
N	4,643,196		4,643,196		4,643,196	
Adj R-Squared	0.1605		0.1744		0.14	
BLS or CPM+NRS?	BLS		CPM+NRS		CPM+NRS	
Fixed Effects	Yes		Yes		Yes	

	Model 4		Model 5		Model 6	
	Coefficient	Impact on Case-Mix Weight (Coefficient Divided by Avg Resource Use)	Coefficient	Impact on Case-Mix Weight (Coefficient Divided by Avg Resource Use)	Coefficient	Impact on Case-Mix Weight (Coefficient Divided by Avg Resource Use)
MMTA - Medium Functional			$428.72	0.1504	$441.46	0.1549
MMTA - High Functional			$815.42	0.2861	$818.00	0.2870
Behavioral Health - Low Functional			-$142.44	-0.0500	-$153.92	-0.0540
Behavioral Health - Medium Functional			$295.62	0.1037	$287.65	0.1009
Behavioral Health - High Functional			$559.07	0.1962	$549.74	0.1929
Complex - Low Functional			$87.19	0.0306	$132.74	0.0466
Complex - Medium Functional			$723.92	0.2540	$779.43	0.2735
Complex - High Functional			$1,188.04	0.4169	$1,175.85	0.4126
MS Rehab - Low Functional			-$7.45	-0.0026	$17.60	0.0062
MS Rehab - Medium Functional			$303.37	0.1065	$344.44	0.1209
MS Rehab - High Functional			$820.32	0.2879	$843.62	0.2960
Neuro - Low Functional			$461.63	0.1620	$417.53	0.1465
Neuro - Medium Functional			$977.49	0.3430	$934.23	0.3278
Neuro - High Functional			$1,356.54	0.4760	$1,274.29	0.4472
Wound - Low Functional			$704.19	0.2471	$517.45	0.1816
Wound - Medium Functional			$1,153.85	0.4049	$979.20	0.3436
Wound - High Functional			$1,545.28	0.5423	$1,324.98	0.4649
Community - Late			$12.72	0.0045		
Institutional - Early			$208.53	0.0732		
Institutional - Late			$542.02	0.1902		
Comorbidity Adjustment	$649.14	0.9138			$466.05	0.1635
Constant	$2,721.29	3.8308	$2,200.17	0.7721	$2,242.10	0.7868
Avg Resource Use	$2,849.75		$2,849.75		$2,849.75	
N	4,643,196		4,643,196		4,643,196	
Adj R-Squared	0.1497		0.1798		0.1822	
BLS or CPM+NRS?	CPM+NRS		CPM+NRS		CPM+NRS	
Fixed Effects	Yes		Yes		Yes	

	Model 7		Model 8		Model 9	
	Coefficient	Impact on Case-Mix Weight (Coefficient Divided by Avg Resource Use)	Coefficient	Impact on Case-Mix Weight (Coefficient Divided by Avg Resource Use)	Coefficient	Impact on Case-Mix Weight (Coefficient Divided by Avg Resource Use)
MMTA - Medium Functional	$299.28	0.4213			$417.79	0.1466
MMTA - High Functional	$580.25	0.8168			$773.37	0.2714
Behavioral Health - Low Functional	-$170.90	-0.2406			-$115.06	-0.0404
Behavioral Health - Medium Functional	$213.23	0.3002			$319.02	0.1119
Behavioral Health - High Functional	$418.05	0.5885			$565.11	0.1983
Complex - Low Functional	$50.24	0.0707			$104.28	0.0366
Complex - Medium Functional	$578.41	0.8142			$715.93	0.2512
Complex - High Functional	$905.84	1.2752			$1,097.92	0.3853
MS Rehab - Low Functional	$40.50	0.0570			$8.28	0.0029
MS Rehab - Medium Functional	$233.65	0.3289			$312.61	0.1097
MS Rehab - High Functional	$628.17	0.8843			$801.49	0.2812
Neuro - Low Functional	$403.02	0.5673			$433.09	0.1520
Neuro - Medium Functional	$813.92	1.1458			$933.18	0.3275
Neuro - High Functional	$1,149.22	1.6178			$1,270.95	0.4460
Wound - Low Functional	$497.50	0.7003			$558.86	0.1961
Wound - Medium Functional	$842.93	1.1866			$994.77	0.3491
Wound - High Functional	$1,186.43	1.6701			$1,340.32	0.4703
Community - Late	-$23.14	-0.0326	-$25.38	-0.0089	-$24.57	-0.0086
Institutional - Early	$124.69	0.1755	$177.10	0.0621	$204.04	0.0716
Institutional - Late	$465.54	0.6553	$580.85	0.2038	$502.31	0.1763
Comorbidity Adjustment	$458.25	0.6451	$648.67	0.2276	$464.90	0.1631
Constant	$2,285.66	3.2175	$2,621.24	0.9198	$2,154.89	0.7562
Avg Resource Use	$2,849.75		$2,849.75		$2,849.75	
N	4,643,196		4,643,196		4,643,196	
Adj R-Squared	0.0472		0.1562		0.1876	
BLS or CPM+NRS?	CPM+NRS		CPM+NRS		CPM+NRS	
Fixed Effects	No		Yes		Yes	

60-Day Episodes

LUPA Thresholds Vary by Payment Group (10th Percentile of Visits)

Variable	Model 1 Coefficient	Model 1 Impact on Case-Mix Weight (Coefficient Divided by Avg Resource Use)	Model 2 Coefficient	Model 2 Impact on Case-Mix Weight (Coefficient Divided by Avg Resource Use)	Model 3 Coefficient	Model 3 Impact on Case-Mix Weight (Coefficient Divided by Avg Resource Use)
MMTA - Medium Functional	$127.35	0.1943	$525.57	0.1992		
MMTA - High Functional	$214.36	0.3270	$933.99	0.3540		
Behavioral Health - Low Functional	-$44.30	-0.0676	-$299.47	-0.1135		
Behavioral Health - Medium Functional	$120.13	0.1833	$314.36	0.1191		
Behavioral Health - High Functional	$184.85	0.2820	$615.85	0.2334		
Complex - Low Functional	-$46.74	-0.0713	$90.43	0.0343		
Complex - Medium Functional	$112.21	0.1712	$771.69	0.2925		
Complex - High Functional	$230.14	0.3511	$1,307.13	0.4954		
MS Rehab - Low Functional	$73.30	0.1118	$153.66	0.0582		
MS Rehab - Medium Functional	$173.14	0.2642	$577.24	0.2188		
MS Rehab - High Functional	$288.89	0.4408	$1,111.08	0.4211		
Neuro - Low Functional	$181.66	0.2772	$531.68	0.2015		
Neuro - Medium Functional	$333.63	0.5090	$1,151.05	0.4362		
Neuro - High Functional	$388.49	0.5927	$1,463.03	0.5545		
Wound - Low Functional	$86.20	0.1315	$773.65	0.2932		
Wound - Medium Functional	$219.19	0.3344	$1,298.51	0.4921		
Wound - High Functional	$257.21	0.3924	$1,624.53	0.6157		
Community - Late	-$94.08	-0.1435			-$253.85	-0.0962
Institutional - Early	$60.57	0.0924			$177.50	0.0673
Institutional - Late	$108.09	0.1649			$603.94	0.2289
Comorbidity Adjustment	$84.75	0.1293				
Constant	$500.23	0.7632	$2,023.22	0.7668	$2,633.11	0.9979
Avg Resource Use	655.4387		2638.562		2638.562	
N	5,247,601		5,247,601		5,247,601	
Adj R-Squared	0.1836		0.1804		0.1452	
BLS or CPM+NRS?	BLS		CPM+NRS		CPM+NRS	

Variable	Model 4 Coefficient	Model 4 Impact on Case-Mix Weight (Coefficient Divided by Avg Resource Use)	Model 5 Coefficient	Model 5 Impact on Case-Mix Weight (Coefficient Divided by Avg Resource Use)	Model 6 Coefficient	Model 6 Impact on Case-Mix Weight (Coefficient Divided by Avg Resource Use)
MMTA - Medium Functional			$481.71	0.1826	$515.14	0.1952
MMTA - High Functional			$862.53	0.3269	$892.48	0.3382
Behavioral Health - Low Functional			-$243.92	-0.0924	-$275.66	-0.1045
Behavioral Health - Medium Functional			$334.33	0.1267	$334.31	0.1267
Behavioral Health - High Functional			$612.32	0.2321	$619.50	0.2348
Complex - Low Functional			$53.12	0.0201	$106.26	0.0403
Complex - Medium Functional			$693.67	0.2629	$766.11	0.2904
Complex - High Functional			$1,204.75	0.4566	$1,217.18	0.4613
MS Rehab - Low Functional			$111.68	0.0423	$170.69	0.0647
MS Rehab - Medium Functional			$491.19	0.1862	$589.29	0.2233
MS Rehab - High Functional			$1,011.41	0.3833	$1,095.92	0.4153
Neuro - Low Functional			$535.55	0.2030	$507.08	0.1922
Neuro - Medium Functional			$1,121.89	0.4252	$1,113.64	0.4221
Neuro - High Functional			$1,442.15	0.5466	$1,384.49	0.5247
Wound - Low Functional			$833.72	0.3160	$630.84	0.2391
Wound - Medium Functional			$1,318.09	0.4996	$1,144.44	0.4337
Wound - High Functional			$1,660.56	0.6293	$1,423.52	0.5395
Community - Late			-$238.91	-0.0905		
Institutional - Early			$215.65	0.0817		
Institutional - Late			$511.70	0.1939		
Comorbidity Adjustment	$624.09	0.9522			$433.71	0.1644
Constant	$2,516.41	3.8393	$2,041.30	0.7736	$1,965.61	0.7450
Avg Resource Use	2638.562		2638.562		2638.562	
N	5,247,601		5,247,601		5,247,601	
Adj R-Squared	0.1469		0.1921		0.1873	
BLS or CPM+NRS?	CPM+NRS		CPM+NRS		CPM+NRS	

Variable	Model 7 Coefficient	Model 7 Impact on Case-Mix Weight (Coefficient Divided by Avg Resource Use)	Model 8 Coefficient	Model 8 Impact on Case-Mix Weight (Coefficient Divided by Avg Resource Use)
MMTA - Medium Functional			$83.80	0.0318
MMTA - High Functional			$134.78	0.0511
Behavioral Health - Low Functional			-$25.77	-0.0098
Behavioral Health - Medium Functional			$86.43	0.0328
Behavioral Health - High Functional			$130.03	0.0493
Complex - Low Functional			-$38.93	-0.0148
Complex - Medium Functional			$68.21	0.0258
Complex - High Functional			$137.20	0.0520
MS Rehab - Low Functional			$83.02	0.0315
MS Rehab - Medium Functional			$151.75	0.0575
MS Rehab - High Functional			$208.70	0.0791
Neuro - Low Functional			$131.40	0.0498
Neuro - Medium Functional			$225.54	0.0855
Neuro - High Functional			$244.74	0.0928
Wound - Low Functional			$39.86	0.0151
Wound - Medium Functional			$126.28	0.0479
Wound - High Functional			$140.28	0.0532
Community - Late	-$313.28	-0.4780	-$118.45	-0.0449
Institutional - Early	$185.44	0.2829	$74.22	0.0281
Institutional - Late	$537.80	0.8205	$57.93	0.0220
Comorbidity Adjustment	$655.80	1.0006	$41.13	0.0156
Constant	$2,529.49	3.8592	$359.21	0.1361
Avg Resource Use	2638.562		450.4626	
N	5,247,601		5,247,601	
Adj R-Squared	0.1619		0.2745	
BLS or CPM+NRS?	CPM+NRS		CPM+NRS	

Comorbidity Regression

Regression of Resource Use on Comorbidity Groups and other HHGM Adjustment Variables (Other Adjustment variables not shown)

30-Day Periods - CPM + NRS

Description	Coefficient	P-Value	% of 30-Day Periods	Points
Behavioral 11: Intellectual Disabilities	-$170.44	0	0.1%	0
Infectious 2: HIV	-$133.49	0	0.1%	0
Renal 4: Pyelonephritus and other disorders of the kidney and ureter	-$129.13	0	0.1%	0
Infectious 4: Viral Hepatitis	-$121.30	0	0.3%	0
Neoplasm 4: Malignant neoplasms of pancreas	-$97.10	0	0.1%	0
Resp 2: Whooping cough	-$96.00	0	1.0%	0
Behavioral 3: Delusional and Non-mood Disorders	-$92.13	0	0.0%	0
Cerebral 1: Occlusion/Stenosis of Pre-cerebral/Cerebral Arteries w/o Cerebral Infarction	-$85.99	0	0.1%	0
Behavioral 1: Schizophrenia and Schizoaffective Disorders	-$72.29	0	0.7%	0
Neuro 3: Dementia in diseases classified elsewhere	-$69.31	0	10.5%	0
Heart 9: Valve Disorders	-$67.91	0	0.9%	0
GI 4: Alcoholic Liver Disease, Chronic Hepatitis, Fibrosis and Cirrhosis of the Liver	-$66.43	0	0.6%	0
Heart 4: Angina Pectoris	-$64.61	0	0.2%	0
Neuro 8: Epilepsy	-$63.02	0	1.5%	0
Neoplasm 6: Malignant neoplasms of trachea, bronchus, lung, and mediastinum	-$61.64	0	0.8%	0
Heart 5: Atherosclerotic Heart Disease with Angina	-$60.02	0	1.2%	0
Neoplasm 17: Secondary neoplasms of respiratory and GI systems.	-$58.35	0	0.4%	0
Endocrine 1: Hypothyroidism	-$55.60	0	3.0%	0
Renal 1: Chronic kidney disease and ESRD	-$50.78	0	10.1%	0
Behavioral 5: Phobias, Other Anxiety and Obsessive Compulsive Disorders	-$48.74	0	5.8%	0
GI 5: Hepatic Failure and Other Inflammatory Liver Disorders	-$47.56	0	0.1%	0
Neuro 2: Delirium due to known physiological conditions	-$45.63	0.004	0.0%	0
Heart 7: Chronic Ischemic Heart Disease	-$42.78	0	0.8%	0
Resp 5: COPD and asthma	-$41.32	0	5.1%	0
Resp 4: Bronchitis and emphysema	-$40.19	0	0.5%	0
Resp 1: Obstructive sleep apnea	-$39.84	0	0.7%	0
Circulatory 1: Nutritional, Enzymatic, and Other Heredity Anemias	-$35.29	0	2.1%	0
MS 5: Osteoporosis	-$32.67	0	2.7%	0
Behavioral 4: Psychotic, Major Depressive, and Dissociative Disorders	-$32.40	0	0.2%	0
Neoplasm 9: Malignant neoplasm of breast	-$30.96	0	0.4%	0
Heart 12: Other Heart Diseases	-$30.84	0	15.2%	0

Description	Coefficient	P-Value	% of 30-Day Periods	Points
Behavioral 6: Schizotypal, Persistent Mood, and Adult Personality Disorders	-$30.76	0	0.2%	0
Neoplasm 11: Malignant neoplasms of female genital organs and prostate	-$30.59	0	0.6%	0
Resp 9: Respiratory Failure	-$28.05	0	1.1%	0
Neuro 1: Vascular Dementia and Delirium due to known physiological conditions	-$28.03	0	0.7%	0
Heart 8: Other Pulmonary Heart Diseases	-$25.95	0	0.9%	0
Neoplasm 22: Follicular and other non-Hodgkin's lymphoma, and leukemia	-$24.22	0	0.7%	0
Neuro 4: Alzheimer's disease and related dementias	-$23.06	0	2.9%	0
Behavioral 2: Mood Disorders	-$22.82	0	2.9%	0
Circulatory 2: Hemolytic, Aplastic, and Other Anemias	-$22.51	0	5.1%	0
Renal 5: Neuromuscular dysfunction of bladder, urinary tract infection, and benign prostatic hyperplasia	-$21.96	0	3.2%	0
Circulatory 7: Atherosclerosis	-$21.61	0	0.3%	0
Endocrine 5: Obesity, and Disorders of Metabolism and Fluid Balance	-$15.07	0	2.5%	0
Neoplasms 1: Malignant neoplasms of lip, oral cavity and pharynx	-$13.36	0.249	0.1%	0
Renal 2: Unspecified renal failure	-$11.55	0.383	0.1%	0
Resp 6: Bronchiectasis	-$11.47	0	10.6%	0
Neuro 11: Diabetic retinopathy and macular edema	-$8.07	0.028	0.8%	0
Behavioral 10: Major Depression, single episode	-$5.43	0	8.6%	0
Neoplasm 2: Malignant neoplasms of digestive organs	-$3.11	0.502	0.6%	0
MS 1: Lupus	-$1.57	0.813	0.3%	0
Resp 8: Pulmonary fibrosis	-$1.41	0.81	0.3%	0
Circulatory 12: Hypotension	-$1.25	0.743	0.8%	0
Endocrine 3: Type 1, Type 2, and Other Specified Diabetes	-$0.86	0.301	23.0%	0
Neoplasm 5: Malignant neoplasms of peritoneum and retroperitoneum	$0.00			0
Behavioral 7: Mental and Behavioral Disorders Due to Psychoactive Substance Abuse	$0.00			0
Behavioral 8: Eating Disorders	$0.00			0
Behavioral 9: Personality and Behavioral Disorders due to known Physiological Condition	$0.00			0
Cerebral 2: Transient Ischemic Attacks and Vascular Syndromes in Cerebrovascular Diseases	$0.00			0
Cerebral 3: Other Cerebrovascular Diseases	$0.00			0
Circulatory 3: Coagulation Defects	$0.00			0
GI 2: Intestinal Obstruction and Ileus	$0.00			0
GI 3: Constipation	$0.00			0
GI 6: Other Disorders of the Liver	$0.00			0
GI 7: Cholelithiasis and Cholecystitis	$0.00			0

Description	Coefficient	P-Value	% of 30-Day Periods	Points
GI 8: Pancreatitis	$0.00			0
GI 9: Celiac Disease	$0.00			0
Heart 3: Unstable Angina, Acute Coronary Thrombosis, and Acute Ischemic Heart Disease	$0.00			0
Heart 6: Aneurysm of Heart/Coronary Artery	$0.00			0
Infectious 3: Herpes Zoster	$0.00			0
Neoplasm 10: Kaposi's sarcoma	$0.00			0
Neoplasm 12: Malignant neoplasms of urinary tract	$0.00			0
Neoplasm 13: Malignant neoplasms of brain	$0.00			0
Neoplasm 14: Malignant neoplasm of spinal cord, cranial nerves and other parts of central nervous system	$0.00			0
Neoplasm 15: Malignant neoplasm of adrenal gland, endocrine glands and related structures	$0.00			0
Neoplasm 16: Secondary neoplasm of lymph nodes	$0.00			0
Neoplasm 19: Secondary neoplasms of other specified sites	$0.00			0
Neoplasm 20: Non-Hodgkin's Lymphoma	$0.00			0
Neoplasm 21: Hodgkin's Lymphoma	$0.00			0
Neoplasm 23: Merkel cell and neuroendocrine carcinoma	$0.00			0
Neoplasm 24: Secondary carcinoid and neuroendocrine carcinoma	$0.00			0
Neoplasm 3: Malignant neoplasms of liver and intrahepatic bile ducts	$0.00			0
Neoplasm 7: Malignant neoplasms of bone and articular cartilage	$0.00			0
Neoplasm 8: Malignant neoplasms of peripheral nerves, autonomic nervous system, and other Connective Tissue	$0.00			0
Neuro 6: Demyelinating diseases of the central nervous system	$0.00			0
Neuro 9: Encephalopathy	$0.00			0
Renal 3: Diabetes Insipidus	$0.00			0
Resp 3: Influenza and pneumonia	$0.00			0
Resp 7: Pneumonitis and chronic pulmonary edema	$0.00		0.1%	0
Skin 5: Non-pressure chronic ulcers	$0.00			0
GI 1: Crohn's, Ulcerative Colitis, and other Functional Intestinal Disorders	$1.30	0.844	0.3%	0
MS 4: Lumbar Spinal Stenosis	$1.89	0.519	1.2%	0
Endocrine 4: Other Combined Immunodeficiencies and Malnutrition	$4.05	0.32	0.8%	0
Circulatory 8: Aneurysms and Peripheral Vascular Disease	$7.11	0	3.4%	1
MS 3: Joint Pain	$7.52	0	2.5%	1
Circulatory 5: Hypertensive Heart and Chronic Kidney Disease w/o Heart Failure	$7.98	0.02	1.2%	1
Infectious 1: C-diff, MRSA, E-coli	$16.60	0	1.0%	2
Circulatory 4: Hypertensive Chronic Kidney Disease	$17.27	0	11.3%	2
MS 2: Rheumatoid Arthritis	$19.30	0	2.2%	2
Heart 11: Heart Failure	$25.38	0	14.6%	3

Description	Coefficient	P-Value	% of 30-Day Periods	Points
Heart 10: Dysrhythmias	$27.47	0	13.6%	3
Circulatory 6: Pulmonary Embolism	$28.01	0	0.3%	3
Neuro 10: Diabetes with neuropathy	$32.92	0	5.0%	3
Heart 1: Hypertensive Heart Disease with Heart Failure	$33.64	0	1.7%	3
Neoplasm 18: Secondary neoplasms of urinary and reproductive systems, skin, brain, and bone	$44.01	0	0.5%	4
Endocrine 6: Graft vs. Host Disease	$59.15	0.265	0.0%	0
Endocrine 2: Diabetes due to a Known Underlying Condition	$60.51	0	0.2%	6
Circulatory 9: Other Venous Embolism and Thrombosis	$72.49	0	0.6%	7
Skin 1: Cutaneous abscess, cellulitis, and lymphangitis	$104.79	0	1.3%	10
Neuro 5: Parkinson's Disease	$133.65	0	2.0%	13
Skin 2: Stage One and unspecified stage pressure ulcers by site	$140.00	0	0.8%	14
Neuro 7: Hemiplegia, paraplegia, and quadiplegia	$147.92	0	1.2%	15
Cerebral 4: Sequelae of Cerebrovascular Diseases	$174.83	0	4.9%	17
Circulatory 10: Varicose Veins of Lower Extremities with Ulceration	$193.98	0	0.2%	19
Circulatory 11: Lymphedema	$278.94	0	0.7%	28
Skin 3: Diseases of arteries, arterioles and capillaries with ulceration and non-pressure chronic ulcers	$364.29	0	3.6%	36
Skin 4: Stages Two-Four and unstageable pressure ulcers by site	$411.06	0	3.0%	41

Comorbidity Subgroup Descriptions for February, 2018 TEP:

Behavioral 1: Schizophrenia and Schizoaffective Disorders

Behavioral 2: Mood Disorders

Behavioral 3: Delusional and Non-mood Disorders

Behavioral 4: Psychotic, Major Depressive, and Dissociative Disorders

Behavioral 5: Phobias, Other Anxiety and Obsessive Compulsive Disorders

Behavioral 6: Schizotypal, Persistent Mood, and Adult Personality Disorders

Behavioral 7: Mental and Behavioral Disorders Due to Psychoactive Substance Abuse

Behavioral 8: Eating Disorders

Behavioral 9: Personality and Behavioral Disorders due to known Physiological Condition

Behavioral 10: Major Depression, single episode

Cerebral 1: Occlusion/Stenosis of Pre-cerebral/Cerebral Arteries w/o Cerebral Infarction

Cerebral 2: Transient Ischemic Attacks and Vascular Syndromes in Cerebrovascular Diseases

Cerebral 3: Other Cerebrovascular Diseases

Cerebral 4: Sequelae of Cerebrovascular Diseases

Circulatory 1: Nutritional, Enzymatic, and Other Heredity Anemias

Circulatory 2: Hemolytic, Aplastic, and Other Anemias

Circulatory 3: Coagulation Defects

Circulatory 4: Hypertensive Chronic Kidney Disease

Circulatory 5: Hypertensive Heart and Chronic Kidney Disease w/o Heart Failure

Circulatory 6: Pulmonary Embolism

Circulatory 7: Atherosclerosis

Circulatory 8: Aneurysms and Peripheral Vascular Disease

Circulatory 9: Other Venous Embolism and Thrombosis

Circulatory 10: Varicose Veins of Lower Extremities with Ulceration

Circulatory 11: Lymphedema

Circulatory 12: Hypotension

Endocrine 1: Hypothyroidism

Endocrine 2: Diabetes due to a Known Underlying Condition

Endocrine 3: Type 1, Type 2, and Other Specified Diabetes

Endocrine 4: Other Combined Immunodeficiencies and Malnutrition

Endocrine 5: Obesity, and Disorders of Metabolism and Fluid Balance

Endocrine 6: Graft vs. Host Disease

GI 1: Crohn's, Ulcerative Colitis, and other Functional Intestinal Disorders

GI 2: Intestinal Obstruction and Ileus

GI 3: Constipation

GI 4: Alcoholic Liver Disease, Chronic Hepatitis, Fibrosis and Cirrhosis of the Liver

GI 5: Hepatic Failure and Other Inflammatory Liver Disorders

GI 6: Other Disorders of the Liver

GI 7: Cholelithiasis and Cholecystitis

GI 8: Pancreatitis

GI 9: Celiac Disease

Heart 1: Hypertensive Heart Disease with Heart Failure

Heart 2: None (these are now part of Circulatory 5)

Heart 3: Unstable Angina, Acute Coronary Thrombosis, and Acute Ischemic Heart Disease

Heart 4: Angina Pectoris

Heart 5: Atherosclerotic Heart Disease with Angina

Heart 6: Aneurysm of Heart/Coronary Artery

Heart 7: Chronic Ischemic Heart Disease

Heart 8: Other Pulmonary Heart Diseases

Heart 9: Valve Disorders

Heart 10: Dysrhythmias

Heart 11: Heart Failure

Heart 12: Other Heart Diseases

Infectious 1: C-diff, MRSA, E-coli

Infectious 2: HIV

Infectious 3: Herpes Zoster

Infectious 4: Viral Hepatitis

MS 1: Lupus

MS 2: Rheumatoid Arthritis

MS 3: Joint Pain

MS 4: Lumbar Spinal Stenosis

MS 5: Osteoporosis

Neoplasms 1: Malignant neoplasms of lip, oral cavity and pharynx

Neoplasm 2: Malignant neoplasms of digestive organs

Neoplasm 3: Malignant neoplasms of liver and intrahepatic bile ducts

Neoplasm 4: Malignant neoplasms of pancreas

Neoplasm 5: Malignant neoplasms of peritoneum and retroperitoneum

Neoplasm 6: Malignant neoplasms of trachea, bronchus, lung, and mediastinum

Neoplasm 7: Malignant neoplasms of bone and articular cartilage

Neoplasm 8: Malignant neoplasms of peripheral nerves, autonomic nervous system, and other Connective Tissue

Neoplasm 9: Malignant neoplasm of breast

Neoplasm 10: Kaposi's sarcoma

Neoplasm 11: Malignant neoplasms of female genital organs and prostate

Neoplasm 12: Malignant neoplasms of urinary tract

Neoplasm 13: Malignant neoplasms of brain

Neoplasm 14: Malignant neoplasm of spinal cord, cranial nerves and other parts of central nervous system

Neoplasm 15: Malignant neoplasm of adrenal gland, endocrine glands and related structures

Neoplasm 16: Secondary neoplasm of lymph nodes

Neoplasm 17: Secondary neoplasms of respiratory and GI systems.

Neoplasm 18: Secondary neoplasms of urinary and reproductive systems, skin, brain, and bone

Neoplasm 19: Secondary neoplasms of other specified sites

Neoplasm 20: Non-Hodgkin's Lymphoma

Neoplasm 21: Hodgkin's Lymphoma

Neoplasm 22: Follicular and other non-Hodgkin's lymphoma, and leukemia

Neoplasm 23: Merkel cell and neuroendocrine carcinoma

Neoplasm 24: Secondary carcinoid and neuroendocrine carcinoma

Neuro 1: Vascular Dementia and Delirium due to known physiological conditions

Neuro 2: Delirium due to known physiological conditions

Neuro 3: Dementia in diseases classified elsewhere

Neuro 4: Alzheimer's disease and related dementias

Neuro 5: Parkinson's Disease

Neuro 6: Demyelinating diseases of the central nervous system

Neuro 7: Hemiplegia, paraplegia, and quadiplegia

Neuro 8: Epilepsy

Neuro 9: Encephalopathy

Neuro 10: Diabetes with neuropathy

Neuro 11: Diabetic retinopathy and macular edema

Renal 1: Chronic kidney disease and ESRD

Renal 2: Unspecified renal failure

Renal 3: Diabetes Insipidus

Renal 4: Pyelonephritus and other disorders of the kidney and ureter

Renal 5: Neuromuscular dysfunction of bladder, urinary tract infection, and benign prostatic hyperplasia

Resp 1: Obstructive sleep apnea

Resp 2: Whooping cough

Resp 3: Influenza and pneumonia

Resp 4: Bronchitis and emphysema

Resp 5: COPD and asthma

Resp 6: Bronchiectasis

Resp 7: Pneumonitis and chronic pulmonary edema

Resp 8: Pulmonary fibrosis

Resp 9: Respiratory Failure

Skin 1: Cutaneous abscess, cellulitis, and lymphangitis

Skin 2: Stage One and unspecified stage pressure ulcers by site

Skin 3: Diseases of arteries, arterioles and capillaries with ulceration and non-pressure chronic ulcers

Skin 4: Stages Two-Four and unstageable pressure ulcers by site

Skin 5: Non-pressure chronic ulcers

Partnership for Quality Home Healthcare

THERE'S NO PLACE LIKE HOME

September 21, 2017

Submitted via regulations.gov

The Honorable Seema Verma
Administrator
Centers for Medicare and Medicaid Services
7500 Security Boulevard
Baltimore, Maryland 21244-1850

Re: CMS–1672-P: Medicare and Medicaid Programs: CY 2018 Home Health Prospective Payment System Rate Update and Proposed CY 2019 Case-Mix Adjustment Methodology Refinements; Home Health Value-Based Purchasing Model; and Home Health Quality Reporting Requirements

Dear Administrator Verma:

The Partnership for Quality Home Healthcare (the "Partnership"), a national coalition of skilled home healthcare providers dedicated to ensuring the quality, efficiency, and integrity of the Medicare home healthcare benefit for homebound seniors and disabled Americans, appreciates the opportunity to comment on payment and policy changes to the Home Health Prospective Payment System ("HHPPS") as proposed by the Centers for Medicare and Medicaid Services ("CMS" or "Agency") on July 28, 2017 ("proposed rule"). On September 1, 2017 we submitted through Regulations.gov two comment letters, one on our initial concerns (Exhibit A), the second on legal concerns, with the proposed rule (Exhibit B). This is the third of three letters we are submitting relating to this proposed rule.

Our comments today include three important views from our coalition as home health providers:

- **Focus on the patient:** Every year, 3.5 million patients rely on skilled health care services delivered in their own home to recover after an illness or injury. Home health is a critical element of our nation's health care system, which enables comprehensive care that best supports a full recovery after an inpatient hospital stay or care in a post-acute setting. Analyses of federal data by Avalere Health and Dobson DaVanzo & Associates[1] reveal that the Medicare home health benefit is particularly important to vulnerable seniors and that these patients are older, sicker, and poorer than all other beneficiaries.

[1] AVALERE HEALTH, HOME HEALTH CHARTBOOK 2017: PREPARED FOR THE ALLIANCE FOR HOME HEALTH QUALITY AND INNOVATION (March 2017), *available at* http://ahhqi.org/images/uploads/AHHQI_2017_Chartbook_PREVIEW.pdf.

- **Provide value to the Medicare program:** Home health providers help alleviate the financial pressure that Medicare faces by delivering cost-effective care. In addition to playing an essential role in the recovery of vulnerable seniors, low-cost home health care is being substituted for high cost institutional post-acute care under the CMS Innovation Center's alternative payment models, including ACOs, CJR, and BPCI models.[2]

- **Collaboration:** While the Partnership supports CMS's efforts to move from volume-driven to value-driven payments based on patient characteristics, we also want to ensure these efforts are appropriately targeted and do not impede patient access to essential home healthcare services. The Partnership is ready and willing to work with CMS to get the policy right—not to oppose policy reform. We want to collaborate with CMS in providing data, information, the patient's perspective, and policy options to improve the home health benefit.

The Partnership supports CMS's efforts to reform the home health prospective payment system to more accurately align payment with patient characteristics, quality, and to remove utilization based incentives and we welcome the opportunity to engage in constructive dialogue characteristics so that we can meet the needs of the patients, help to control Medicare spending, and improve the value of the benefit. However, we do not believe that this proposed rule, as currently written, meets these three important criteria. This proposed rule represents a major change in both the payment and care delivery system that has not been adequately tested or validated for implementation, and it is unclear how it will impact patients. It also dramatically reduces the payment to providers. This will only reduce the availability of home health services and likely increase costs to the Medicare program.[3] Finally, there was little collaboration from CMS on seeking broad input on the impact of the proposed, far-reaching changes. We appreciate the opportunity to react to the wide-range of policy updates contained in the proposed rule in the following comment letter, but we have significant concerns in the following areas:

1. **It is imperative that the Home Health Groupings Model ("HHGM") proposed for implementation in CY 2019 be withdrawn from the CY 2018 HH PPS update final rule, as stakeholders, including members of the Partnership, require additional information in order to fully assess the impact of the proposed model.**

2. CMS has never before proposed non-budget neutral, comprehensive overhaul payment reform without specific Congressional authority and previous non-budget neutral reforms

[2] DOBSON DAVANZO, analysis of 2013-2015 VRDC RIF data, DUA #'s 28682 and 28643 and 2013-2015 ACO Public Use Files; *see also* LEWIN GROUP, CMS BUNDLED PAYMENT FOR CARE IMPROVEMENT INITIATIVE MODELS 2-4: YEAR 2 EVALUATION & MONITORING ANNUAL REPORT (prepared for CMS), https://innovation.cms.gov/Files/reports/bpci-models2-4-yr2evalrpt.pdf, at pgs. 11 and 17 (finding a correlation with increased or substituted use of home health and achieved savings).

[3] In appendix C of the *2017 Annual Report of the Boards of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds,* the Trustees also raise significant concerns about home health margins and reductions in their payments. They state that by "2040, simulations suggest…that over 80 percent of home health agencies (HHAs) would have negative total facility margins."

have caused significant harm; therefore, we strongly recommend that any home health payment reform, including the **HHGM proposal, be implemented in a fully budget neutral fashion** to help ensure patients continue to have access to low cost, clinically effective care in the setting they prefer – their homes.

3. The increased administrative burdens under HHGM's establishment of a 30-day episode is also in conflict with the Administration's stated goal, including in the Request for Information in the proposed rule, of reducing regulatory burden and CMS's effort to "simplify rules and policies for patients, clinicians, providers, and suppliers" in ways that "increases quality of care and decreases costs."

Medicare's home healthcare benefit has long made clinically-appropriate and cost-effective services available to homebound seniors and disabled Americans. One of the most significant opportunities for reducing spending and improving quality generally occur after patients are discharged from the hospital. For example, home health agencies have played a central role in CMS's bundled payment arrangements, including CMS's Comprehensive Care for Joint Replacement model, which works toward better outcomes for patients undergoing lower extremity joint replacement surgeries. A June 2016 data analysis across all post-acute care settings and areas of the country found that Medicare paid approximately $5,000 *less* when patients were first discharged to home health care compared to other post-acute settings, like skilled nursing or rehabilitation facilities.[4]

Home health services allow senior citizens and individuals with disabilities to receive physician-ordered medical and rehabilitative treatment where they most prefer to remain: in the safety and dignity of their own homes. The Medicare home healthcare benefit is ideally suited to support your and the Secretary's efforts to instill a greater focus on value throughout the Medicare program. As proposed, HHGM would significantly hamper providers' ability to help our patients and the Medicare program achieve high-quality results at the best value.

I. The Home Health Grouping Model Is Significantly Flawed Policy

a. HHGM Will Harm Access to Care

The proposed rule includes the implementation of the Home Health Groupings Model ("HHGM"), a new case-mix adjustment model that significantly changes the model of care and reimbursement for the Medicare home health payment. It reduces the unit of home health services from a 60-day episode to 30-day "periods" and reduces the overall payments for home health services by a purported 4.3 percent. This mandatory model in which all home health agencies would be forced to participate is not authorized under the Social Security Act and it dramatically alters Medicare payment for skilled home health services, to begin as early as 2019.

CMS projects HHGM will significantly reduce Medicare reimbursement for home health services by as much as ***$950 million in 2019 alone***. Prior to the issuance of the proposed rule in

[4] DOBSON DAVANZO, DATA ANALYSIS UNDERSCORES VALUE OF HOME HEALTH IN THE MEDICARE COMPREHENSIVE CARE FOR JOINT REPLACEMENT PAYMENT MODEL (June 2016), http://ahhqi.org/research/joint-replacement-data.

July, CMS did not solicit substantial comment or seek industry input in the development of this proposed policy. While we support CMS's efforts to move from volume-driven payments to payments based on patient characteristics, implementing a totally new payment system that significantly cuts Medicare home health, with almost no input from key stakeholders (such as Medicare patients and home health agencies), puts both vulnerable home health beneficiaries and quality providers at significant risk.

HHGM will result in additional cuts to home healthcare if implemented as proposed. The Medicare home health sector has experienced ***more rate cuts over the last decade than any other healthcare sector*** in the Medicare program and is the only provider type that has not had an increase in Medicare reimbursements since 2009. The Partnership and CMS will use the year ahead to fix this proposed payment model or develop more broad based alternatives by working inclusively with Medicare beneficiaries and experienced, high quality providers. **The Partnership urges CMS not to finalize the HHGM policy and instead work with stakeholders to develop a budget neutral policy that does not limit access for beneficiaries.**

b. HHGM Requires Fundamental Revisions

There are fundamental revisions that must be made to the proposed HHGM in order for it to be a workable payment model for home health care. These changes should ensure that access to care is maintained for one of Medicare's most vulnerable beneficiary populations, who are older, sicker and poorer, on average, than the general Medicare population.

HHGM would:

- Create access to care barriers for vulnerable home health patients;
- Significantly cut reimbursement for many types of home health patients without Congressional authorization;
- Compound five years of rate cuts that total nearly 18% in a benefit that has had essentially flat spending since 2010; and
- Impose non-budget neutral reforms in home health services at a level that previously caused significant harm to patients, e.g. with the Interim Payment System (1998-2000), nearly 1.5 million Medicare beneficiaries lost access to care following the closure of more than 4,000 home health agencies virtually overnight.

The HHGM development process was not adequately transparent and only vague details were provided despite repeated requests for data. Additionally, the proposed rule still does not provide enough information to accurately replicate the potential impacts of the HHGM. Since the home health provider community has not been able to fully research, model and provide specific comments on the HHGM, it must not be finalized as part of the CY 2018 payment rule. We encourage ongoing, meaningful dialogue and coordination between CMS and the home health provider community to improve the HHGM before implementation.

The proposal appears as though it was developed by looking at the home health benefit in a vacuum and not as part of the overall Medicare system, and thus it fails to recognize the benefit of getting a patient to home health prior to a hospital stay as a means of controlling total

Medicare expenditures. Accurately identifying Medicare beneficiaries in need of home health services in order to avoid costly hospitalization requires advanced technology solutions whose costs have not been properly considered and allocated in this proposal.

This proposal from CMS comes at a time when federal policy continues to push more care into the most cost-effective settings like home health, yet HHGM would create another significant obstacle for the home health community in being able to deliver the type of quality care that Medicare beneficiaries desire in their home. Moreover, according to the *2017 Annual Report of the Boards of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Funds* ("Report"),[5] lower Medicare payment rates, other payment provisions, sequestration, changes to Medicare and Medicaid disproportionate share payments, and coverage expansions collectively suggest a deterioration of facility margins for HHAs, particularly over the long run.

Under the current payment law, as a result of these cuts, the Report projects that by 2040 over 80 percent of HHAs would have negative total facility margins—thus raising the likelihood of access and quality-of-care issues for Medicare beneficiaries. Further, CMS's Office of the Actuary found in a July 2017 report[6] that under simulations of the Affordable Care Act ("ACA") Medicare payment rate update provision on Part A providers, for HHAs, there will be a roughly 30 percent increase in providers experiencing negative margins by 2019. Thus, CMS needs to ensure that any changes made to the HH payment system will not impede beneficiaries' access to this essential Medicare benefit.

Rather than addressing the anticipated steep decline in Medicare payments for home health care, the HHGM as proposed would further worsen the outlook for Medicare home health. HHGM would dramatically alter Medicare payment amounts for skilled home health services in a non-budget neutral manner with wide ranging effects at the agency level. The HHGM will also base payments on patient characteristics rather than expected care needs, and will replace the historically used 60-day episodes with 30-day "periods." This change conflicts with CMS's efforts to reduce administrative burden by requiring providers to bill twice as frequently and is inconsistent with the statute.

Primary analyses completed based upon the Abt Technical Report prepared for CMS indicate that HHGM will create access to care barriers for vulnerable home health patients. We are concerned that the cuts proposed by CMS would be unsustainable for many providers, particularly those in areas that are already struggling to provide beneficiaries with continued access to a benefit they depend on. Previous non-budget neutral reforms in home health services have caused significant harm and taken years to repair. Again, with the Interim Payment System

[5] 2017 ANNUAL REPORT OF THE BOARDS OF TRUSTEES OF THE FEDERAL HOSPITAL INSURANCE AND FEDERAL SUPPLEMENTARY MEDICAL INSURANCE TRUST FUNDS, July 13, 2017, *available at* https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/ReportsTrustFunds/Downloads/TR2017.pdf.
[6] CENTERS FOR MEDICARE & MEDICAID SERVICES, OFFICE OF THE ACTUARY, SIMULATIONS OF AFFORDABLE CARE ACT MEDICARE PAYMENT UPDATE PROVISIONS ON PART A PROVIDER FINANCIAL MARGINS, July 13, 2017, *available at* https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/ReportsTrustFunds/Downloads/ACAmarginsimulations2017.pdf.

(1998-2000), nearly 1.5 million Medicare beneficiaries lost access to care following the closure of more than 4,000 home health agencies.

The HHGM would redistribute payments away from medically-necessary home health services such as physical, occupational and speech therapy that are currently producing Medicare savings in value-based care, alternative payment and bundled payment models. In the long run, HHGM could result in higher Medicare costs as patients are forced to access institutional care rather than receive appropriate care in their own homes. Further, the HHGM would potentially create a perverse reversal of incentives by rewarding inefficiency and low-quality providers while penalizing high quality home care providers.

c. CMS's Inconsistent Approach to Payment Reform

CMS has not taken a consistent approach to post-acute payment reform. For example, CMS is working to reform the Skilled Nursing Facility ("SNF") Payment system from a therapy/minute driven system to a payment system defined by patient characteristics. Concurrently, CMS is working to reform the HH payment system from a therapy/visit driven system to the HHGM payment system defined by patient characteristics. Unfortunately, CMS has taken very different approaches to the two payment systems in terms of timing, availability of necessary data to understand impact of proposal, and stakeholder input.

For example, CMS proposed the SNF payment reform - the Resident Classification System Version 1 ("RCS-1") - in an Advance Notice of Proposed Rulemaking instead of a proposed rule, to furnish providers with sufficient time to comment on the payment system before proposing it for implementation. Additionally, SNF providers were furnished with an additional 30-days, 90-days total, to provide meaningful comment on the Advance Notice. The home health provider community was not given additional time to comment or provided the benefit of an Advance Notice, hence our request to withdraw the HHGM proposed for CY 2019.

CMS has been more forthcoming with necessary data to evaluate RCS-1 than HHGM. For example, CMS provided SNFs with the RCS-1 classification logic used to model the payment proposal and a provider specific impact analysis. No comparable information was supplied to HH providers. This lack of sufficient information has impeded HH providers' ability to fully assess the HHGM proposal and its impact on individual providers or certain types of patients.

Additionally, SNF providers have had many more opportunities for stakeholder input and a much more transparent process than HH providers. For example, CMS held four separate Technical Expert Panels ("TEPs") to engage stakeholders in the process as they were developing the policy, whereas CMS did not hold any TEPs to engage the HH providers in the process. It is our understanding that the TEPs held consisted solely of CMS staff and academicians. The table below highlights the process/timeline for SNF versus HH payment reform.

SNF Payment Reform	HH Payment Reform
April 2014 – Summary Report on SNF Therapy Payment Models February 2015 – CMS hosts first TEP to discuss questions and issues related to the therapy payment research November 2015 – CMS hosts second TEP to discuss questions and issues related to the nursing component of the SNF PPS, as well as issues around Non-Therapy Ancillaries June 2016 – CMS hosts third TEP to provide an outline of basic payment structure for a revised SNF PPS October 2016 – CMS hosts fourth TEP to provide an outline of the recommended alternative payment model for a revised SNF PPS April 2017 – Abt releases detailed technical report	August 2016 – Abt releases overview slides of HHGM December 2016 – Abt releases detailed technical report January 2017 – CMS presents HHGM during a National Provider Call

For all of these reasons, the Partnership recommends that CMS implement home health payment reform of this magnitude thoughtfully, with sufficient time and full disclosure of data, and ample opportunity for stakeholder participation and input.

d. Independent Analysis of HHGM Demonstrates Significant Flaws in HHGM

In order to understand the implications of HHGM, the Partnership retained Dobson DaVanzo and Associates to replicate the HHGM grouper and payment system, as discussed in the 2016 Abt Technical Report and the proposed rule, to estimate HHGM impacts on HHAs, patients and ACOs, and identify any structural flaws in HHGM that will impact access to quality home health services. Dobson Davanzo based their analysis on the presumption that HHGM would be implemented in a budget neutral manner. Dobson DaVanzo concluded that as a result of significant changes to the payment model, including the unit of payment, payment basis, clinical groupings, and other changes, if implemented, the revised groupings could restrict and effectively alter the home health benefit and potentially place the home health industry in financial jeopardy.[7]

[7] Dobson DaVanzo's Memorandum and Supplemental Findings are enclosed as Exhibit C. Referred to herein as the Dobson DaVanzo Memorandum.

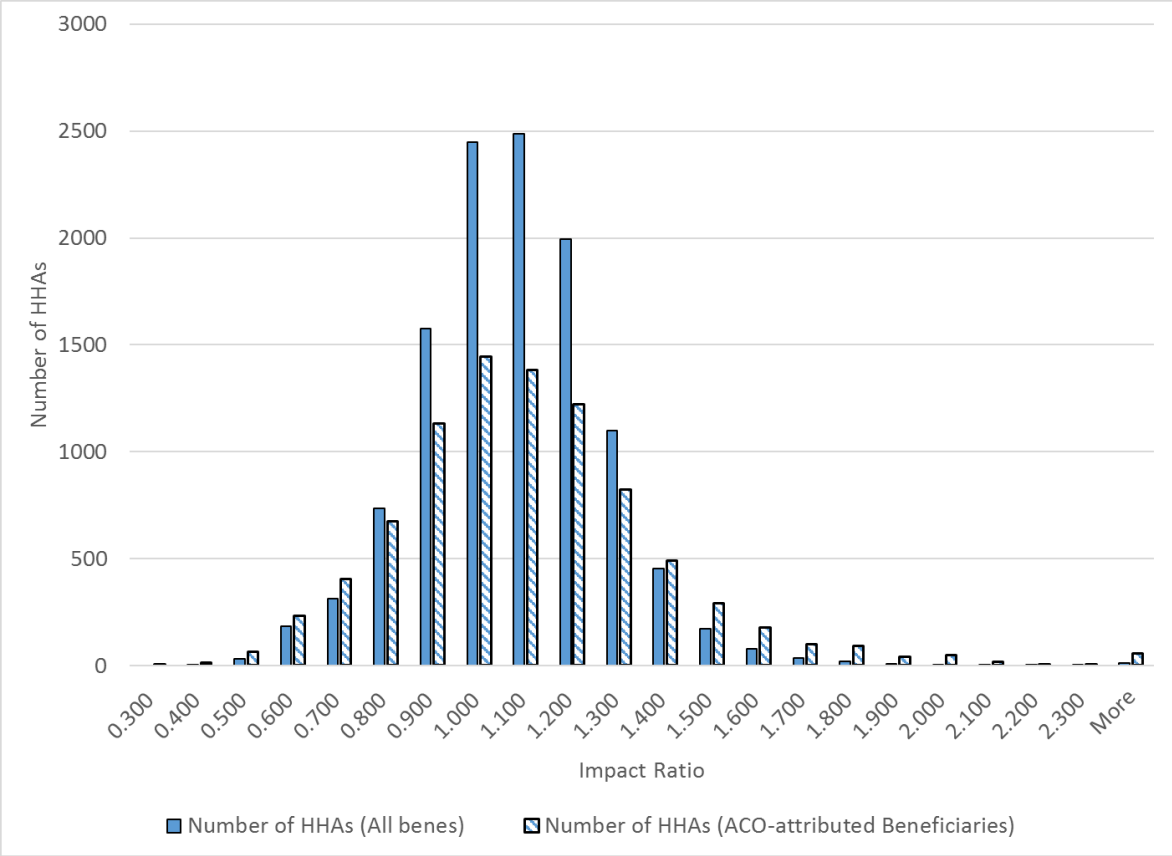
The following is a brief summary of Dobson DaVanzo's conclusions.[8]

i. HHGM is Highly Redistributive

Dobson DaVanzo replicated the HHGM patient grouper as described in the Abt Technical Report and applied the analysis to a sample of 2013 claims and assessment data. Following testing to ensure the data was consistent with Abt's information, the report concluded that HHGM is highly redistributive at the agency level. While the Abt analysis did not evaluate the impact on individual HHAs, the Dobson DaVanzo analysis found revenue would be substantially redistributed with more than 25% of individual HHAs having a revenue change plus or minus 20% in payment.

[8] It is important to note that Dobson DaVanzo concluded the proposed rule's impact analysis could not be replicated because CMS has not provided the 2016 data file, upon which the impact analyses were based.

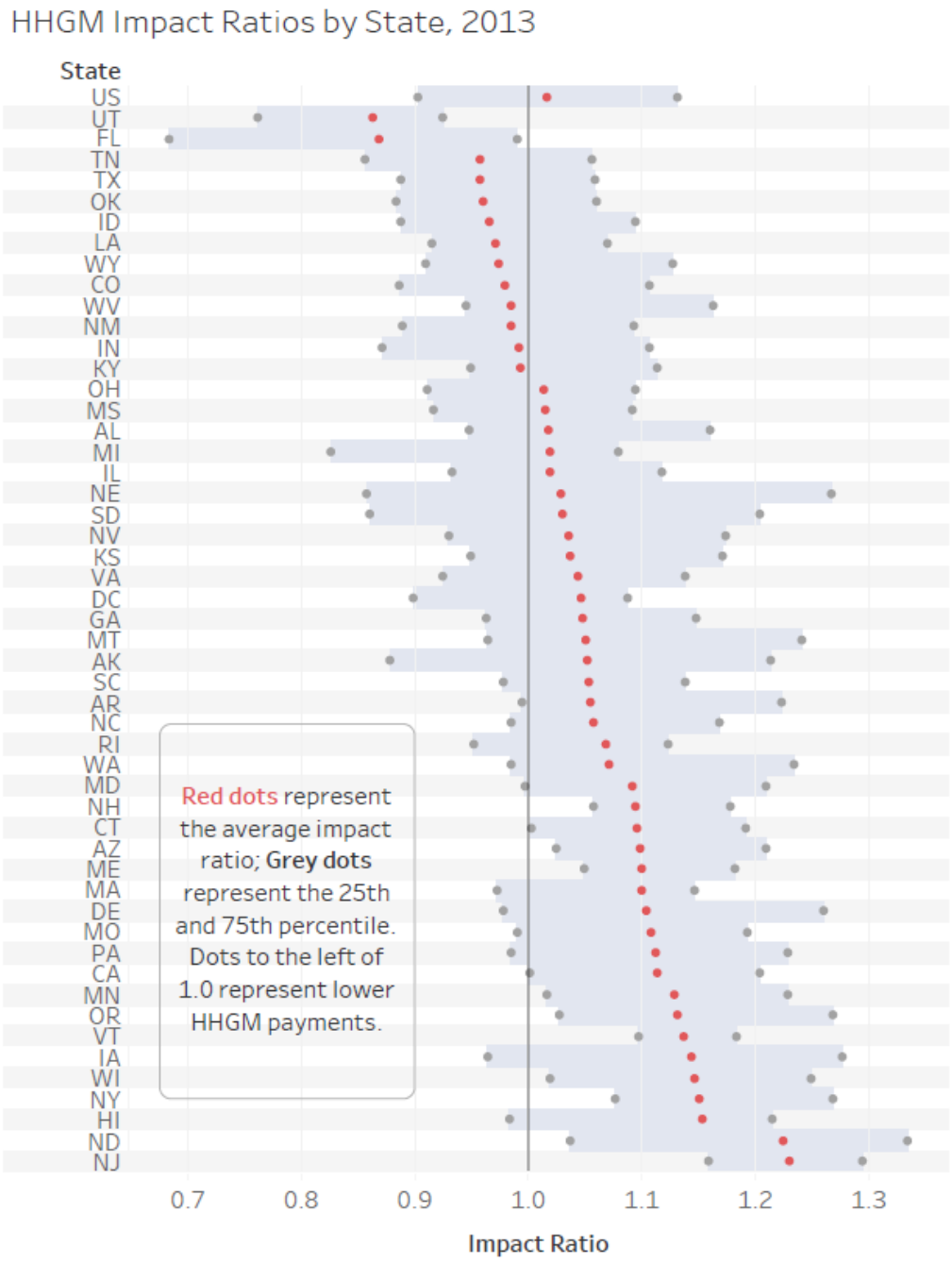
Exhibit 3: Distribution of HHGM/Current Law Impact Ratios by HHA for all beneficiaries and ACO-attributed beneficiaries[9]



This same redistribution effect is also found at the State level. Some states have a much wider variation in impact ratios.

[9] Exhibit numbers used in this comment letter are numbered in coordination with those in the Dobson DaVanzo Memorandum. Dobson DaVanzo replication of HHGM grouper and payment system produced under contract with HealthSouth, DUA 28682, Exhibit 3 in the Dobson DaVanzo Memorandum.

Exhibit 4: HHGM Agency Impact Ratios by State Assuming Budget Neutrality, 2013[10]



[10] The mean case-weighted mean impact ratio for US states in the Dobson Davanzo Memorandum Exhibit 4 is 1.016. This differs from the 1.029 described in Exhibit 2; Exhibit 4 shows a subset of cases due to data exclusions at the agency level.

The analysis also evaluated major issues regarding losses in therapy services being provided, whether the home health patient was admitted from an institutional or community based setting, the timing of the episode (early versus late), and comorbidities. In addition, other variables also contributed to the impacts, however the change from a 60-day episode payment to 30-day period payment was the most important driver of the reduction and variation in payments.

ii. Other Issues with HHGM

Dobson DaVanzo's review concluded that the HHGM framework is consistent with the goal of linking payment to patient characteristics and clinical need. However, they concluded that there are other less disruptive ways to achieve this goal and improve the care for patients.

Other issues raised by Dobson Davanzo regarding inaccurate payments include:

- Use of the Cost-Per-Minute + Non-Routine Supplies approach payments would only be valid dependent on the accuracy and consistency of the cost reports. However, cost report data is an inaccurate source of resource use as the reports have not been audited or used for any purpose since the 1990s. In addition, this may be skewed depending on the overhead allocations of facility-based HHA.

- There is no clarity regarding how overhead expenses are distributed in the HHGM's base structures and how it will affect HHAs that have different overhead structures and prior therapy use.

- Episode payments and assignment to grouping categories does not consider significant changes in clinical status within or across the episode period (proposed to be 30-days).

- The lack of a payment adjustment for treating vulnerable populations will discourage the provision of care to these beneficiaries; and

- NRS payments would be included in the base rate which is wage adjusted, even though the portion of labor-to-non-labor payments remained unchanged in the home health prospective payment system.

iii. FFS Perspective and Integration with the APM/ACO Agenda

The Dobson DaVanzo analysis suggests that implementation of HHGM will add additional complexity to assessing the impact of Alternative Payment Models (APMs) such as ACOs. This is further complicated by the interaction of HHGM's relationship to the home health prospective payment budget levels. The APMs promote cost-effective sites of care, such as home health services which could be limited by severe cuts in payments as proposed. Therefore, it may drive the APM's to higher cost providers, thereby affecting the total value and costs of the APMs.

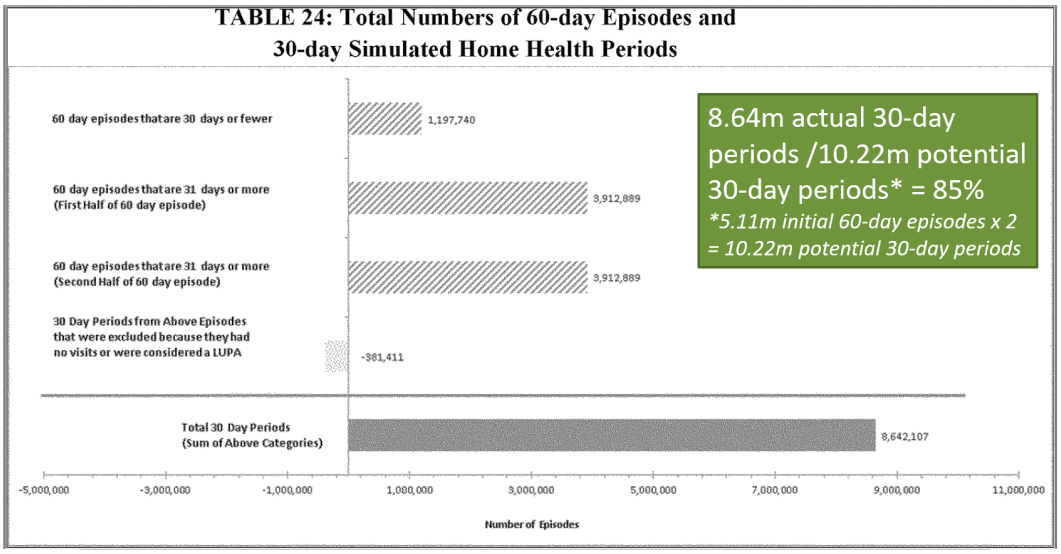
iv. HHGM in the CY2018 Proposed Home Health Prospective Payment Rule

CMS modified the HHGM from what was presented in the Abt Technical Report that was released in December 2016 in this new proposed rule. Among the changes, one in particular is of concern, the use of 2016 data to define case-mix groups and weights. In addition, CMS proposed to implement HHGM in a non-budget neutral manner with an estimated reduction of -4.3% or 2.2% if implemented in a partially budget neutral way. While other changes were made, Dobson DaVanzo's conclusion is clear: ***HHGM would be highly redistributive of payments, even if it were budget neutral, which it is not.***

v. HHGM is Not Budget or Revenue Neutral

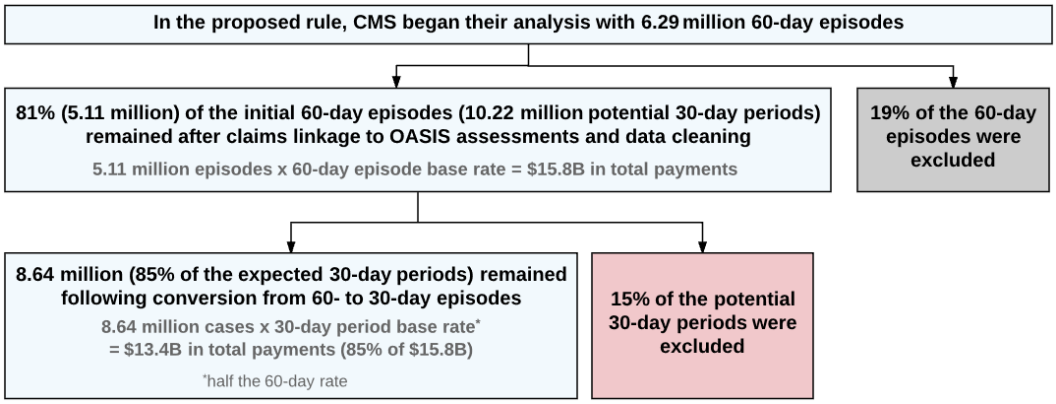
The proposed rule is not budget neutral to the current home health prospective payment system. The removal of certain 30-day periods which did not convert to the current system, the removal of payment for home health services that would be considered "questionable encounters" under HHGM, and the increase in LUPA thresholds will decrease the number of fully paid episodes unevenly across case types and agencies. The combined effect of these proposed policy changes is effectively a rebasing of the payment system.

Exhibit 5: The Proposed Rule's Illustration of 60-day Episodes and 30-day Simulated Periods[11]



[11] Exhibit 5 in the Dobson DaVanzo Memorandum, adapted from the Medicare and Medicaid Programs; CY 2018 Home Health Prospective Payment System Rate Update and Proposed CY 2019 Case-Mix Adjustment Methodology Refinements; Home Health Value-Based Purchasing Model; and Home Health Quality Reporting Requirements**,** Table 24, 82 Fed. Reg. at 35,302.

Exhibit 6: Uncompensated Excluded Cases as Removed from HHGM in CY2018 Proposed Rule[12]



Dobson DaVanzo found that 19% of the 60-day episodes in 2016 were discarded from the sample used to create HHGM case-mix weights. As a result, it was difficult to estimate the overall loss of episodes and payments in the system. The discarded claims may be in a sample of claims that were ultimately paid in full or they may be claims that no longer fit into a covered clinical category. Further, when 60-day episodes were converted to 30-day periods, there appears to be a 15% reduction in the number of 30-day cases. These are likely to be episodes that did not meet the case-mix group-specific LUPA threshold or otherwise may have had missing visits not counted. These exclusions present concern that CMS did not adjust the base payment rate or case-mix to take into account these episodes. Dobson DaVanzo concluded that by removing approximately 15% of fully paid cases and not compensating for this with increases to the base rate, the result is a roughly 15% reduction of revenue from the system on cases that were paid under the current system.

This is a critically important policy and evaluation issue that we would like an opportunity to work through as soon as the rulemaking process is completed to ensure that the data is valid and we can replicate it without disruption to patients.

vi. CMS Estimate of a -4.3% System Impact

CMS estimates that there will be an expected $950 million revenue reduction (4.3%) to home health agencies from CY 2018 through the implementation in CY 2019, CMS has acknowledged this reduction is net of certain "assumptions on behavioral responses" as a result of the new case-mix methodology.

CMS has provided **no information on the inputs** for these behavioral estimates. We are unable to comment on the effect of any such behavioral changes given the lack of information provided by CMS, or how the reductions are in fact achieved. Therefore, we have asked and will continue

[12] Dobson DaVanzo Memorandum, Exhibit 6.

to ask CMS for responses to requests for further information on HHGM in a transparent and open way on how HHGM will work, how much it will change the program, and whether the assumptions on the cost and impact are in fact valid.

Specifically, Dobson DaVanzo has highlighted the following concerns and questions for which CMS needs to respond:

1. Fundamental to understanding the impact table is to know the baseline from which impacts are assessed. This information was NOT included in the NPRM.
    a. What is the projected total home health prospective payment system payments for CY2017, CY2018, and CY2019 (under HHGM)?

2. Dobson DaVanzo estimates that the reduction of system revenue being due to the change in case definition and ensuing shortfall as removed cases is not compensated by an increase in the base rate. As such, it is critical to understand how 30-day periods that receive payment under the current home health prospective payment system and unpaid under HHGM are handled.
    a. What portion of these 30-day periods were removed in the transition to 30-day episodes? How are these periods counted in the impact table?
    b. How are LUPAs treated in the impact table?

3. The 4.3% reduction to home health payments described in the proposed rule appears to rest on "assumptions on (provider) behavioral responses." There is no additional information included in the proposed rule or supplemental materials describing the behavioral assumptions and their use in the impact assessment.
    a. What are the assumed behavioral responses? How are these assumptions treated in the impact analysis at the case level?

We are concerned that CMS has not been transparent with how it has handled "missing" payments for 30-day periods without visits. Dobson DaVanzo believes this flaw could cause disruption of an even greater magnitude than the transition that occurred in the interim payment system and the original home health prospective payment system enacted in 1997.

vii. Working Toward Sustainable Solutions

As discussed in these comments, Dobson DaVanzo found that the proposed rule could have substantial consequences for the financial stability of home health agencies that ultimately may limit access to care for Medicare beneficiaries. The changes that occurred in the home health payment in late 1990s resulted in large-scale impacts on providers and patients:

- **Home Health Agencies**: There was a net 15% reduction in the number of Medicare Home Health Agencies. The actual closure rate was 26%; the entry of new agencies provided a level of offset.[13]

- **Beneficiary Impacts**: Home health utilization dropped by 29%, from 104 home health users per 1,000 in 1996 to 72 users per 1,000 in 1999.[14]

- **System Impacts**: The home health benefit was reduced from $16.8 billion in 1996 to $7.9 billion in 1999, and the industry had not fully recovered as of 2007. Program payments were $15.6 billion in 2007.[15]

Given the redistributional effects and the decrease in the overall system payment level, the problems for beneficiary access and availability could be compounded. Changes can be made, but they must be done with robust modeling that permits an evaluation of their potential impact.

II. CMS Does Not Have Statutory Authority to Implement HHGM in a Non-Budget Neutral Manner. A Change in the Unit of Payment that is Not Aligned with the Standard Payment is Also Not Authorized by Statute and Would Undermine Legislative Intent

a. Budget Neutrality

We do not believe CMS has statutory authority to implement HHGM in a non-budget neutral manner, as has been proposed.[16] In developing changes to the HH PPS case-mix weights, Section 1895(b)(3)(B) of the Act requires CMS "to ensure the changes to the HH PPS case-mix weights are implemented in a *budget neutral manner*[.]"[17] During these annual rulemakings, CMS has on numerous occasions reduced overall payment amounts to accommodate HHRG-creep, i.e., an increase in the reported case mix that is not associated with an increase in actual case mix.[18]

For CY 2019 and subsequent years, the Agency proposes to replace the standard 60-day episode with a 30-day period that can be extended for a second 30-day period when warranted. According to CMS,

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[13] U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, ASSISTANT SECRETARY FOR PLANNING AND EVALUATION OFFICE OF DISABILITY, AGING AND LONG-TERM CARE POLICY, *Agency Closings and Changes in Medicare Home Health Use, 1996-1999* (July 2003), at pg. 7, *available at* https://aspe.hhs.gov/system/files/pdf/74761/closings.pdf.
[14] *Id.* at pg. 6.
[15] CENTERS FOR MEDICARE & MEDICAID SERVICES, HEALTH CARE FINANCING REVIEW, 2008 STATISTICAL SUPPLEMENT, TABLE 7.1: TRENDS IN PERSONS SERVED, VISITS, TOTAL CHARGES, VISIT CHARGES, AND PROGRAM PAYMENTS FOR MEDICARE HOME HEALTH AGENCY SERVICES, BY YEAR OF SERVICE: SELECTED CALENDAR YEARS 1974-2007, https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/MedicareMedicaidStatSupp/Downloads/2008_Section7.pdf#Table%207.1.
[16] Enclosed as Exhibit D is a legal memorandum prepared by Greenberg Traurig LLP.
[17] 82 Fed. Reg. at 35, 288 (emphasis added).
[18] *See* 82 Fed. Reg. 35, 275.

> [t]he overall impact of the proposed HH PPS case-mix adjustment methodology refinements, including a change in the unit of payment from 60-day episodes to 30-day periods of care, is an estimated -$950 million (-4.3 percent) in payments to HHAs in CY 2019 if the refinements are implemented in a *non-budget neutral manner* for 30-day periods of care beginning on or after January 1, 2019.[19]

In short, the change from a 60-day to a 30-day standard unit would have a significant negative impact, aside from the case mix adjustment, on overall funding of HH services under Medicare. The non-budget neutral adjustment is not authorized by Section 1895.

b. Standard Episode

The HH PPS statute[20] requires CMS to use a single unit of payment, not a single episode followed by an additional payment for the additional days that will occur in the majority of episodes that will exceed 30 days. The standard payment amount is to be adjusted for case-mix and wage level adjustments.[21] Since the average length of stay for a home health patient is 47 days,[22] by CMS's own calculation, CMS's proposal to divide "a single 60-day episode into two 30-day periods" exceeds the Secretary's authority as the proposal would require CMS to use multiple units to capture the average home health stay.

A 60-day timeframe continues to capture the intent and reading of the law that the standardized payment will relate to all "number, type, and duration of visits" and "eliminates the effects of variations in relative case-mix and area wage adjustments".[23] Approximately 46% of all episodes are exactly 60 days in length while only 23.4% are 30 days or less. More than half of all episodes are 58 days or greater.[24] The statute requires that the Secretary "consider an appropriate unit of service" which would pay for all services furnished and the proposed rule's proposal to use multiple units explicitly does not capture "*all* services."

The Medicare Act established a precise method to reimburse providers for home healthcare services. It required the Secretary to establish a single payment model built around a single unit of care and a single standardized payment amount for that unit. No further regulatory modifications to that initial model were contemplated by the Act and indeed, in the ACA, Congress made clear that any modifications to the basic model would require congressional

[19] 82 Fed. Reg. at 35,273 (Table 1) (emphasis added).
[20] The Balanced Budget Act of 1997 ("BBA"), Pub. L. No. 105-33, mandated the development and implementation effective October 1, 2000 of a prospective payment system ("PPS") for home health services. *See* BBA, § 4603(a), adding a new section 1895 to the Social Security Act. On July 3, 2000, CMS's predecessor issued its final rule implementing the Home Health Prospective Payment System ("HH PPS") effective October 1, 2000, as required by the Balanced Budget Act of 1997. *See* Medicare Program: Prospective Payment System for Home Health Agencies, 65 Fed. Reg. 41,128 (Jul. 3, 2000) (codified at 42 C.F.R. pts. 409, 410, 411, 413, 424, and 484); *see also* Social Security Act § 1895(a), 42 U.S.C. § 1395fff(a); 42 C.F.R. pt. 484.200.
[21] Social Security Act § 1895(b)(3)(A)(i) (West 1998).
[22] Medicare and Medicaid Programs: CY 2018 Home Health Prospective Payment System Rate Update and Proposed CY 2019 Case-Mix Adjustment Methodology Refinements; Home Health Value-Based Purchasing Model; and Home Health Quality Reporting Requirements, 82 Fed. Reg.at 35,294 (July 28, 2017).
[23] *See id*.
[24] *See id.* at 35,303 (Table 25).

action. Most notably, the ACA codified into the statute the unit of payment that the Secretary must use for 2014 and subsequent years. Under Section 1895(b)(3)(A)(iii), the authorized adjustments are to be made only to the standard payment amount based on the continued use of an episode unit of payment as it existed at the time of the ACA enactment. That provision provides in part:

> Adjustment for 2014 and subsequent years.—
>
> (I) In general.—Subject to subclause (II), for 2014 and subsequent years, the amount (or amounts) that would otherwise be applicable under clause (i)(III) shall be adjusted by a percentage determined appropriate by the Secretary to reflect such factors as changes in the number of visits **in an episode**, the mix of services **in an episode**, the level of intensity of services **in an episode**, the average cost of providing care **per episode**, and other factors that the Secretary considers to be relevant…
>
> Section 1895(b)(3)(A)(iii)(I) (emphasis added).

By proposing to change the unit of payment from a 60-day episode to a 30-day payment period, the Secretary ignores the statutory directive under Section 1895 that the standard payment amount be based upon the continued use of the episode of payment subject to the 4-year phase-in of the standard payment rate reduction. Accordingly, the Secretary would directly violate the statutory mandate to alter the unit of payment that is in effect.

Thus, an attempt to alter by regulation the basic unit or episode of care from 60 to 30 days, or to modify the standardized payment for that unit, is not authorized by the Social Security Act. Moreover, any modifications, even if authorized in theory, are not permitted if they are not budget neutral, discussed *infra*. As a result, the proposed rule that would change the episode of care from 60 to 30 days and the corresponding standard of payment is not authorized.

III. Specific Payment Methodology Concerns with the Home Health Groupings Model

The HHGM, if implemented, would completely overhaul the current home health payment system, cause enormous disruption in the delivery of care to Medicare beneficiaries, and negatively impact patient access. This proposal from CMS comes at a time when federal policy continues to support care in the most cost-effective settings, like home health services, yet HHGM is a significant obstacle to delivering the type of quality care that Medicare beneficiaries need in their home. **As outlined in the beginning of this letter, there are fundamental revisions that must be made to the proposed HHGM for it to be an effective and sustainable payment model for the home health provider community.**

The HHGM is a wholesale payment reform measure that would replace a 17-year payment model in a non-budget neutral manner with dramatic and wide ranging effects at the provider level. The HHGM bases payment amounts on an untested model that relies on certain patient characteristics that have not been determined to be valid or reliable indicators of care needs. It also would replace the historically used 60-day episodes with 30-day "periods" even though

Medicare retains a 60-day standard for the patient assessment and plan of care. This change conflicts with CMS's efforts to reduce administrative burden by requiring providers to bill twice as frequently and manage patient care in a framework inconsistent with the payment system.

a. Methodology Used to Calculate the Cost of Care

i. Payments Should Not Rely on Inaccurate Cost Reports

We are concerned that HHAs' inputs, as demonstrated through cost reports, do not likely reflect the effects of changes in utilization, provider payments, and provider supply that have occurred over the past decade. Cost report data is an inaccurate source of resource use as the reports have not been audited or used for any purpose since the 1990s. Cost report data provides an unfair advantage to facility-based agencies that have the ability to allocate indirect overhead to the cost of services.

The enactment of the ACA and the effects of rebasing and other reimbursement reductions, as well as the effects of APMs ,value based-purchasing and quality improvement, including the impact that the Medicare Spending Per Beneficiary ("MSPB") measure, are impacting overall utilization of post-acute care services. The HHGM does not adequately account for the effects of these changes. Moreover, the strength and utility of episode-specific costs depends upon the accuracy and consistency of agencies' reported charges, cost-to-charge ratios, and episode visit minutes. These inputs from the Medicare cost reports are neither standardized nor uniformly audited.

As proposed, HHGM will reward inefficient HHAs with historically high costs. The use of cost report data in lieu of Wage Weighted Minutes of Care ("WWMC") favors facility-based agencies because they have the ability to allocate indirect overhead costs from their parent facilities to their service cost.[25] Cost report data provides an unfair advantage to provider types that have been historically inefficient operators. To the extent that inefficient providers tend to serve a distinct set of patients, and efficient providers a different set of distinct patients, these differences are incorporated into the resource use. Thus the case-mix for these patient types is reallocating dollars to inefficient providers from those who have been more efficient with their services (staff productivity, visit utilization, turnover rates, etc.).

Based on our operational experiences with clinical staffing labor costs, HHA cost report data suggests more parity exists between costs regarding skilled nursing ("SN") and physical therapist ("PT") than in fact exists. The Bureau of Labor and Statistics ("BLS") data showing a 40 percent difference between SN and PT costs are more reflective of our human resources/staffing

[25] The Medicare Payment Advisory Commission's (MedPAC) 2017 Report to Congress effectively reinforces this point, where it states that "[t]he Commission includes hospital-based HHAs in the analysis of inpatient hospital margins because these agencies operate in the financial context of hospital operations. Margins for hospital-based agencies in 2015 were –14.8 percent. The lower margins of hospital-based agencies are chiefly due to their higher costs, some of which may be due to overhead costs allocated to the HHA from its parent hospital. Hospital-based HHAs help their parent institutions financially if they can shorten inpatient stays, lowering expenses in the most costly setting." MEDICARE PAYMENT ADVISORY COMMISSION, REPORT TO THE CONGRESS: MEDICARE PAYMENT POLICY (March 2017), at pg. 247.

experiences in the markets where we operate. As such, the use of cost report data would cause the HHGM model to *over*pay for nursing services and *under*pay for therapy services.

Due to a lack of information in the proposal, we have been unable to determine the distribution of overhead expenses within the model, along with the impact of cost and payment redistributions on HHAs with different overhead structures and prior therapy use levels. We request CMS provide additional information of the implications of the model.

ii. Non-Routine Supplies ("NRS") Should not be Included in the Base Rate

Non-Routine Supplies ("NRS") should not be incorporated into the base rate to then be wage-index adjusted. Supplies cost approximately the same price across the country, regardless of whether the geography is rural or urban, whether the wage index is 0.75 or 1.85. By including NRS in the base rate, CMS will be penalizing rural providers and unnecessarily overpay for NRS in high wage-index areas. The resulting redistribution of payments among providers will be materially significant and, for many HHAs, unsustainable based upon their patient case-mix.

b. National, Standardized 30-day Payment Amount

The HH PPS statute requires CMS to use a single unit of payment, not a single episode followed by an additional payment for the additional days that will occur in the majority of episodes that will exceed 30 days. The standard payment amount is to be adjusted for case-mix and wage level adjustments. Since the average length of stay for a home health patient is 47 days, by CMS's own calculation, CMS's proposal to divide "a single 60-day episode into two 30-day periods" exceeds the Secretary's authority as the proposal would require CMS to use multiple units to capture the average home health stay.

A 60-day timeframe continues to capture the intent and reading of the law that the standardized payment will relate to all "number, type, and duration of visits" and "eliminates the effects of variations in relative case-mix and area wage adjustments".[26] Approximately 46% of all episodes are exactly 60 days in length while only 23.4% are 30 days or less. More than half of all episodes are 58 days or greater.[27] The statute requires that the Secretary "consider an appropriate unit of service" which would pay for all services furnished and the proposed rule's proposal to use multiple units explicitly does not capture "*all* services."

The Medicare Act established a precise method to reimburse providers for home healthcare services. It required the Secretary to establish a single payment model built around a single unit of care and a single standardized payment amount for that unit. No further regulatory modifications to that initial model were contemplated by the Act and indeed, in the ACA, Congress made clear that any modifications to the basic model would require congressional

[26] *See* Medicare and Medicaid Programs; CY 2018 Home Health Prospective Payment System Rate Update and Proposed CY 2019 Case-Mix Adjustment Methodology Refinements; Home Health Value-Based Purchasing Model; and Home Health Quality Reporting Requirements**,** 82 Fed. Reg. at 35,289, 35,304.
[27] *See id.* at 35,503 (Table 25).

action. Most notably, the ACA codified into the statute the unit of payment that the Secretary must use for 2014 and subsequent years. Under Section 1895(b)(3)(A)(iii), the authorized adjustments are to be made only to the standard payment amount based on the continued use of an episode unit of payment as it existed at the time of the ACA enactment. That provision provides in part:

> Adjustment for 2014 and subsequent years.—
>
> (I) In general.—Subject to subclause (II), for 2014 and subsequent years, the amount (or amounts) that would otherwise be applicable under clause (i)(III) shall be adjusted by a percentage determined appropriate by the Secretary to reflect such factors as changes in the number of visits **in an episode**, the mix of services **in an episode**, the level of intensity of services **in an episode**, the average cost of providing care **per episode**, and other factors that the Secretary considers to be relevant…
>
> Section 1895(b)(3)(A)(iii)(I) (emphasis added).

By proposing to change the unit of payment from a 60-day episode to a 30-day payment period, the Secretary ignores the statutory directive under Section 1895 that the standard payment amount be based upon the continued use of the episode of payment subject to the 4-year phase-in of the standard payment rate reduction. Accordingly, the Secretary would directly violate the statutory mandate to alter the unit of payment that is in effect.

Thus, an attempt to alter by regulation the basic unit or episode of care from 60 to 30 days, or to modify the standardized payment for that unit, is not authorized by the Social Security Act. Moreover, any modifications, even if authorized in theory, are not permitted if they are not budget neutral. As a result, the proposed rule that would change the episode of care from 60 to 30 days and the corresponding standard of payment is not authorized.

c. Split Percentage Payment Approach for 30-day Period of Care

While a shift to reimbursing home health agencies on a 30-day cycle has many benefits to CMS and providers, to do so without accompanying regulatory relief related to the documentation HHAs are required to submit prior to payment would make such a shift impossible. We believe that a shift to reimbursing home health agencies every 30 days, if constructed properly, similar to how hospice agencies are reimbursed, would be a more appropriate manner in which to reimburse home health agencies over the method proposed in HHGM. The reimbursement should continue to be based on 60-day episodes. We believe it is important that CMS be cognizant of the fact that home health providers are required to complete significantly more paperwork than hospice providers. Home health agencies are highly dependent upon physicians and facilities providing the necessary paperwork for HHAs to submit to the Medicare Administrative Contractors ("MACs"). Thus any proposal to use split percentage payments based on 30-day periods of care should not slow down or impede providers' ability to bill for services on a monthly basis. CMS should ensure providers have adequate time before payments are recouped or canceled by Medicare. Further, streamlining the eligibility documentation

requirements and unnecessarily burdensome face-to-face documentation requirements, discussed *infra*, are necessary in order for this proposal to be possible.

d. Episode Timing Categories

As we have previously outlined, we have significant concerns and oppose CMS's proposal to replace a 60-day episode with 30-day periods. We are open to proposals that would utilize "early" and "late" categories under a 60-day episode where the initial episode is "early" and all subsequent episodes are "late." It is imperative that evaluations of proposals such as these are carefully evaluated and modeled by CMS and discussed with providers through transparent dialogue.

e. Admission Source Category

We support CMS's efforts to move from volume-driven payments to payments based on patient characteristics, but the proposed rule lacks significant information. The proposed rule fails to acknowledge that shifts to therapy services since the 1990s have been to the benefit of patients and to Medicare and the Medicare trust fund as the home setting is preferred by the patient. The proposed rule also likewise does not consider the fiscal impacts of providing care in the home, as home care is more financially beneficial to the taxpayer and trust fund because it is a cheaper alternative to receiving care in skilled nursing facilities. Data in the Abt Technical Report and the proposed rule show that there was a 52 percent increase in the Musculoskeletal Rehab clinical group from 2013 to 2016 (10.2% to 16.6% of total episodes) and the resource use increased 14 percent ($1,505 to $1,713 for 30-day periods). While some of the change may be coding-related (i.e., changes to ICD-10), this increase suggests that a patient referred to home health is a more acute, sicker patient in need of greater levels of service in the home health setting.

f. Proposed Clinical Groupings

CMS's proposal represents a fundamental change to payment system that needs time in order to be fully evaluated. The clinical groupings, and its "questionable episodes" ("QEs") framework, will discourage some HHAs from admitting patients whose clinical/medical conditions may not be readily "codeable" into the new system. This has the feel of a "rule of thumb" whereby CMS is, in effect, making a medical necessity/coverage determination based off codes. In other contexts, however (e.g., IRF PPS), CMS has stated that patients' diagnoses alone are not indicators of whether they need to receive IRF care and services. The same principle applies here, yet CMS appears to be establishing its version of the CMS-13 portion of the 60% Rule framework, i.e., specifying particular conditions that can quote-unquote "count" toward HHGM (minus the establishment of a minimum compliance threshold percentage derived from among the conditions that must be treated to satisfy the policy).

CMS should take into consideration the limited information often available to home health agencies from referral sources about the specific elements of the patient's condition. If a patient meets the statutory requirements for the Medicare home health benefit (including medical

necessity and homebound requirements), HHAs should not go unreimbursed for services if the patient's diagnosis does not fit squarely into an identified clinical group.

There are legitimate use cases for Medicare home health services relating to clinical conditions not included in the HHGM clinical groupings construct as proposed. For example, homebound Medicare patients needing complex rehabilitation, cardiac rehabilitation, and oncology patient management should be able to access home health services. Though such cases today may not be common, the home health benefit should be able to flex with patient and health system needs to enable more beneficiaries to receive care at home instead of in institutional settings. If CMS labels anything outside the bounds of the specified, strict clinical groupings as "questionable encounters," fewer patients will be able to shift from institutional to home-based settings, resulting in higher cost for the Medicare program. Over time, additional condition-specific clinical grouping(s) may be necessary to adapt to such innovative uses of home health care. In the meantime, CMS can encourage appropriate clinical applications of home health care by creating (and paying for) additional clinical groups that would capture miscellaneous interventions that are not otherwise specified.

Further, CMS should take into consideration the sometimes limited information available to home health agencies from referral sources about the specific elements of the patient's condition. Even for patients who meet the eligibility requirements of the home health benefit, home health agencies sometimes may not be given the full information necessary to code the patient in a primary diagnosis that is not a QE.

Moreover, we are concerned that the Medication Management Teaching and Assessment ("MMTA") incorporates too large of a share of overall patients to accurately reimburse for all that fall into that category.

CMS's proposal represents a fundamental change to payment system that needs time in order to be fully evaluated.

g. Functional Levels and Corresponding OASIS Items

Additional time is needed to evaluate whether the point values and proposed OASIS items accurately reflect patients' characteristics and providers' operations.

h. Comorbidity Adjustment

The proposal fails to acknowledge the benefit of having a viable home based services for chronic co-morbid patients with longer term needs. Longer term patients such as these may experience fewer visits over the course of each episode than shorter term patients but require more community care coordination, on-call resources and risk-stratification technologies that have not been considered and properly allocated under this proposal.

Additionally, HHGM reduces payments for polychronic, comorbid patients who require multiple episodes to adequately treat all of their home health related needs. This model does not appear to fully incorporate all necessary elements to accurately predict resource use among

patients who likely require greater resources in their treatment plans, including dual-eligible status, functional needs, etc.

i. Changes in the Low-Utilization Payment ("LUPA") Threshold

We agree in concept with CMS's proposed changes to the Low-Utilization Payment ("LUPA") Threshold, but we believe that additional time is necessary to fully evaluate the model's impact, as not all LUPAs are the same and vary according to the HHRG assigned the patient.

j. Payments for High-Cost Outliers

We are concerned that CMS's proposal to maintain the current methodology for payment of high-cost outliers upon implementation of the HHGM in CY 2019 based on calculating payment for high-cost outliers on 30-day periods of care will have unintended consequences. We are concerned that there are a significant number of HHAs who have low outliers today that are under 10 percent, but will hit the outlier cap under a 30-day period of care measurement. CMS should revisit the cap on the amount of time per day that is permitted to be counted toward the estimation of an episode's costs for outlier calculation purposes.

IV. Proposed Provisions of the Home Health Value-Based Purchasing ("HHVBP") Model

The Partnership supports the goals of the HHVBP, appreciates CMS's leadership on this important program to date, and offers the following constructive critiques in response to requests for comments and input from CMS.

We have concerns about the proposed adjustment to the minimum number of completed Home Health Consumer Assessment of Healthcare Providers and System (HHCAPHS) surveys. CMS proposes to use as a minimum to generate a quality measure score *40 or more* completed HHCAHPS surveys. We are primarily concerned that this threshold will greatly reduce the number of agencies with data, considering that over 6,000 agencies did not have enough surveys to generate a star rating for patient satisfaction. Since the ostensible goal is greater consumer transparency, we question why the agency would close off data on approximately 50 percent of all agencies.

With respect to CMS's proposal to remove one OASIS-based measure beginning in performance year 3 and subsequent performance years, the Partnership generally believes that whenever possible the Agency should seek to utilize measures that are objective and independently verifiable such as claims-based measures and patient reported measures in an effort to assess HHA performance. When it is not possible to utilize this type of measure we encourage CMS to more heavily weight objective measures to limit the impact and risk of OASIS-based measures being manipulated. We recommend the removal of the Drug Education on all Medications measure which is topped out at this point.

With respect to methodologies and analyses used to test quality measures, we support the use of composite measures like the ADL/IADL change. But we believe improvement should not be the

sole focus of any measure as many patients benefit greatly from skilled home health services but are not likely to improve on these measures. Measures like this may lead to a new patient selection bias that could cause patient migration to higher cost care settings. We respectfully question why bathing is not included in this measure. Similarly, we support the Composite Functional Decline Measure or any similar measure that values stabilization in the home health population, but encourage CMS to use the same metrics as the Composite ADL/IADL measure. We also support the Behavioral Health Measures but do not believe that the measures should be based on the ability and willingness of the caregiver. Scoring HHAs based on caregiver willingness may again lead to selection bias.[28]

V. Proposed Updates to the Home Health Care Quality Reporting Program (QRP)

The Partnership believes the QRP is working well and can be improved consistent with our recommendations in response to CMS' specific questions.

The Partnership supports accounting for social risk factors in measures in the QRP. We believe CMS should use Social Risk Factors, Social Determinants of Health or Distressed Communities index scores in the QRP. We suggest a technical expert panel be convened to further refine the use of such data.

We are generally supportive of the concept of cross-setting measures to achieve a level of standardization across HHAs, LTCHs, IRF, and SNFs. We strongly caution, however, that measure validity across all settings may be compromised by the fact that the *home is different* than institutional settings. For instance, mobility in a hospital or a SNF is distinct from a patient's home due to environmental variation. It is far easier to show improvement in a setting designed for safe mobility than it is do so in a beneficiary's own home. If such cross-setting measures are adopted, effective risk adjustment will be an essential policy feature for home health agencies to distinguish care provided in non-standardized patient care settings like the beneficiary's own home.

We agreed with CMS's proposal last year to allow for any quality measure adopted in the QRP to remain in effect until it is removed, suspended or replaced – and the proposal this year to apply the same policy to the standardized patient assessment data it adopts for the QRP.

We also agree with the proposal to make substantive changes to the QRP standardized patient assessment data through proposed and final rulemaking. However, we urge CMS to go further and respectfully request that all substantive changes include a technical expert panel of home health clinical leaders, a Special Open Door Forum to explain the changes, and a meaningful comment period. We also request as much data as possible related to the risk adjustment methodology and factors for each item. CMS' proposal to require reporting of standardized patient assessment data by home health agencies with the 2020 QRP is agreeable but we

[28] We are also concerned with any measures like this with a C statistic under or bordering .7, as it may not accurately support the predictive modeling involved. We recommend using .8 as a cut off value.

continue to raise questions about the design and use of such data in the home setting, which is fundamentally different and variable compared to institutional settings.[29]

Regarding QRP quality measures proposed starting with the CY 2020 QRP, we agree with and support the proposal for home health agencies to begin reporting the proposed changes in Skin Integrity Post-Acute Care/Pressure Ulcer/Injury, which will replace the current pressure ulcer measure, with data collections beginning with respect to admissions and discharges occurring on or after January 1, 2019.[30]

For QRP measures and measure concepts under consideration for future use, we agree with the direction of CMS's proposal, but return to our prevailing theme that work must be done to ensure that any measure account for beneficiaries who do not have the goal of improvement, and that any measures should be tested to ensure their validity and reliability within the home setting, which as we accentuate above, is different than other standardized institutional care settings and presents unique challenges to caregivers and beneficiaries alike.

We agree with the Cognitive Function and Mental Status Data reporting requirements (BIMS, Confusion Assessment Method, Behavioral Signs and Symptoms, and Patient Health Questionnarie-2), but, especially with respect to the questionnaire, we believe more training is needed as is an alternative method to assess patients who are not physically or cognitively able to respond.

We also agree with the proposed reporting requirements for identified Special Services, including Cancer Treatments Chemotherapy and Radiation, Respiratory Treatment, Suctioning, Tracheostomy Care, Invasive and Non-Invasive Mechanical Ventilator Care, Transfusions, IV Access, Parenteral/IV Feeding, Mechanically Altered Diet, and Therapeutic Diet. However, we request that, given the variety of new OASIS elements imposed on home health agencies, that OASIS Answers or another vendor again be contracted for OASIS questions and answers. We hold that same view for the additional condition and comorbidity data requested, including Skin Integrity and Hearing and Vision data elements. With new data elements required of home health agencies, the Partnership believes a vendor service like OASIS Answers is critical to effective reporting and function of these aspects of the QRP.

a. Proposals Relating to the Form, Manner and Timing of Data Submission Under the QRP

The Partnership generally agrees with CMS's proposals relating to the form, manner and timing of data submission under the QRP, including the proposed start date for reporting standardized patient assessment data for new HHAs, the proposed mechanisms for reporting standardized patient assessment data beginning with the CY 2019 QRP, and the proposed schedule for reporting the proposed quality measures beginning with the CY 2020 QRP.

[29] We share the same views with respect to functional status data. We suggest using objective test and measures with normative values to assure validity in the home setting.
[30] We believe this change to the skin integrity measure should focus on reduction in complexity of pressure ulcer questions in OASIS.

And we agree conceptually with the proposed schedule for reporting proposed quality measures beginning with the CY 2020 QRP, but we note that the sharp discrepancy in payment makes data collection practices challenging for home health agencies.

b. Other Proposals to the CY 2019 QRP and Subsequent Years

We agree with proposal to apply the QRP data completion thresholds to the submission of standardized patient assessment date beginning in the 2019 QRP, the proposal for the QRP submission exception and extension process, and the reconsideration and appeals process.

VI. Request for Information on CMS Flexibilities and Efficiencies

We welcome the opportunity to engage with CMS on ways to craft rules that are "less complex" and "reduce burdens", as stated in the Request for Information ("RFI") contained in the proposed rule. We believe it is critical to "simplify rules and policies for beneficiaries, clinicians, providers, and suppliers" in ways that "increases quality of care and decreases costs".

a. Face-to Face Requirements and Eligibility Documentation

In order for Medicare beneficiaries to receive the home health benefit, documentation is required to verify patients' eligibility. This documentation includes proof of their homebound status and medical need for skilled homecare, their homecare plan, evidence of a face-to-face encounter with a physician or approved practitioner and that physician or approved practitioner's validation of the patient's homebound status.

A lack of uniformity within the home health eligibility documentation has created a subjective and overly complicated system, which ultimately hurts patient access and increases improper payments to providers. We believe that the 42% improper payment rate,[31] which has been shown through CERT testing to be primarily attributable to insufficient documentation, could be significantly reduced if we could work together. A significant portion of the improper rate is largely due to the face-to-face requirement, which lacks consistency and does not account for a patient's medical record. Furthermore, the Medicare Administrative Contractors ("MACs") have applied subjective and inconsistent review standards, both among the MACs and within the same MAC, of records we submit for approval. In reviewing a patient's medical record for claims' review and processing, it is vital that CMS and the MACs, RACs, ZPICs, all consider the totality of the record, including the home health agency record.

CMS only reviews the physician's record for the required documentation—it does not utilize the patient's entire medical record, including the home health agency's record, to demonstrate eligibility. In an effort to simplify the documentation of these requirements we have previously provided draft documentation that can be standardized, streamlined and minimally subjective and

[31] PAYMENTACCURACY.GOV, MEDICARE-FEE-FOR-SERVICE, https://paymentaccuracy.gov/program/medicare-fee-for-service (reflecting data current to November 2016).

thus, have a significant impact on reducing the improper payment rate. The proposals for consideration include physician attestations, discharge plans, certifications, and forms[32].

We request that CMS work with our members and other stakeholders to work collaboratively on these proposals or other initiatives that seek the same goal of reducing the improper payment rate. We also encourage CMS to convene a group of physicians who regularly refer to home health so they can assist in the process as we all evaluate these new documents to streamline the eligibility process and reduce documentation problems.

While the data is quite clear that physician documentation is the primary reason for home health denials, we also agree that the home health industry must also take responsibility for insufficient documentation that is within its control. This starts with responding quickly and accurately to Additional Development Requests (ADRs) from the Medicare Administrative Contractors (MACs). One of the MACs, CGS, reports that between April and June 2016, 14% of home health medical review denials occurred because "requested documentation was not received/received untimely."[33] Another MAC, PGBA, reports a 51.2% auto denial rate in October–December 2015, due to "requested records not submitted." We believe that the failure to submit records is a major point of concern and points to an area where CMS should focus its attention. We recommend CMS provide one warning of late submission to the provider with an abbreviated time frame for submission thereafter. If such submission does not occur then we suggest that the provider be placed on a probe audit and go under extensive pre-payment review until it can be determined whether the provider is serving patients that fall within the guidelines of the benefit.

b. Provide a Limited Waiver of the "Homebound" Status Requirement

The Partnership urges CMS to consider offering a waiver of the homebound requirement (as defined in sections 1835(a) and 1814(a) of the Social Security Act) to support and enable more appropriate use of home health care. In particular, the Partnership recommends that CMS test a waiver of the homebound requirement for the home health benefit where the home health agency has a 3-star or higher rating on Home Health Compare. The Partnership suggests initially applying the waiver in the following circumstances:

1. A beneficiary has met all eligibility requirements at the beginning of the first 60-day home health episode, but during the course of the episode, experiences improvement and is no longer homebound. In this circumstance, the waiver would enable the beneficiary to continue receiving care during the remainder of the episode, rather than being discharged from care. This waiver would avoid interruptions in care by enabling the home health agency to continue to provide services to non-homebound beneficiaries during the remainder of their episode.

2. A beneficiary has met all eligibility requirements throughout the first 60-day home health episode of care, but following the episode of care, the beneficiary's condition

[32] Enclosed as Exhibit E.
[33] CGS, *Home Health Top Medical Review Denial Reason Codes*, http://www.cgsmedicare.com/hhh/medreview/hh_denial_reasons.html.

improves and he or she is no longer homebound. In this circumstance, the waiver would enable the beneficiary to continue to receive support from the home health agency as needed. Use of the waiver will ensure continuity of care and support the avoidance of an unnecessary readmission after the first episode.

As with the waiver of the three-day requirement for skilled nursing facility stays offered in other episode payment models, all other Medicare coverage and payment rules would apply.

c. Expand the Scope of Allowable Costs for Home Health Services

With increasing expectations for quality care delivery, the use of technology to deliver home healthcare is increasingly being recognized as an invaluable tool for an industry challenged by diminished reimbursement formulas. We request that CMS update the allowable costs in home health cost reports to include expenses related to: technology, telehealth, care management resources, and clinical support services provided outside the home and other costs incurred related to care coordination and improvement that may be outside the scope of traditional home health services. CMS should recognize the significant benefits of telehealth by creating a reimbursement mechanism for certain types of remote patient management and related technologies.

Currently, CMS does not recognize telehomecare as a distinctly covered benefit under Medicaid, nor does it allow for telehomecare technology costs to be reimbursed by Medicare. Unfortunately, CMS maintains that telehealth visits do not meet the Social Security Act definition of home health services "provided on a visiting basis in a place of residence" under the Medicare program, as CMS regulations (42 CFR 484.48(c)) defines a home health "visit" as "an episode of personal contact with the beneficiary by staff of the HHA [home health agency]."

Telehealth is a proven and important component of health care today and vital to reducing acute care episodes and the need for hospitalizations for a growing chronic care population. Given the financial constraints on agencies under the prospective payment system (PPS), providers of care should be granted maximum flexibility to utilize cost- effective means for providing care, including non-traditional services such as telehomecare that have been proven to result in high-quality outcomes and patient satisfaction.

d. Combatting Fraud and Abuse

We have consistently offered to work with CMS to combat true fraud and abuse and we look forward to moving forward on this effort as soon as possible. CMS has a number of effective tools at its disposal, including the use of moratoria, the Fraud Prevention System, and the ability to decertify providers to discourage bad actors.

Additionally, we believe the following requirements could serve as to deter home health fraud:

- Require minimum capitalization levels equal to two months of annual revenue or a minimum of $250,000.

- Require a compliance program with a compliance officer, annual compliance training, and attestations from all employees.
- Within two years of the effective date of these changes, require use of an Electronic Medical Record (EMR) system.
- Require new providers to earn the right to receive RAPs; eliminate RAPs for providers with less than 3 years of certification.
- Require criminal background checks for all home health employees with direct patient care contact, access to medical records, and for all owners / operators
- Verify competency of owners and managing employees to validate their competency according to standards set by the Secretary, including evaluation of an owner or manager's knowledge of Medicare participation requirements, benefit coverage standards, HIPAA protections, and reimbursement policies.

e. Permit Providers' Increased Operational Flexibility

In response to increased labor demands amid a supply shortfall, we request that CMS amend the current requirement of having one qualifying discipline to be fully employed without the use of any contract staff. Amending this requirement will better allow for operational flexibility and ensure the patients' needs are adequately cared for.

f. Creation of a Payment Mechanism for Patients being Transitioned to Home Prior to the Start of Care Date

Before a patient is transitioned back to their home for treatment, a home health agency dedicates a significant amount of time and resources preparing for the patient's care. Medicare does not presently provide reimbursement for this time, despite the vital necessity it plays in the patient's treatment. We request that CMS create a payment mechanism for the patient's transition to home for patients transitioning from a facility prior to the start of care date. This time occurs in the facility or in the home in preparation for the patient being transitioned back into their home for home health care.

VII. Home Health Stakeholders are Eager to be Part of the Solution

We are proud to be part of a sector that has long been recognized for its skilled caregivers and dedicated administrators. Every day, home health professionals go into communities – including those with high poverty, with a history of violence, or which are rural and difficult to access – in order to meet the specialized needs of seniors and disabled Americans who would otherwise be hospitalized or institutionalized. We were proud of our daily strives to improve outcomes and reduce costs. And we stand ready to work with you to ensure the Medicare program delivers its beneficiaries with quality care.

Sincerely,

Keith Myers
Chairman
Partnership for Quality Home Healthcare

Enclosures

cc:

Demetrios Kouzoukas
Principal Deputy Administrator & Director of the Center for Medicare

Laurence Wilson
Director, Chronic Care Policy Group

Hillary Loeffler
Director, Division of Home Health & Hospice

GT GreenbergTraurig

Memorandum **Attorney-Client Communication**
Attorney Work Product

TO: Keith G. Myers, Chairman, Partnership for Quality Home Healthcare

FROM: Greenberg Traurig

DATE: August 30, 2018

RE: Legal Review of Home Health Proposed Rule Regarding Behavioral Adjustment Assumptions

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This memorandum analyzes CMS's Home Health Proposed Rule ("the Proposed Rule"), which will be subject to notice-and-comment through Friday, August 31, 2018, and more specifically the proposed behavioral assumptions set forth therein. The Proposed Rule relies upon three behavioral assumptions to impose a non-discretionary 6.42% payment adjustment upon all home health agencies ("HHAs" or "providers"). *See* Medicare and Medicaid Programs; CY 2019 Home Health Prospective Payment System Rate Update and CY 2020 Case-Mix Adjustment Methodology Refinements; Home Health Value-Based Purchasing Model; Home Health Quality Reporting Requirements; Home Infusion Therapy Requirements; and Training Requirements for Surveyors of National Accrediting Organizations, 83 Fed. Reg. 32,340 (July 12, 2018).

Executive Summary

The behavioral assumptions set forth in the Proposed Rule are flawed for at least two reasons. First, the assumptions lack any foundation in actual evidence-based data and therefore penalize providers in an arbitrary and capricious fashion in violation of the APA. Second, the manner in which the assumptions are applied to providers departs from past practice and sound policy. Unless and until the behavioral assumptions embrace evidence-based data to support them, they cannot withstand scrutiny and should not be finalized.

Background

The Bipartisan Budget Act of 2018 ("BBA of 2018") amended the Social Security Act (the "Act") by adding Section 1895(b)(3)(A)(iv). That Section requires CMS to make assumptions about provider behavior. The assumptions, which will be implemented in CY 2020, are as follows:

1. The first is the "Clinical Group Coding" assumption, which "…assume[s] that HHAs will change their documentation and coding practices and [will] put the highest paying

diagnosis code as the principal diagnosis code in order to have a 30-day period be placed into a higher-paying clinical group." 83 Fed. Reg. at 32,389.

2. The second is the "Comorbidity Coding" assumption, which assumes that HHAs will include additional ICD–10–CM diagnosis codes resulting in more 30-day periods of care receiving a comorbidity adjustment. *Id*.

3. Finally, the CMS assumes, under the "LUPA [Low Utilization Payment Adjustment] Threshold" assumption that "for one-third of LUPAs that are 1 to 2 visits away from the LUPA threshold HHAs will provide 1 to 2 extra visits to receive a full 30-day payment." *Id*.[1]

The culmination of these assumptions is a non-discretionary 6.42% decrease in payments to HHAs irrespective of their past or future behavior. 83 Fed. Reg. at 32,390.

The BBA of 2018 also added Section 1895(b)(3)(D)(i) to the Act, which requires the Secretary to determine annually the impact of differences between assumed behavior changes, which are described in Section 1895(b)(3)(A)(iv), and actual behavior changes on estimated aggregate expenditures with respect to years beginning with 2020 and ending with 2026. Of course, as the Proposed Rule, itself, makes clear, any data contradicting the assumptions will not be available for review until 2022—two years after they take effect and are applied to HHAs. *See* 83 Fed. Reg. at 32,390.

Finally, the BBA of 2018 also added Sections 1895(b)(3)(D)(ii)-(iii) to the Act. Those Sections require the Secretary to make, as needed and via notice-and-comment rulemaking, "one or more permanent increases or decreases" and "one or more temporary increases or decreases" to offset increases or decreases in estimated aggregate expenditures for a given year. The Proposed Rule offers little information concerning how or when such adjustments will be made.

Analysis

CMS's assumptions, which lack any foundation in evidence-based data, will take effect in 2020. Their consequence will be to penalize providers for anticipated behaviors that may or may never transpire. And, though Section 1895(b)(3)(D)(i) of the Act contemplates an annual determination of the "differences between assumed behavior changes….and actual behavior changes", the ameliorative effect of this analysis remains unclear from the Proposed Rule. *See* 1895(b)(3)(D)(iii) of the Act (noting the possibility for "temporary increases or decreases in estimated aggregate expenditures" but failing to set forth how or when those adjustments will be implemented). What is more, the "analysis" cannot begin until the data tracking these "actual behavior changes" is available, i.e. until 2022. Thus, for at least the first two years

[1] This assumption is the only one for which CMS has provided even a passing reference to any data or evidence. *See id*. n. 32.

following its 2020 implementation, the Proposed Rule will violate the APA and depart from CMS's own past practice.

a. In Relying on Mere Guesses Rather than Evidence-Based Data, CMS's Proposed Rule Violates the Administrative Procedure Act

With regard to the Clinical Coding and Comorbidity behavioral assumptions, CMS has not based its assumptions on data. Such a failure renders the assumptions – and any proposed adjustment stemming from them – invalid.[2]

Any proposed rulemaking, including notice-and-comment rulemaking, must comply with the Administrative Procedure Act ("APA"), 5 U.S.C. § 553. The APA's standard for evaluating agency rulemaking is well-established. Specifically, a rule must be set aside where it is "arbitrary, capricious or [constitutes] an abuse of [agency] discretion." *Motor Vehicle Mfg. Ass'n v. State Farm Mutual Auto. Ins. Co.*, 463 U.S. 29 (1983). Such is the case where an agency fails to explain the rationales informing a given rule. *See*, *e.g.*, *Banner Health v. Price*, 867 F.3d 1323, 1349 (D.C. Cir. 2017); *Sierra Club v. EPA*, 863 F.3d 834 (D.C. Cir. 2017).

It is axiomatic that in promulgating rules, an agency "must examine the relevant data and articulate a satisfactory explanation for its action including a rational connection between the facts found and the choice made." *Motor Vehicle Mft. Ass'n*. 463 U.S. at 43 (holding that rescission of a rule was invalid for failing to consider alternatives, quickly dismissing noted benefits and failing to provide a sufficient explanation). "[A]mong the information that must be revealed for public evaluation are the 'technical studies and data' upon which the agency relies." *Chamber of Commerce of the United States v. SEC,* 443 F.3d 890, 899 (D.C. Cir. 2006). Data that is "essential" and "central" to the agency's decision making process is critical factual information that must be disclosed. *Chamber,* 443 F.3d at 902-03. Thus, although courts must give "due deference to the agency's ability to rely on its own developed expertise," courts also have a duty to give "close scrutiny" to the evidence relied upon by agencies and must "hold[] agencies to certain minimal standards of rationality." *See Ethyl Corp. v. EPA*, 541 F.2d 1, 36 (D.C. Cir. 1976). In issuing the Proposed Rule, and as discussed below, CMS has failed to meet these minimal standards.

i. The Clinical Group Coding Assumption Lacks Evidentiary Support

First, CMS makes assumptions regarding provider reaction to the clinical grouping. Specifically, CMS improperly "…assume[s] that HHAs will change their documentation and coding practices and [will] put the highest paying diagnosis code as the principal diagnosis code in order to have a 30-day period be placed into a higher-paying clinical group." 83 Fed. Reg. at 32,389. An assumption of such magnitude must be supported by facts, not conjecture. CMS attempts to mollify its broad condemnation of providers when it states that it does not "support or condone coding practices or the provision of services solely to maximize payment"

[2] This memo will not address the LUPA assumption as that assumption was supported by at least some CMS data.

and points out that it often takes into account "expected behavioral effects on policy changes" when implementing new rules. *Id*. Yet, CMS relies on assumptions that providers will attempt to improperly maximize reimbursements. In so doing, CMS fails to support its assumption that HHAs will document at higher coding levels or provide additional services based on historical evidence of such an issue. CMS also fails to assure that it has taken into account "expected behavior effects" in the past. In light of these failings, the Proposed Rule's Clinical Group Coding assumption is arbitrary and capricious and thus in violation of the APA.

ii. The Comorbidity Coding Assumption Lacks Evidentiary Support

Next, CMS makes assumptions regarding provider behavior with regard to comorbidity coding. Here, CMS assumes wrongly that HHAs will include additional ICD–10–CM diagnosis codes resulting in more 30-day periods of care receiving a comorbidity adjustment. 83 Fed. Reg. at 32,389. CMS again, fails to provide any "technical studies and data" indicating that HHAs have a proclivity to engage in this type of behavior, or that providers have engaged in such behavior in the past to such an extent that it warrants an adjustment. Thus, the Comorbidity Coding assumption also violates the principles of the APA.

b. The Assumptions Are a Departure from Past Practice and Sound Policy

Sound policy (and, as discussed above, administrative law jurisprudence) dictate that agencies must utilize facts (and not mere conjecture) in issuing and administering rules within the purview of their own expertise. In the past, and in the context of other rules, CMS has expressly embraced this evidence based-approach. Its actions in issuing the Proposed Rule thus represent a deviation from past practice and from sound decision-making.

By way of example, in issuing its 2019 Skilled Nursing Facility Final Rule (the "SNF Rule"), CMS refused to make assumptions about provider behavior. *See* 83 Fed. Reg. 39,162 (Aug. 8, 2018). Instead, when analyzing assumed behavior of SNF providers, CMS stated that it would "not make any attempt to anticipate or predict provider reactions to the implementation of the proposed [payment model]." *Id*. at 39,255. In fact, CMS declined to make assumptions about such behavior because it "lack[ed] an appropriate basis to forecast behavioral responses" and would "not adjust [the] analyses of resident and provider impacts … for projected changes in provider behavior." *Id*. CMS instead noted that it "intends to monitor behavior which may occur in response to the implementation of [the payment model] … and may consider proposing policies to address such behaviors to the extent determined appropriate." *Id*.

The Proposed Rule, in contrast, ignores the policy rationales informing its past practice. It fails to support or even explain the assumptions it relies upon to support its 6.4% payment adjustment. Such an "[u]nexplained inconsistency" in agency policy is "a reason for holding an interpretation to be an arbitrary and capricious change from agency practice." *Nat'l Cable & Telecomms. Ass'n v. Brand X Internet Servs.*, 545 U.S. 967, 981 (2005).

Conclusion

Both administrative law jurisprudence and sound policy value agency action rooted in evidence-based data. Indeed, they require it. The assumptions advanced by the Proposed Rule, however, lack support in any such data. Thus, unless and until CMS collects data to support the Proposed Rule's assumptions, they should not, and cannot, be applied to providers to penalize them for behaviors that may never even come to pass. And, because such data will not be collected and analyzed at least until 2022, CMS's Proposed Rule cannot withstand scrutiny. It should not be finalized.

Evaluation of the Patient-Driven Groupings Model on the Home Health Marketplace

Proposed HH PPS Revisions for CY2020

Submitted to:
Partnership for Quality Home Healthcare (PQHH)

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August 30, 2018 – Final Report

Introduction

The Patient-Driven Groupings Model (PDGM) is a proposed overhaul to the Home Health Prospective Payment System (HH PPS) case mix group system included in the CY2019 HH PPS proposed rule. PDGM is an extensive redesign of the HH PPS with unknown outcomes for patients and providers. PDGM is the latest version of a payment system prototype previously called the Home Health Groupings Model (HHGM), proposed but not finalized in the CY2018 HH PPS administrative rulemaking cycle. Aspects of PDGM are required to be enacted on January 1, 2020 by legislative mandate under the Bipartisan Budget Act of 2018 (BBA of 2018), namely that 1) HH PPS cases are shortened from 60 days to 30 days, 2) cases will no longer be paid based on therapy utilization thresholds as in the current HHRG system and 3) changes will implemented in a budget neutral manner.

Dobson DaVanzo & Associates was commissioned by the Partnership for Quality Home Healthcare (PQHH) to conduct analyses of PDGM. Dobson DaVanzo & Associates also previously supported PQHH in the review of HHGM as included in the CY2018 HH PPS proposed rule and the preceding technical report. We draw on this prior report, other responses to the CY2018 comment period, the subsequent mandated Technical Expert Panel report, as well as the CY2019 impact file, PDGM grouper, HH-OASIS LDS claims files (CMS DUA 52150) and the proposed rule itself. We commend CMS for making extensive case data available and showing greater transparency in this rulemaking cycle to enable robust and productive commentary by the public. CMS was responsive to many concerns raised by multiple industry stakeholders that the HHGM NPRM did not provide the information needed to fully assess the proposed system change. However, we did not have the requisite data to fully replicate CMS behavioral assumptions or specifications available to completely reproduce PDGM case-mix weights.

We find PDGM to be highly problematic with likely unintended consequences in terms of its implications for home health market stability and subsequently beneficiary access to home health services and the broader strategy of CMS post-acute care (PAC) reform. Many of the problems we found in HHGM remain present in PDGM. Primarily:

- Unlike HHGM as proposed in the CY2018 rule, PDGM does appear to be budget neutral in its proposed payment levels. However, several outstanding questions remain as to whether the required CY2020 version of HH PPS system changes would be implemented in a budget neutral manner due to several potential adjustments for assumed behavioral changes to coding practice and care provision.
    - Given the high likelihood that these behavioral assumptions may not reflect accurate projections, as providers' actual behavioral outcomes at this point are not knowable, CMS might consider not reducing rates to account for the behavioral changes given the extensive redistributive effects that will be associated with PDGM's implementation. As we described in our report on HHGM, multiple shocks via redistributions of

revenue and episode volume coupled with a global rate cut could be additive, further threatening patient access to services and agency operational stability.

- A rapid switch to PDGM may yield extraordinarily high levels of revenue redistribution across providers – we project 48% of home health agencies could experience at least a +/-10% change in revenue under their current case mixes.
    - We posit several approaches for transitioning to the new payment system that could reduce the shock of the change. These approaches include stop-loss and potential PDGM design changes to lessen immediate and substantial revenue redistribution.

We also include a set of technical issues raised with CMS in a variety of public venues that were not completely addressed in the CY2019 HH PPS proposed rule. We note that a variety of substantive and valid technical concerns were raised by stakeholders through formal channels such as the comment period and through the Technical Expert Panel meeting. Thoroughly addressing these questions and potential system flaws could yield improved payment accuracy and equity over the current proposal.

Budget Neutrality

The BBA of 2018 and the CY2019 proposed rule assert that proposed changes will be budget neutral to the current system in aggregate. Analyses from the HH-OASIS LDS and facility impact files consistently indicate a budget neutral system for the 5,456,216 60-day cases included in the CY2017 analytic sample, which convert to 9,285,210 30-day PDGM cases. Total system revenue for the impact analytic file is consistent at $16.135B dollars; the detected variance between the two HH PPS systems is very small, on the order of -$50,000 or -0.00031%.

As inferred from Table 3 in the NPRM, the analytic sample is about 91% of total reimbursed Medicare FFS CY2017 home health episodes.[1] Similarly, the budget neutral level in the analytic files is set at around $16.1B; however, the expected total system outlay is projected to be around $18B[2] in 2017 (it was $18.1B in 2016, the most recent available year[3]). This leaves roughly 9% of cases and about $1.9B (10.6% of revenue) unaccounted for. It is reasonable that not all currently paid cases would be included in the proposed rule analytic files given data cleaning procedures and other considerations. However, CMS

[1] Proposed Rule: Medicare and Medicaid Programs; CY 2019 Home Health Prospective Payment System Rate Update and Proposed CY 2020 Case-Mix Adjustment Methodology Refinements; Home Health Value-Based Purchasing Model; and Home Health Quality Reporting Requirements; Home Infusion Therapy Requirements; and Training Requirements for Surveyors of National Accrediting Organizations. 83 Federal Register 32340. Centers for Medicare and Medicaid Services. July 12, 2018. https://www.gpo.gov/fdsys/pkg/FR-2018-07-12/pdf/2018-14443.pdf.

[2] Medicare – CBO's April 2018 Baseline. Congressional Budget Office, April 2018, p. 2. https://www.cbo.gov/system/files?file=2018-06/51302-2018-04-medicare.pdf

[3] Report to the Congress: Medicare Payment Policy, Medicare Payment Advisory Commission, March 2018, p. 241. http://www.medpac.gov/docs/default-source/reports/mar18_medpac_ch9_sec.pdf?sfvrsn=0

might further describe the dropped cases (e.g. reason for payment in the current system if not able to be included in the file) as well as what might become of these cases under the proposed payment system. It is unclear how much of this nearly $2B in system output is at risk of removal under implementation. The NPRM implies that the budget neutral level for CY2020 may be based on the CBO baseline ($18B as an example on page 32390)[4], but it would be helpful if CMS confirmed their approach to assessing budget neutrality.

The difficulty in assessing budget neutrality in the change to PDGM is not trivial as compared to previous proposed PPS changes. This is because the change involves both a conversion in case mix groups and weights (price) and a change in the episode unit (60 days to 30 days) altering volume (quantity). Added to that, we predict there will be major redistributions of case revenue across agencies resulting from PDGM implementation which could endanger operations at some agencies, resulting in yet lower volume. This could further affect the assessment of future budget neutrality. With the new and different incentives inherent in PDGM, home health agencies may move to allocate resources to meet patient needs and the per case budgets as set in the new payment system; the extent to which this may occur is not known. As such, neither simply comparing the change in price and quantity nor modeling the current HHRG system in terms of an operational PDGM can form a comprehensive and compelling assessment of future expected neutrality.

CMS might consider the following issues when assessing whether proposed changes were implemented in a manner consistent with expectations for CY2020:

- Consider full Medicare FFS payments ($18.1B or more recent projection) as a benchmark for system financial performance under implementation.
- Consider changes to case volume due to population changes as reflected in CBO baseline projections.
- Consider changes to the average number of unique beneficiaries, average episodes per unique beneficiary as well as total duration of care that might be influenced by Alternate Payment Model (APM) initiatives which may not be reflected in CBO baseline projections.
- Consider the tradeoff between more home health care and less of the more expensive institutional care which Accountable Care Organizations and bundling programs might seek to achieve. In this sense, HHA expenditure growth should be regarded as contributing to overall Medicare expenditure reductions.

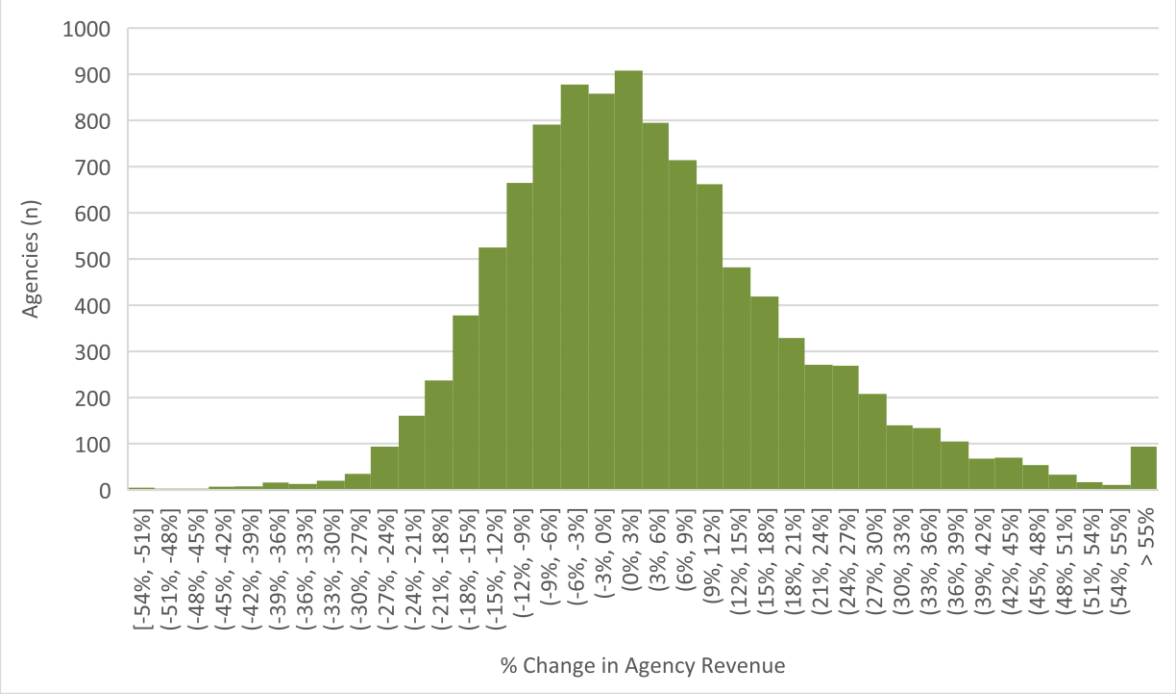
[4] Proposed Rule: Medicare and Medicaid Programs; CY 2019 Home Health Prospective Payment System Rate Update and Proposed CY 2020 Case-Mix Adjustment Methodology Refinements; Home Health Value-Based Purchasing Model; and Home Health Quality Reporting Requirements; Home Infusion Therapy Requirements; and Training Requirements for Surveyors of National Accrediting Organizations. 83 Federal Register 32390. Centers for Medicare and Medicaid Services. July 12, 2018. https://www.gpo.gov/fdsys/pkg/FR-2018-07-12/pdf/2018-14443.pdf.

Revenue Redistribution

CMS described the expected changes in case revenue in broad terms in the NPRM impact report. As in last year's report on HHGM, we examined the percent change in facility revenue under matched cases in the current system and PDGM. We find that 48% of home health agencies are projected to have a +/-10% or greater change in annual revenue; the full distribution is shown in Exhibit 1. The interquartile range of losses and gains is approximately -7.4% to 12.4%.

Exhibit 1: Distribution of HHA Projected Revenue Change Under PDGM Implementation

Note: the chart below does not include behavioral assumption reductions, as these cannot be predicted at an agency level from the HH-OASIS LDS dataset.



Source: Dobson | DaVanzo analysis of CMS HH-OASIS LDS data, CMS DUA 52150

When changes of this magnitude were implemented in the late 1990s, significant and detrimental impacts were observed across the home health landscape which Medicare was compelled to reverse:[5]

- Agency impacts:
  - There was a net 15% reduction in the number of Medicare Home Health Agencies.[6]
- Beneficiary impacts:
  - Home health utilization dropped by 29%, from 104 home health users per 1,000 in 1996 to 72 users per 1,000 in 1999.[7]
- System impacts:
  - Program payments were reduced from $16.8 billion in 1996 to $7.9 billion in 1999.
  - The industry had not fully recovered as of 2007.[8]

Volume Changes and Questionable Encounters

Changes in case volume in large part drive the projected revenue changes described above and in Exhibit 1. Under PDGM, the system would have an overall apparent case volume drop of 14.9% ((10,912,432-9,285,210) / 10,912,432) = 14.9%) distributed across facilities (shown in Exhibit 2). This change in case volume acts as a second order of revenue redistribution after the initial change to new case weights – the "fall off" is due to a portion of 60-day episodes only converting to a single 30-day period in the new system instead of two. The combined effect of case payment and volume changes are shown in Exhibit 1.

There were 5,456,216 60-day episodes included in the impact file, which we multiplied by 2 to find an expected 30-day volume of 10,912,432. This compares to a projected PDGM 30-day case volume of 9,285,210. We examine the percent change from expected cases to PDGM cases by facility. The average facility is expected to experience a 10.4% reduction in volume under the same case mix and practices, with over five thousand agencies projected to experience reductions greater than 10%.

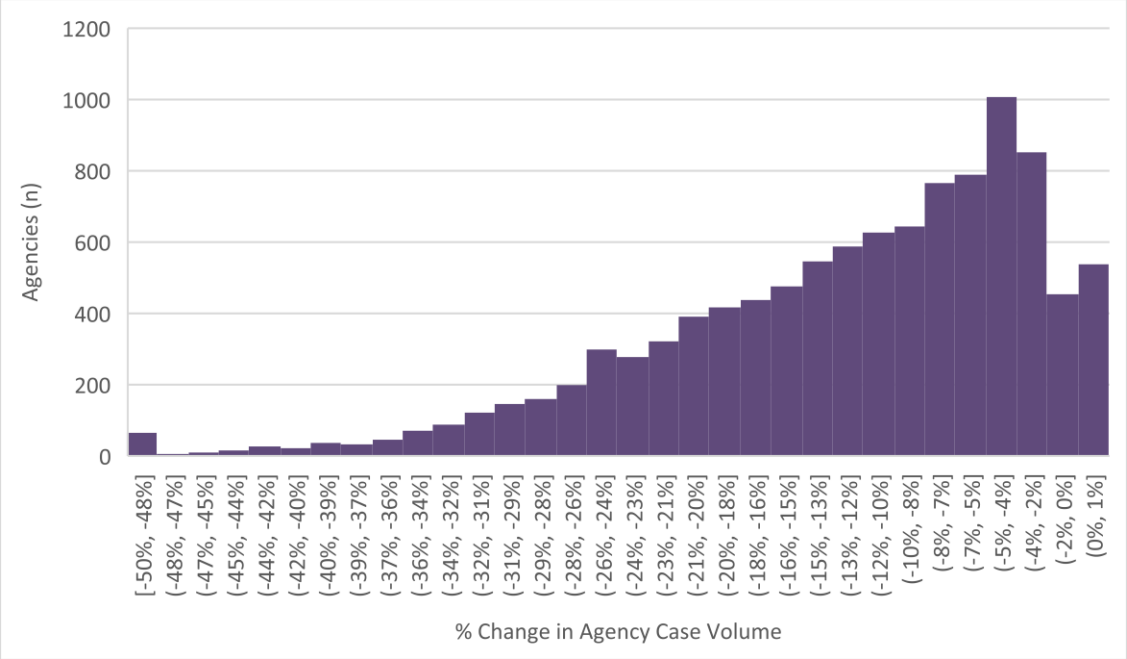
[5] Adapted from Dobson et. al. presentation "The Home Health Groupings Model (HHGM)", Dobson DaVanzo and Associates, Slide 3, Dobson DaVanzo and Associates Presentation, October 25,2017.

[6] Note: The actual closure rate was 26%; the entry of new agencies provided a level of offset. Source: "Agency Closings and Changes in Medicare Home Health Use, 1996-1999." Page 7. U.S. Department of Health and Human Services Assistant Secretary for Planning and Evaluation Office of Disability, Aging and Long-Term Care Policy. July 2003. https://aspe.hhs.gov/system/files/pdf/74761/closings.pdf.

[7] Note: Average county-level rate of decline in HHA utilization. Source: Ibid. Page 6.

[8] Note: Program payments were $15.6 billion in 2007. Source: Health Care Financing Review 2008 Statistical Supplement. Table 7.1, Trends in Persons Served, Visits, Total Charges, Visit Charges, and Program Payments for Medicare Home Health Agency Services, by Year of Service: Selected Calendar Years 1974-2007. Centers for Medicare and Medicaid Services. https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/MedicareMedicaidStatSupp/Downloads/2008_Section7.pdf#Table%207.1.

Exhibit 2: Distribution of HHA Projected Case Volume Changes



Source: Dobson | DaVanzo analysis of CMS HH-OASIS LDS data, CMS DUA 52150

These projected volume changes do not reflect currently paid cases that would no longer be grouped under PDGM. Cases that no longer fit into the classification system were referred to as "questionable encounters" in the CY2018 proposed rule but were not directly discussed in the CY2019 NPRM. It is unclear at this time what additional portion of cases and revenue may "fall off" due to diagnoses no longer considered to be included in the home health benefit, particularly given that CMS "compromised" on stakeholder feedback by moving just 8 ICD-10 codes out of the "questionable encounter" group and into the home health benefit.

Changes in Case Mix Groups

As PDGM operates on a completely different set of patient categorization measures and indicators (including episode cost estimation) compared to the current system, current payment groups are not predictive of PDGM case mix groups. Rather, we found that cases in the current HHRG system tend be broadly redistributed across PDGM case mix groups. When characterizing the change in case mix system groups, we refer to which 30-day cases under the current system are projected to translate into which PDGM groups:

- Current HHRGs (of which there are 144) translate to 137 PDGM HHRGs on average, from 17 to 216 (every PDGM group). Distributions, of course, vary by HHRG.

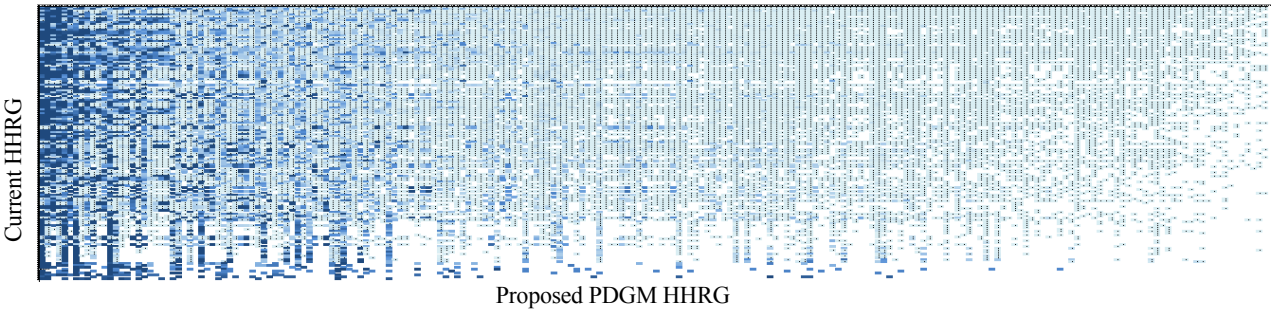
- On average, 65% (interquartile range 53-76%) of current HHRG volume translates to the 10 most common PDGM HHRGs. However, the most common PDGM HHRGs typically relate to the second or subsequent period in a sequence – almost always community-late groups – which are more predictable (as they are an eventuality of the system) than the initial period HHRG.

While each current case mix group translates into a range of new PDGM HHRGs (with common second periods falling into PDGM groups community/late), we note that each facility has a unique case mix featuring a range of the current 144 case mix groups. As such, predicting the most likely 5-10 PDGM HHRGs a current case would fit into may prove highly difficult for agencies. That leaves aside the issue one 60-day HHRG typically translates to multiple different PDGM HHRGs.

We mapped the system redistribution in Exhibit 4 below. The lack of clear patterning in the colors suggests low translatability from current HHRGs to proposed PDGM HHRGs. This is indicated by the unique distribution of each HHRG to proposed PDGM HHRG shown in the heat map; commonalities between HHRGs appear as faint vertical stripes.

Exhibit 4: Case Mix Redistributions from Current (vertical) to Proposed (horizontal) System

Notes: The unit of observation is a 30-day payment period that falls into the specified current-to-PDGM HHRG pair. The most common case mix groups are at the top-left; dark blue indicates the highest number of cases; light blue indicates the lowest number of cases. Blank (or white areas) have no cases.



Source: Dobson | DaVanzo analysis of CMS HH-OASIS LDS data, CMS DUA 52150

Since a single 60-day episode can translate to more than one 30-day payment period, the most populated PDGM case mix groups are community-late, common for payment periods later in the sequence. For the first 30-day period in a sequence, translation from the current system to the new proposed system is highly dispersed. The apparent visible order (as depicted by the dark blue clustering toward the left of the map) is driven by the large portion of late-sequence 30-day payment periods which fall into a narrow set of PDGM HHRGs (community-late groups) after the first period in a sequence.

Though the change from one case mix system to the next is deterministic, it is also difficult to predict PDGM case mix groups without applying the full CMS grouper on a case-by-case basis, as there is not an observable logic for how one case is viewed in both systems (other than the observed cluster to the most common case mix groups in sequences of care). This does not portent for quick or efficient provider adjustments to the new system.

Overall, we expect that providers will have a difficult time adjusting to the extensive overhaul with unpredictable results compared to the current case mix system. Smaller providers without substantial analytic resources may be particularly vulnerable to the unintuitive change in case mix group definitions. This could negatively impact patient care and outcomes, especially in the short-term as providers attempt to adapt to the myriad of changes and unknowns PDGM introduces.

Behavioral Assumptions

CMS indicated that one or more of these provider behavioral responses may occur: [9]

1. Some cases that fall short of LUPA thresholds by 1-2 visits may subsequently surpass that threshold through additional visits and thus receive a full case payment.
2. Some cases may include secondary diagnoses on the OASIS assessment or claims that if reported as the primary diagnosis, could yield a higher case payment.
3. Some cases may include secondary diagnoses on the claims that if reported as comorbidities in OASIS could yield a higher case payment.

These behavioral assumptions – and potential CMS responses via base rate reductions – are not included in above projections of revenue redistribution, volume reduction or case-mix translations.

We conducted approximations of the first two behavioral assumptions to the extent possible with the Home Health-OASIS LDS dataset; we were unable to approximate the third due to data limitations. We note that the latter two behavioral assumptions reflect data from claims that were not available in the file (e.g. additional secondary diagnoses listed on claims and not on the OASIS assessment). That said, our approximations indicated the CMS estimates were mathematically reasonable on the LUPA and primary category changes given the stated assumptions.

Though we concur with the technical calculation of these estimates, CMS did not provide a compelling evidence base for their assumptions. We simply have no way of estimating the

[9] Proposed Rule: Medicare and Medicaid Programs; CY 2019 Home Health Prospective Payment System Rate Update and Proposed CY 2020 Case-Mix Adjustment Methodology Refinements; Home Health Value-Based Purchasing Model; and Home Health Quality Reporting Requirements; Home Infusion Therapy Requirements; and Training Requirements for Surveyors of National Accrediting Organizations. 83 Federal Register 32390 (table 33). Centers for Medicare and Medicaid Services. July 12, 2018. https://www.gpo.gov/fdsys/pkg/FR-2018-07-12/pdf/2018-14443.pdf.

likelihood of their behavioral adjustments occurring or to what extent they may occur. We are unclear on how CMS would incorporate their behavioral assumptions into future rulemaking impact statements in a budget neutral manner given the unknown distribution of changes (and effects of those changes) across the industry. CMS indicates elsewhere in the NPRM that they "continue to expect that HHAs will provide the appropriate care needed by all beneficiaries who are eligible for the home health benefit."[10] We concur with CMS that changes in provider behavior should not affect the appropriateness of care, but here the implied definition of appropriate care has shifted to be viewed by PDGM HHRGs instead of the current system's valuation. Indeed, PDGM may incentivize more standardized care practices across the new case mix groups, presumably a desired outcome by CMS. The shifting of provider behavior to meet these new incentives – indirectly representing what CMS considers to be appropriate care – must be the expected effect of the proposed system change.

While some agencies may respond as CMS predicts, others (perhaps smaller, rural agencies) may not adapt to the new system as expected due to a potential lack of analytic resources, in which case the behavior assumption cuts proposed could have even more of a redistributive impact across the industry. Ultimately, it cannot be known in advance how (and which) agencies will respond in what ways to a fundamentally different payment system. Given this uncertainty of provider responses, a universal rate cut may only serve to further disadvantage agencies that may already struggle with the change.

Should CMS cut rates for behavioral assumptions in advance, this may signal to providers that they *should* alter their behavior in the ways specified in the proposed rule. CMS may bring about a self-fulfilling prophecy in which providers adjust to meet CMS' apparent expectations.

Furthermore, behavioral offsets proposed in the CY2019 NPRM for CY2020 are larger than those enacted retrospectively in previous years. Exhibit 3 shows historical adjustments implemented retrospectively to offset changes in "coding practice that ha[ve] resulted in significant growth in the national case-mix index since the inception of the HH PPS that is not related to ''real'' change in case-mix."[11] We note these reduction levels were disputed by public commenters who made technical arguments describing the data and methodology used to determine the rate as unreliable.[12]

[10] Proposed Rule: Medicare and Medicaid Programs; CY 2019 Home Health Prospective Payment System Rate Update and Proposed CY 2020 Case-Mix Adjustment Methodology Refinements; Home Health Value-Based Purchasing Model; and Home Health Quality Reporting Requirements; Home Infusion Therapy Requirements; and Training Requirements for Surveyors of National Accrediting Organizations. 83 Federal Register 32396 (table 33). Centers for Medicare and Medicaid Services. July 12, 2018. https://www.gpo.gov/fdsys/pkg/FR-2018-07-12/pdf/2018-14443.pdf.

[11] Final Rule: Medicare Program; Home Health Prospective Payment System Refinement and Rate Update for Calendar Year 2008. CMS 1541-FC. Page 49833, https://www.gpo.gov/fdsys/pkg/FR-2007-08-29/pdf/07-4184.pdf.

[12] Public Comment to CMS-1625-P CY2016 Home Health Prospective Payment System Update; Home Health Value-Based Purchasing Model; and Home Health Quality Reporting Requirements. National Association for Home Care and Hospice. September 3, 2015.

Exhibit 3: Examples of Rate Reductions due to Provider Coding Behavior[13]

Year	Adjustments to Account for Coding Practice Changes	Context
2008	-2.75%	Adjustments were "to offset the change in coding practice" that resulted in a ''nominal'' (rather than a "real") increase in case-mix between the 12 months ending September 30, 2000, and the most recent available data from 2003.[14]
2009	-2.75%	
2010	-2.75%	
2011	-3.79%	Adjustments were to fully account for "nominal case-mix growth which was identified from 2000 to 2008" [15]
2012	-3.79%	
2013	-1.32%	Adjustment to fully account for nominal case-mix growth identified from 2000 to 2009[16]
2014	0.00%	
2015	0.00%	
2016	-0.97%	Adjustments "to account for estimated case-mix growth unrelated to increases in patient acuity (nominal case-mix growth) between CY 2012 and CY 2014."[17]
2017	-0.97%	
2018	-0.97%	
2019 (Proposed)	0.00%	
2020 (Proposed)	-0.38% to -6.42%	These assumptions are prospective estimates based on anticipated future provider behavior.[18]

These historical adjustments are considerably lower (on an annual basis) than the prospective adjustments CMS is now proposing.

Regardless of whether these assumptions are predictive of industry behavior should PDGM be implemented, CMS might consider not adjusting the system in advance through

[13] Proposed Rule: Medicare and Medicaid Programs; CY 2019 Home Health Prospective Payment System Rate Update and Proposed CY 2020 Case-Mix Adjustment Methodology Refinements; Home Health Value-Based Purchasing Model; and Home Health Quality Reporting Requirements; Home Infusion Therapy Requirements; and Training Requirements for Surveyors of National Accrediting Organizations. 83 Federal Register 32346-7, 32390. Centers for Medicare and Medicaid Services. July 12, 2018. https://www.gpo.gov/fdsys/pkg/FR-2018-07-12/pdf/2018-14443.pdf.

[14] Final Rule: Medicare Program; Home Health Prospective Payment System Refinement and Rate Update for Calendar Year 2008. CMS 1541-FC. Page 49833, https://www.gpo.gov/fdsys/pkg/FR-2007-08-29/pdf/07-4184.pdf.

[15] Final Rule: Medicare Program; Home Health Prospective Payment System Rate Update for Calendar Year 2012. CMS 1353-F. Page 68528, https://www.gpo.gov/fdsys/pkg/FR-2011-11-04/pdf/2011-28416.pdf.

[16] Final Rule: Medicare Program; Home Health Prospective Payment System Rate Update for Calendar Year 2013, Hospice Quality Reporting Requirements, and Survey and Enforcement Requirements for Home Health Agencies. CMS 1358-F. Page 67071. https://www.gpo.gov/fdsys/pkg/FR-2012-11-08/pdf/2012-26904.pdf.

[17] Final Rule: Medicare and Medicaid Programs; CY 2016 Home Health Prospective Payment System Rate Update; Home Health Value-Based Purchasing Model; and Home Health Quality Reporting Requirements. CMS 1625-F. Page 68624. https://www.gpo.gov/fdsys/pkg/FR-2015-11-05/pdf/2015-27931.pdf.

[18] Proposed Rule: Medicare and Medicaid Programs; CY 2019 Home Health Prospective Payment System Rate Update and Proposed CY 2020 Case-Mix Adjustment Methodology Refinements; Home Health Value-Based Purchasing Model; and Home Health Quality Reporting Requirements; Home Infusion Therapy Requirements; and Training Requirements for Surveyors of National Accrediting Organizations. 83 Federal Register 32390. Centers for Medicare and Medicaid Services. July 12, 2018. https://www.gpo.gov/fdsys/pkg/FR-2018-07-12/pdf/2018-14443.pdf.

behavioral offsets to provide some cushion for the inevitable financial shocks of PDGM implementation.

Across the board rate cuts to protect CMS from the unknown would further compound the financial impact of PDGM. CMS might instead presuppose specific tests for detecting this behavior meant to increase revenue and monitor and adjust accordingly throughout system implementation.

Transition Policies

Given the above, CMS could consider policies to decrease the financial and clinical shock of implementing the proposed payment system in order to maintain beneficiary access. Though the BBA of 2018 language may not allow for a clean transition between the current and future systems, it appears not to prohibit any other technical approach beyond 30-day episode definition and removal of therapy thresholds as payment triggers (note these technical approaches are not related to the earlier discussion of behavioral adjustments). As such, we propose several technical approaches to easing the transition which could be phased in over time in a budget neutral manner. Indeed, minimizing industry redistribution and maintaining current levels of beneficiary access may be advantageous to CMS in this time of widespread payment system transition across almost all PAC PPSs and through Alternative Payment Models.

Example payment system transition approaches:

- Stop-loss threshold. To reduce uncertainty for both CMS and providers, CMS could implement a stop-loss threshold target based on monthly or quarterly revenue flow and prevent agencies from dipping above or below a designated range from previously stable trends.
- Short term alterations to PDGM which enable it to more closely resemble the current system. These familiar aspects could be transitioned out over time to enable a smoother transition (understanding any would require a reset and examination of case payment weights). These could include:
    - Altering the timing category such that up to the first 120 days of care could be considered ‘early’.
    - Altering the origin category such that cases would not change status over a sequence of care.
    - Applying the existing functional status groups.
    - Utilizing BLS data for costing. Though BLS cost data are not representative of overall agency costs as are the fully loaded CPM with NRS cost estimates, BLS is a way to gauge resource utilization without regard to issues of facility overhead and other aspects of the cost reports.
    - Retaining the current, single LUPA payment threshold for all case mix groups.

Regardless of the approach CMS takes, CMS could implement near real-time monitoring to observe agency operational failure and act in time to prevent industry upheaval should implementation go awry. Indeed, the complete overhaul and amount of change providers will need to adapt to, potentially to maintain operations, will lead to tremendous uncertainty about how specific providers – and perhaps local individual markets – may fare.

Review of Prior Concerns from HHGM and How/Whether they are Addressed in PDGM

Given that PDGM is the subsequent iteration of the formerly proposed HHGM, many of the issues raised during the previous NPRM cycle continue to be highly relevant. Exhibit 5 below largely contains issues brought by stakeholders in prior rulemaking and other public comment opportunities that are generally not otherwise addressed in this report above.

In the CY2019 NPRM, CMS addressed some issues through additional analyses, more detailed rationale, or by making changes to elements of the proposed PDGM. For instance, CMS was responsive to the concern raised by multiple industry stakeholders that the HHGM NPRM did not provide the information needed to fully assess the proposed system change. Commenters to the HHGM NPRM requested additional information on how the model was constructed, and facility-level impact file so that potential changes could be evaluated at the agency level. CMS delivered on each of these requests in the CY2019 NPRM, albeit still with gaps in information not yet provided and discussed throughout this report. As another example, CMS took commenters' concerns into account on specific items of the proposed system, such as the comorbidity adjustment, which has been revised in the PDGM to include high and low comorbidity tiers based on the presence of comorbidities as well as comorbidity interactions that are associated with higher levels of resource use. Concerns about many other key elements of the PDGM remain unresolved, as indicated in Exhibit 5, below.

Exhibit 5: Prior Concerns from HHGM and How/Whether they are Addressed in PDGM

Issue Category	Issue Description	Source (citations listed below table)	Adequately Addressed in NPRM?	How was the Issue Addressed in NPRM?
60- to 30- day episodes	A 30 day period of care is counter to several key elements of the current home health system, such as: - patient plans of care cover 60 days; - physicians certify patients for a home health benefit of 60 days; - the home health patient assessment is mandated to be performed every 60 days.	1; 2; 3	Yes	This change was mandated by the Bipartisan Budget Act of 2018. P.32388
60- to 30- day episodes	It's not clear that a 30-day period of care aligns with the needs of all home health patients. Not all patients' care is 'frontloaded' in the first 30 day period, and the emphasis on patients who have had a prior inpatient stay may be detrimental to patients from the community.	3; 4; 5	Yes	This change was mandated by the Bipartisan Budget Act of 2018. P.32388
Administrative Burden	Agencies will face increased administrative burden and costs as they train staff and make operational adjustments to the new system.	1	Partially	Impact statement suggests PDGM shift will reduce agency burdens in regard to OASIS item changes. Burdens specific to administrative changes mentioned were not included in the impact assessment, p. 32480. CMS did estimate the cost of responding to the proposed rule at $0.7M, which may be undercounted as it includes estimates for reading the rule, but not conducting analyses or responding, a necessity for many agencies given the magnitude of proposed changes. No changes are required to the Plan of Care, which is still mandated to be reviewed and revised no less frequently than every 60 days. Also, no changes are required in the timing of the comprehensive assessment, which would still be completed at the start of care and every 60 days from the start of care. P. 32388. CMS developed claims processing procedures to reduce administrative burden. Claims processing procedures would assign cases into the early or late category (P. 32393) and determine whether beneficiaries fit into the institutional or community category by pulling information from prior claims (P.32398). CMS does not anticipate additional provider burden regarding LUPAs "as LUPA visits are billed the same as non-LUPA periods." P.32412.
Administrative Burden	Agencies will face increased administrative burden and costs as they code (or re-code) questionable encounters.	1; 3; 4; 5; 6	No	Impact statement suggests PDGM shift will reduce agency burdens in regard to OASIS item changes (P. 32480). Burdens specific to administrative changes mentioned were not included in the impact assessment.

Issue Category	Issue Description	Source (citations listed below table)	Adequately Addressed in NPRM?	How was the Issue Addressed in NPRM?
Administrative Burden	HHGM clinical groups run counter to current trends in clinical care. Like the IRF 60% Rule, the clinical group framework may be confusing and burdensome for home health clinicians.	5	No	This point was not directly addressed in the NPRM.
Alignment with other HHA Regs	Changes to the HH PPS should align with other changes the home health industry must face, such as the home health value-based purchasing model.	3	No	PDGM does not have a quality component.
Behavioral Assumptions	A detailed description of the behavioral assumptions incorporated into CMS' estimates should be shared.	7	Partially	Documentation of behavioral assumptions mandated by BBA '18. Behavioral assumptions were described in detail and quantitative analyses were included. However, CMS did not indicate what behavioral assumptions will be used in CY2020 rule and did not provide detail on the analytic approach for assessing behavior changes under PDGM. P. 32390, Table 33.
Budget Neutrality	A non-budget neutral system change would amplify the financial shocks to agencies.	4; 8; 6; 7; 1; 2	Yes	Budget neutrality required by the BBA of 2018. Administrative burden not addressed in economic impact assessment.
Case-mix recalibration	The details and timing of case-mix weight recalibration are unclear.	1	Partially	Mentioned in NPRM, but no detail provided. P. 32393 - "we propose to recalibrate the PDGM case mix weights on an annual basis to ensure that the case-mix weights reflect the most recent utilization data available at the time of rule-making."
Cost and Resource Use Estimation	Use the Risk-Based Grouper Model (which relies on OASIS based risk-adjustment and is used for the home health quality reporting program) to set case-mix weights.	3	No	The Risk-Based Grouper Model is not mentioned in the NPRM.
Cost and Resource Use Estimation	Evidence that visits decline over the 60-day episode misses the concept that additional care coordination (which may not represent itself as a home health visit) occurs toward the end of the episode.	3	Yes	P. 32393 - "significant difference in the resource utilization between early and late 30-day periods as demonstrated in Table 34. ... resource cost estimates are derived from a very large, representative dataset. ... the proposal reflects agencies' average costs for all home health service delivered in the period examined."
Cost and Resource Use Estimation	Actual costs should be used to set case-mix weights, not a regression.	3	Yes	CMS addresses this concern and explains their rationale for using regression-adjusted costs, P.32416

Issue Category	Issue Description	Source (citations listed below table)	Adequately Addressed in NPRM?	How was the Issue Addressed in NPRM?
Cost and Resource Use Estimation	Payment adjustors for dual-eligibility, readmission risk, income status and other social determinants of health may be needed.	3	No	This point was not directly addressed in the NPRM, but CMS implies that the risk for rehospitalization is accounted for in that "beneficiaries discharged from institutional settings are more vulnerable because of, among other factors, the need to manage new health care issues, major modifications to medication interventions, and the coordination of follow-up appointments, which could lead to the risk for adverse drug events, for errors in a beneficiary's medication regimen, and for the need to readmit to the hospital due to deterioration of the patient's condition" P.32396.
Cost and Resource Use Estimation	The Cost per Minute plus Non-Routine Supplies (CPM + NRS) approach may not suitably represent HHA costs and relies on Medicare Cost Report data which is not audited by CMS.	4; 5; 2; 3	Partially	"Utilizing data from HHA Medicare cost reports better represents the total costs incurred during a 30-day period (including, but not limited to, direct patient care contract labor, overhead, and transportation costs), while the WWMC method provides an estimate of only the labor costs (wage and fringe benefit costs) related to direct patient care from patient visits that are incurred during a 30-day period. With regards to accuracy, we note that each HHA Medicare cost report is required to be certified by the Officer or Director of the home health agency as being true, correct, and complete with potential penalties should any information in the cost report be a misrepresentation or falsification of information." P. 32386.
Cost and Resource Use Estimation	Freestanding and hospital-based HHAs have dissimilar cost structures; this may bias episode costs calculated from the CPM + NRS approach.	6; 4; 3	Partially	Addressed on P. 32386-88, through additional explanation and rationale. No change in proposed use of cost report data.
Cost and Resource Use Estimation	Including non-routine supplies (NRS) in the base rate (which is then wage-index adjusted as if it included labor hours) may unintentionally overpay for NRS in some areas and underpay in others. Including NRS in the base rate may not adequately support the needs of some patient groups, such as wound patients.	1; 2; 3; 4; 5; 7	No	NPRM does not address the comment regarding the non-variability of NRS across regions and the potential unintended consequences of overpaying for NRS in some areas and underpaying in others.
Cost and Resource Use Estimation	Audits and further trimming of Medicare cost reports is needed if they are to be used in the proposed system due to accuracy concerns.	3	Partially	Trim excluded HHAs that fell in the top or bottom 1 percent of the distribution. This is the same methodology outlined in the CY2014 proposed rule. P. 32384 "With regards to accuracy, we note that each HHA Medicare cost report is required to be certified by the Officer or Director of the home health agency as being true, correct, and complete with potential penalties should any information in the cost report be a misrepresentation or falsification of information." P. 32386.

Issue Category	Issue Description	Source (citations listed below table)	Adequately Addressed in NPRM?	How was the Issue Addressed in NPRM?
High Cost Outliers	The cap on the amount of time per day that counts toward the development of the high cost outlier costs as well as the 10 percent cap on outlier payments to a given agency should be revisited, as these may not fit the proposed 30-day period length and may have unintended consequences.	4	Partially	"... we do not have the authority to adjust or eliminate the 10- percent cap or increase the 2.5 percent maximum outlier payment amount. ... the daily and weekly cap on the amount of skilled nursing and home health aide services combined is a limit defined within the statute ... we believe that maintaining the 8-hour per day cap is appropriate under the proposed PDGM." P. 32421.
Highly Redistributive Payments	This type of proposed system change is highly redistributive of agency payments and may cause substantial disruption to the industry and agencies.	4; 5; 6	No	Acknowledged in impact statement.
Impact on APMs	It is unclear how the proposed model will impact other healthcare redesign efforts such as Alternative Payment Models (Accountable Care Organizations and Bundled Payments Initiatives).	1; 8	No	No mention of ACOs or Bundled Payments in NPRM.
Importance of Therapy	The proposed system undervalues the importance of therapy services in home health care. Therapy services have helped patients gain functionality and independence at home while also helping to control growth in Medicare spending through reduced hospitalizations and length of stay. Unintended and drastic reductions in therapy in response to the new incentives of PDGM, which may include a shift in demand towards other home health disciplines, could lead to worse patient outcomes.	1; 3; 7	Partially	"One goal in developing the PDGM is to provide an appropriate payment based on the identified resource use of different patient groups, not to encourage, discourage, value, or devalue one type of skilled care over another." P.32401.
Intervening Hospice Stay	It is unclear how the proposed model will accommodate for an intervening hospice stay or return from hospice to home health.	1	No	This point was not directly addressed in the NPRM.
LUPAs	The proposed LUPA policy is confusing, burdensome to agencies, and introduces the incentive for providers to change behavior.	1; 3	Partially	"After analyzing the data to evaluate the potential impact, we believe that the change to a 30-day period of care under the proposed PDGM from the current 60-day episode warrants variable LUPA thresholds depending on the payment group to which it is assigned." " ... we propose to vary the LUPA threshold for a 30-day period of care under the PDGM depending on the PDGM payment group to which it is assigned." P.32412. CMS does not anticipate additional provider burden regarding LUPAs "as LUPA visits are billed the same as non-LUPA periods." P.32412.

Issue Category	Issue Description	Source (citations listed below table)	Adequately Addressed in NPRM?	How was the Issue Addressed in NPRM?
LUPAs	The proposed LUPA policy may make more cases be LUPAs and may make some LUPA cases more profitable than other LUPA cases, disrupting care practices and staffing.	1	Yes	We note that in the current payment system, approximately 8 percent of episodes are LUPAs. Under the PDGM, consistent with the CY 2018 HH PPS proposed rule, we propose the 10th percentile value of visits or 2 visits, whichever is higher, in order to target approximately the same percentage of LUPAs (approximately 7.1 percent of 30-day periods would be LUPAs (assuming no behavior change)). P. 32412.
Partial Episode Payment (PEP)	PEPs should be abandoned in the new system. The initial agency should receive payment for a patient without consideration for the timing in which a second agency may take on care for that patient.	1; 3	Yes	"We note that the change in the unit of payment from 60 days to 30 days will reduce the number of instances where a PEP adjustment occurs. However, we believe maintaining a PEP adjustment policy is appropriate to ensure that Medicare is not paying twice for the same period of care, as the PEP is involved with patient transfers there is a risk of a duplicate payment error. " P. 32421
Patient Grouping	A readmission during the 60 day gap period should be an “early” (not a “late”) period.	3	No	"...we note that the PDGM also includes a category determined specifically by source of admission, which would account for any readmission to home health. Under the PDGM we already account for whether the patient was admitted to home health care from the community or following an institutional stay, including inpatient stays that occur after the commencement of a home healthcare. ... an intervening hospital stay would not trigger recategorization to an ‘‘early’’ period unless there were a 60-day gap in home health care." P.32393
Patient Grouping	Since a late period with an institutional admission source is paid a higher amount than an early period with a community admission source, a 5-day lookback period instead of a 14-day lookback for designating institutional vs. community admissions may be more appropriate.	3	No	14 day lookback is used.
Patient Grouping	Add a clinical grouping category for patients who need complex rehabilitation interventions is needed - providing high intensity rehabilitation and therapy services incurs significant costs.	5	No	No special high-needs category created, but changes to grouper may address this. Unless CNI category is intended to capture this (P. 32381).
Patient Grouping	Assess the impact of keeping the same clinical group for beneficiaries over multiple 30-day periods, in light of the possibility that beneficiaries' clinical needs may change during that time.	6	No	This point was not directly addressed in the NPRM.
Patient Grouping	Design the patient groups such that a patient can be put into multiple groups (50% MMTA and 50% behavioral health, as an example).	3	No	This point was not directly addressed in the NPRM.

Issue Category	Issue Description	Source (citations listed below table)	Adequately Addressed in NPRM?	How was the Issue Addressed in NPRM?
Patient Grouping	Account for whether an inpatient stay was planned or unplanned.	3	No	This point was not directly addressed in the NPRM.
Patient Grouping	MMTA and behavioral health clinical groups are not reimbursed adequately.	3	No	This point was not directly addressed in the NPRM.
Patient Grouping	More time is needed to assess whether the point values and proposed OASIS items accurately indicate patient characteristics and provider operations.	4	No	This point was not directly addressed in the NPRM.
Patient Grouping	Clinical groupings are overly focused on patients' principal diagnosis. Home health clinicians care for patients based on their impairments, not on their diagnoses - trying to base care on diagnoses when that's not how agencies provide services creates a disconnect.	3;5	Partially	"We do agree that diagnosis alone does not provide the entire clinical picture of the home health patient; however...the multidisciplinary nature of the benefit is precisely the reason that diagnosis should be an important aspect of the clinical groupings model. The various home health disciplines have different but overlapping roles in treating the patient; however, a diagnosis is used across disciplines and has important implications for patient care. A patient's diagnosis consists of a known set of signs and symptoms agreed upon by the medical community. Each different healthcare discipline uses these identifiable signs and symptoms to apply its own approach and skill set to treat the patient. However, it remains a patient centered approach." P. 32402.
Patient Grouping	The proposed patient groups may not adequately account for resource use variation and changes in clinical need across episodes for a given patient (or across patients overall). For instance, MMTA may make up too large of a share of patients to accurately reimburse for all of the patients that fall into that group.	4	Partially	CMS shows analyses of MMTA subgroups and will monitor trends to determine if changes to this group are needed in the future. P. 32402 - "This group represents a broader, but no less important reason for home care. We believe MMTA is not so much an "other" category as much as it appears to represent the foundation of home health." P. 32403 - "using the MMTA subgroup model would result in more payment groups but not dramatic differences in case-mix weights across those groups. For this reason, we are not proposing to divide the MMTA clinical group into subgroups."
Patient Grouping	Use more than 144 payment groups.	3	Yes	PDGM as proposed would increase payment groups from 144 to 216.

Issue Category	Issue Description	Source (citations listed below table)	Adequately Addressed in NPRM?	How was the Issue Addressed in NPRM?
Patient Grouping	The benefit of having viable home-based services for chronic co-morbid patients with longer term needs is not adequately represented in the new system. Longer term patients may receive fewer visits over an episode than shorter term patients, but this group may require more care coordination, on-call resources and risk-stratification technologies than are accounted for in the proposed system. The proposed system lowers payments for polychronic, comorbid patients who need more than one episode of care to properly address their needs.	4;7	Partially	Model supports and detracts from chronic care benefit by 1) encouraging greater use of skilled nursing (on a cost basis) but 2) tapering off payments relatively sharply over time (see weights table). It is unclear if current practice given HHA interpretation of Medicare authorization policy [P. 32377] is reflective of chronic/complex care needs - however, they assume a very short episode (8 weeks) that may not realistically describe long term chronic care.
Patient Grouping	Instrumental Activities of Daily Living (IADLs) should be included in the functional status portion of the model; the proposed functional levels do not include an adequate number of functional and cognitive items.	3	Partially	CMS examined additional OASIS items for utility in resource use prediction, including IADLS. P. 32405 - "Despite commenters' recommendations, the variables suggested were only minimally helpful in explaining or predicting resource use and most reduced the amount of actual payment. As such, we excluded variables associated with cognition, IADLs, and caregiver support because they would decrease payment for a home health period of care which is counter to the purpose of a case-mix adjustment under the HHGM. The complete analysis of all of the OASIS items can be found in the HHGM technical report on the HHA Center web page."
Patient Grouping	Multiple comorbidity adjustment levels are recommended in place of a binary adjustment. These levels should be set based on available data.	3	Yes	Additional analyses conducted by CMS, subsequent creation of high and low comorbidity tiers (and no comorbidities) in PDGM guided by the presence of comorbidities as well as comorbidity interactions that are associated with higher levels of resource use. P. 32408, 32410.
Patient Grouping	Patients with an ER visit or observational stay in the 14 days prior to HHA admission should be in the institutional, not community admission group.	3	Yes	CMS compared PDGM community vs. institutional distinction to how things are done in other care settings and considered creating a third admission source group to include these cases. Ultimately, CMS proposes to leave ER visits and observational stays out of the institutional category. P. 32398.
Patient Grouping	Fully evaluate the inclusion of functional variables that have counterintuitive relationships between functional ability and resource use. Leaving these variables out (specifically, cognitive function) could cause inappropriate payment distributions and adjustments.	6	No	This point was not directly addressed in the NPRM. Counterintuitive relationships are increasingly odd in the face of PDGM slightly redistributing dollars towards dual -eligible beneficiaries (P. 32499 Table 61).

Issue Category	Issue Description	Source (citations listed below table)	Adequately Addressed in NPRM?	How was the Issue Addressed in NPRM?
Patient Grouping	Reconsider the inclusion of a case-mix adjustment to support care for vulnerable populations (dually eligible beneficiaries, for example) to safeguard their access to care. Examine why Abt's findings on the relative costs of dually eligible beneficiaries do not match other published sources (e.g., MedPAC).	3; 4; 6	Partially	CMS considered this insofar as they examined global changes in service utilization by discipline (Figure 2, P. 32350) and patients receiving inpatient care (P. 32396).
Patient Grouping	Examine and potentially include all interactions between comorbidities in the model.	3	Yes	Additional analyses conducted by CMS, subsequent creation of high and low comorbidity tiers (and no comorbidities) in PDGM guided by the presence of comorbidities as well as comorbidity interactions that are associated with higher levels of resource use (P. 32410).
Questionable Encounters	Avoiding questionable encounters may violate World Health Organization (WHO) coding conventions; resubmitting claims that are outside the proposed system diagnoses codes may increase administrative burden.	4	Partially	Some specific questionable encounters are now groupable - For instance, UTI site not specified, now falls into the MMTA category. However, many codes are still not assigned to a clinical group. P. 32401. The PDGM Grouper tool shows that 8 ICD-10 codes which were questionable encounters in HHGM have been assigned to a category: Aphasia, Dysphagia (5 specific dx codes), UTI's site not specified, and Ataxia unspecified. 26,000+ diagnoses that were questionable encounters in HHGM are not listed in the PDGM grouper file.
Questionable Encounters	Evaluate whether questionable encounter rules are clinically appropriate for agencies and patients, as they may hinder access to the home health benefit. If a patient's diagnosis does not fit into an established clinical group, agencies may be negatively impacted (through a lack of reimbursement for that patient's care).	5; 6	Partially	Some specific questionable encounters are now groupable - For instance, UTI site not specified, now falls into the MMTA category. However, many codes are still not assigned to a clinical group. P. 32401. The PDGM Grouper tool shows that 8 ICD-10 codes which were questionable encounters in HHGM have been assigned to a category: Aphasia, Dysphagia (5 specific dx codes), UTI's site not specified, and Ataxia unspecified. 26,000+ diagnoses that were questionable encounters in HHGM are not listed in the PDGM grouper file.
Questionable Encounters	Specific diagnoses that were excluded from previous versions of the model were raised as concerns: Urinary Tract Infection (UTI), site not specified N39.0; Dysphagia R13; Ataxia R27; Example 4. Sequelae codes: Many home health cases treat sequelae from resolved or resolving etiologies (Examples – but not an exhaustive list – include numerous sign/symptom codes that remain appropriate as the primary diagnosis long after the condition is resolved, such as: Cancer diagnoses and their sequelae, Fracture codes	5	Partially	Some specific questionable encounters are now groupable - For instance, UTI site not specified, now falls into the MMTA category. However, many codes are still not assigned to a clinical group. P. 32401. The PDGM Grouper tool shows that 8 ICD-10 codes which were questionable encounters in HHGM have been assigned to a category: Aphasia, Dysphagia (5 specific dx codes), UTI's site not specified, and Ataxia unspecified. 26,000+ diagnoses that were questionable encounters in HHGM are not listed in the PDGM grouper file.

Issue Category	Issue Description	Source (citations listed below table)	Adequately Addressed in NPRM?	How was the Issue Addressed in NPRM?
	and their sequelae, Burn codes and their sequelae, TBI codes and their sequelae); Cases where the HHA is primarily addressing the resultant Weakness M62.81 and R53.1, frailty, and deconditioning that resulted from an extended inpatient stay			
Request for Anticipated Payment (RAP)	CMS has not experienced operational or program integrity concerns resulting from RAPs. Agencies' margins do not allow the necessary capital to carry multiple weeks of care costs without payment. In addition, efficiencies are not gained through a 30 vs 60 day billing cycle.	1	Yes	Propose to allow RAP but decrease portion of total payment gradually over time. RAPs would not be allowed for new HHAs. Regardless, initial "no-pay" RAPs would be required to notify CMS of start of care. P. 32391.
System Incentives and Impacts	Reducing payment rates to some patient categories may impact such patients' access to care and the level of care provided because of financial considerations. The proposed model may create a high level of potential access risk for certain patient groups.	1	No	This point was not directly addressed in the NPRM.
System Incentives and Impacts	The proposed model is influenced by the current payment system and should be estimated using other data sources (such as MA or commercial insurance) rather than the current HHPPS. Modeling HHGM based on current data could produce flawed results. The new system should be modeled after 'best practices' not after past behavior. For instance, CMS could model the proposed system after HHAs that are doing well on the HHVBP.	3	No	This point was not directly addressed in the NPRM.
System Incentives and Impacts	The proposed system may create an unintended incentive for providers to keep patients for multiple periods of payment.	1	No	This point was not directly addressed in the NPRM, although mentioned briefly on P. 32396.
System Incentives and Impacts	The proposed system may incent patient discharge at or before 30 days and a reduced length of stay or number of visits in the first 30 days. If these changes are not clinically appropriate, Medicare spending on later care needs may rise.	1	No	This point was not directly addressed in the NPRM, although mentioned briefly on P. 32396.

Issue Category	Issue Description	Source (citations listed below table)	Adequately Addressed in NPRM?	How was the Issue Addressed in NPRM?
System Incentives and Impacts	Agencies that admit patients from the community may receive reduced payments under the proposed system, which may disincentivize agencies from taking these patients and bring about changes in agencies' operations that could reduce their patient volume and thus raise the per unit cost of care.	1	Partially	P. 32396 - "we continue to expect that HHAs will provide the appropriate care needed by all beneficiaries who are eligible for the home health benefit, including those beneficiaries with medically-complex conditions who are admitted from the community. We will carefully monitor the outcomes of the proposed change, including any impacts to community entrants, and make further refinements as necessary."
System Incentives and Impacts	CMS relies on a regression analysis to set case mix weights (as is typical in case-mix adjustment models). However, this approach would institutionalize practices that are in violation of the Medicare standards for coverage.	1	Yes	2017 data was used for the PDGM as outlined in the proposed rule. Case-mix weights will be updated annually. "Annual recalibration will be made to the PDGM case-mix weights. We will make refinements as necessary to ensure that payment for home health periods are in alignment with costs". "Actual PDGM Case-mix weights for CY 2020 will be updated in the CY 2020 HH PPS proposed rule". P. 32416
Transition Period	A multi-year transition may help to avoid major industry disruption which could negatively impact home health patients.	2; 7	No	No transition period/phase-in of changes mentioned.
Transition Period	A pilot of the proposed changes should be run before its widespread implementation. Move ahead slowly so that this is an evidence-based system.	3	No	No pilot mentioned in NPRM.
Transparency	Sufficient industry feedback was not sought by CMS	4; 5	Partially	TEP held prior to PDGM NPRM.
Transparency	Information to replicate the proposed system change was lacking in prior iterations of the PDGM (HHGM). Transparency and additional information is needed.	4; 5	Yes	Data files released with PDGM NPRM.
Transparency	Estimated impacts should be shared by CMS at an agency level so that agencies can understand the potential effects on their operations.	3	Yes	Data files released with PDGM NPRM that show CCN level impacts.

Exhibit 5 Sources:

1 National Association of Homecare and Hospice Comments to CMS, "CMS–1672-P: Medicare and Medicaid Programs: CY 2018 Home Health Prospective Payment System Rate Update and Proposed CY 2019 Case-Mix Adjustment Methodology Refinements; Home Health Value-Based Purchasing Model; and Home Health Quality Reporting Requirements" September 25, 2017.

2 LHC Group Comments to CMS, "CMS–1672–P; RIN 0938–AT01: Medicare and Medicaid Programs; CY 2018 Home Health Prospective Payment System Rate Update and Proposed CY 2019 Case-Mix Adjustment Methodology Refinements; Home Health Value-Based Purchasing Model; and Home Health Quality Reporting Requirements," September 18, 2017.

3 "Medicare Home Health Prospective Payment System: Summary of the Home Health Groupings Model Technical Expert Panel Meeting and Recommendations," Abt Associates, prepared for CMS, June 2018.

4 Partnership for Quality Home Healthcare (PQHH) Comments to CMS, "CMS–1672-P: Medicare and Medicaid Programs: CY 2018 Home Health Prospective Payment System Rate Update and Proposed CY 2019 Case-Mix Adjustment Methodology Refinements; Home Health Value-Based Purchasing Model; and Home Health Quality Reporting Requirements," September 21, 2017.

5 HealthSouth and Encompass Home Health and Hospice Comments to CMS, "File Code CMS-1672-P / Preliminary Comment Letter from HealthSouth on CY 2018 HH PPS Proposed Rule re Home Health Groupings Model ("HHGM")," September 25, 2017.

6 Dobson DaVanzo Memo to Keith Myers, Partnership for Quality Home Healthcare (PQHH), September 18, 2017. Included as an appendix to PQHH's Comments to CMS, "CMS–1672-P: Medicare and Medicaid Programs: CY 2018 Home Health Prospective Payment System Rate Update and Proposed CY 2019 Case-Mix Adjustment Methodology Refinements; Home Health Value-Based Purchasing Model; and Home Health Quality Reporting Requirements," September 21, 2017.

7 HealthSouth Comments to CMS, "File Code CMS-1672-P / Preliminary Comment Letter from HealthSouth on CY 2018 HH PPS Proposed Rule re Home Health Groupings Model ("HHGM")," August 17, 2017.

8 Dobson DaVanzo Comments to CMS, "CMS-1672-P – Medicare and Medicaid Programs; CY 2018 Home Health Prospective Payment System Rate Update and Proposed CY 2019 Case-Mix Adjustment Methodology Refinements; Home Health Value-Based Purchasing Model; and Home Health Quality Reporting Requirements," September 25, 2017.

Conclusion

We find that, as proposed, PDGM implementation could yield substantial and varied unintended consequences. The massive projected payment redistribution across patients and agencies will challenge much of the industry to shift to the new incentive system. Further, current payments and case volume are not terribly predictive of PDGM revenue or case volume – providers will need to be sophisticated enough to adapt their mode of thinking about cases very quickly, especially if there is no transition policy as proposed. Some portion of agencies may not be able to maintain operations, or have to alter the way they provide care, in a way that ultimately reduces beneficiary access or worsens outcomes. This financial uncertainty and disruption pales in comparison to the clinical uncertainty providers will face as they adjust to a fundamentally different system.

CMS may reduce the effect of PDGM implementation in a variety of ways to better assure continued beneficiary access and PAC market stability. First is to implement PDGM in a budget neutral manner without behavioral adjustments. Second is to add provisions for a smooth transition to be phased out over time. Last is to continue to work with stakeholders to address remaining concerns.