

Evaluation of Medicare Home Health Services under PDGM and Implications for CY 2024 HH PPS Proposed Rule

Assessing the Impact of CMS' Proposed Behavioral Adjustments under PDGM and the Future of Access to Home Health Services

Submitted to: Partnership for Quality Home Healthcare (PQHH)

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Executive Summary

Dobson DaVanzo & Associates (Dobson | DaVanzo) was commissioned by the Partnership for Quality Home Healthcare (PQHH) to analyze available Medicare home health claims data reflecting the implementation of the Patient-Driven Groupings Model (PDGM), in support of PQHH development of comments for the CY 2024 Home Health Prospective Payment System (HH PPS) Proposed Rule. For our study, we analyzed available Medicare claims data under our Research Identifiable File (RIF) Data Use Agreement (DUA),¹ data made available by CMS, and the CY 2024 HH PPS Proposed Rule. We also draw from our work in prior rule making cycles.

Outlined below are key conclusions from our analysis.

- 1. CMS' 2024 HH PPS Proposed Rule data are not sufficient for a precise replication of CMS' impact analysis of the CY 2024 proposed payments.** Unlike in prior rule making cycles, CMS did not make available the “current law” (CY 2023) payments to allow modelling of CY 2024 proposed payment impacts. Yet, these data are critical for a complete assessment of the agency-level distributional impact of the CY 2024 HH PPS proposed policies.
- 2. CMS projects that CY 2024 payments will result in aggregate payment reductions of 2.2 percent across all agencies, however significant variation in agency-level impacts exist, with percent impacts ranging between -4.6% (95th percentile) to 1.0% (5th percentile).** This variation in agency-level impacts is largely driven by the fluctuation in the wage index between CY 2023 and CY 2024. The observed variation in agency-level impacts is also driven in part by the proposed CY 2024 case-mix recalibration.
- 3. The HH PPS Market basket updates are not reflective of actual price trends in the HH industry, likely because it fails to account for home health specific price changes on a real-time and industry specific basis.** For instance, while CMS proposes a market basket increase of 3.0 percent in CY 2024, data from the Bureau of Labor and Statistics (BLS) indicates that hourly nurse wages grew by 7.7% in Q1 of 2023 compared to the Q1 of 2022. Analysis of the projected and actual market basket for CY 2021 and CY 2022 indicates a cumulative forecast error of 5.2 percent, which if uncorrected could result in -\$11 billion in lost payments for HHAs over a 10-year period.
- 4. In the absence of any corrective action, we estimate that CMS' existing and proposed permanent and temporary behavioral adjustments could lead to a reduction of approximately \$25 billion in home health payments between CY 2020 and CY 2029. This represents more than one year's worth of home health payments.** The total \$25 billion reduction reflects the cumulative impact of the -4.36 reduction due to assumed provider behaviors implemented in CY 2020, the cumulative impact of the permanent adjustment for CY 2023 and CY 2024, and a \$4.1 billion reduction due to the temporary reductions to reconcile CY 2020, CY 2021, CY 2022 and CY 2023 aggregate payments.² Further, the temporary and permanent

¹ CMS DUA 54747.

² Note that CMS states in the CY 2024 HH PPS proposed rule that a \$3.4 billion reduction is required to reconcile CY 2020, 2021, and 2022 payments. We (Dobson | DaVanzo) further estimate that an additional \$643 million would be required to reconcile CY 2022 payments.

reductions combined could result in roughly 40 percent of home health agencies having negative margins if temporary adjustments were implemented over a three-year period between CY 2025 and CY 2027.

The extensive scale of the proposed CY 2024 and future payment reductions to home health agencies threatens the viability of many home health providers. These proposed reductions will also pose challenges for providers to succeed in the recently expanded Home Health Value-Based Purchasing (HHVBP) Model and newly available benefits including Medicare’s Home Intravenous Immune Globulin (IVIG). As providers have less financial reserve due to the payment reductions, they may be less incentivized to take on the risks of participating in these new innovative models of care.

Introduction

Dobson DaVanzo & Associates (Dobson | DaVanzo) was commissioned by the Partnership for Quality Home Healthcare (PQHH) to analyze available Medicare home health claims data reflecting the implementation of the Patient-Driven Groupings Model (PDGM) in support of PQHH development of comments for the CY 2024 Home Health Prospective Payment System (HH PPS) Proposed rule. Dobson | DaVanzo previously supported PQHH in the review of PDGM as included in the Calendar Year (CY) 2018 through CY 2023 Home Health Prospective Payment System (HH PPS) Proposed and Final Rules, as well as accompanying technical reports. To inform our analyses and conclusions, we draw on this prior work along with other responses to the prior comment periods, and available claims data.

Effective January 1, 2020, the CMA overhauled the HH PPS episode and case-mix group definitions, payment weights, and base rate. PDGM is a revision of the Home Health Resource Group (HHRG) case-mix group definitions initially proposed in the CY 2018 HH PPS administrative rulemaking cycle that was refined and finalized in the CY 2019 and CY 2020 HH PPS rulemaking cycles. When implementing PDGM in the CY2020 Final Rule, CMS prospectively reduced the HH PPS base rate from the budget-neutral calculated level by 4.36 percent. CMS indicated that this rate reduction was based on analytic assumptions on how providers might change their behavior once PDGM was implemented (behavioral assumptions).

The CY 2021 HH PPS rule made limited changes to PDGM and in the CY 2022 HH PPS rule CMS sought comment and alternative approaches to the methodology the agency used to assess budget neutrality. In the CY 2023 HH PPS Final rule, CMS finalized using the methodology first proposed in CY 2022 to assess budget neutrality. From this methodology, the agency finalized a -3.925 percent permanent adjustment to the 30-day payment rate (half of the finalized 7.85 percent adjustment, initially proposed at -7.69 percent) and sought comment on how to implement an additional temporary adjustment of approximately \$2.0 billion in future years to reconcile retrospective overpayments in CYs 2020 and 2021. Finally, in the CY 2024 HH PPS Proposed rule, CMS is proposing an additional permanent adjustment of -5.653 percent in CY 2024, which includes the remaining -3.925 percent not applied to the CY 2023 payment rate and additional adjustment to reflect actual behavior changes in CY 2022. CMS also calculated additional temporary adjustments of approximately \$3.4 billion to reconcile retrospective overpayments in CYs 2020, 2021, and 2022.

For CY 2024 home health agencies are projected to experience a reduction of \$375 million in payments (or a -2.2 percent reduction), which includes a -5.1 percent overall payment reduction due to the permanent adjustment, a 0.2 percent increase reflecting effects of the fixed-dollar loss ratio (FDL) updates, and a 2.7 percent payment update reflecting the market basket update reduced by a productivity adjustment.

Detailed Findings

1. Insufficient Data Made Available by CMS

We commend CMS for making case data available through the CY 2024 Proposed Rule CMS OASIS-LDS impact files, but we note that the data provided are not sufficient to replicate CMS' analysis of the distributional impact of the proposed payment adjustments to providers of interest.

Projected CY 2023 claims-level payments that CMS used to create the impact table in the proposed rule are not provided.

In the CY 2024 Proposed Rule CMS OASIS-LDS PDGM impact file, CMS provided projected case-level CY 2024 payments based on CY 2022 home health claims data adjusted to reflect the CY 2024 payment update, permanent behavior adjustment and FDL update.

To model the impacts of the proposed payments on home health revenues, we would need to know the specific adjustments that the agency applied to the CY 2022 data to project the CY 2023 payments. The complete CY 2023 data are currently not available as the year is not complete and we would require another 2 to 3 months for run out after year end.

Additionally, we determined total CY 2024 payments of \$15.5 billion from CMS' OASIS-LDS dataset. Yet, from the proposed rule, we calculated that projected CY 2024 payments would have had to be \$16.67 billion and CY 2023 payments of \$17.05 billion to equate to an \$375 million (or a 2.2 percent) reduction in payments over the two years. This gap suggests that CMS applied additional adjustments beyond the payment parameters in the available data to estimate CY 2024 payments. The actual adjustments CMS applied are not clear to us at this time. We note that in the CY 2020 rule making cycles CMS provided much of this information and directly provided data on agency-level impacts.

2. Impact of the CY 2024 HH PPS Proposed Rule on HHA Revenues

IMPACT OF CY 2024 HH PPS PROPOSED PAYMENT RATES ON HHA MEDICARE REVENUES

CMS projects in the CY 2024 HH PPS that home health agencies will experience a reduction of \$375 million (or a -2.2 percent reduction) in payments between CY 2023 and CY 2024. This reduction includes an overall -5.1 percent reduction³ due to the permanent behavioral adjustment, a 0.2 percent increase for the FDL and a 2.7 percent payment update (inclusive of the market basket update adjusted for the MPF).

³ As CMS notes in the CY 2024 HH PPS proposed rule, the -5.653 percent permanent reduction is applied to the base payment but after accounting for fully paid cases, LUPAs, PEP cases and outlier cases, the permanent adjustment results in a 5.1 percent overall payment reduction.

METHODOLOGY

We examined the impacts of the CY 2024 HH PPS proposed payment rates on HHA revenues by comparing current law (Dobson | DaVanzo estimated CY 2023) payments to the projected CY 2024 payments provided by CMS in the OASIS LDS files through the following steps.

Step 1: We obtained CY 2024 projected case-level payments from the CY 2024 CMS OASIS-LDS impact file dataset. We then aggregated the cases for each agency using the provider CCN and determined the CY 2024 payments for each agency.

Step 2: We modeled CY 2023 payments for each case using case mix, wage index, and visit information included in the OASIS LDS impact file. Modeled case payments accounted for the following types of episodes:

- **Standard Cases:** We determined CY 2023 claim-level payments by adjusting the CY 2023 standard base payment rate by case mix and the labor portion by wage index.
- **Partial Episode Payment (PEP) Cases:** We proportionally adjusted the CY 2023 case payment by the length of stay of the episode.
- **Outlier Cases:** We estimated an outlier add-on payment using a 0.8 loss sharing ratio applied to the difference between imputed episode costs (from the LDS OASIS dataset) and the outlier threshold.
- **Low Utilization Payment Adjustment (LUPA) Cases:** We estimated episode payments by applying the CY 2023 per visit payments to the visit information in the LDS OASIS dataset for each agency.

Step 3: We calculated the projected revenue change by determining the difference between the estimated CY 2023 payments and the projected CY 2024 payments for each agency.

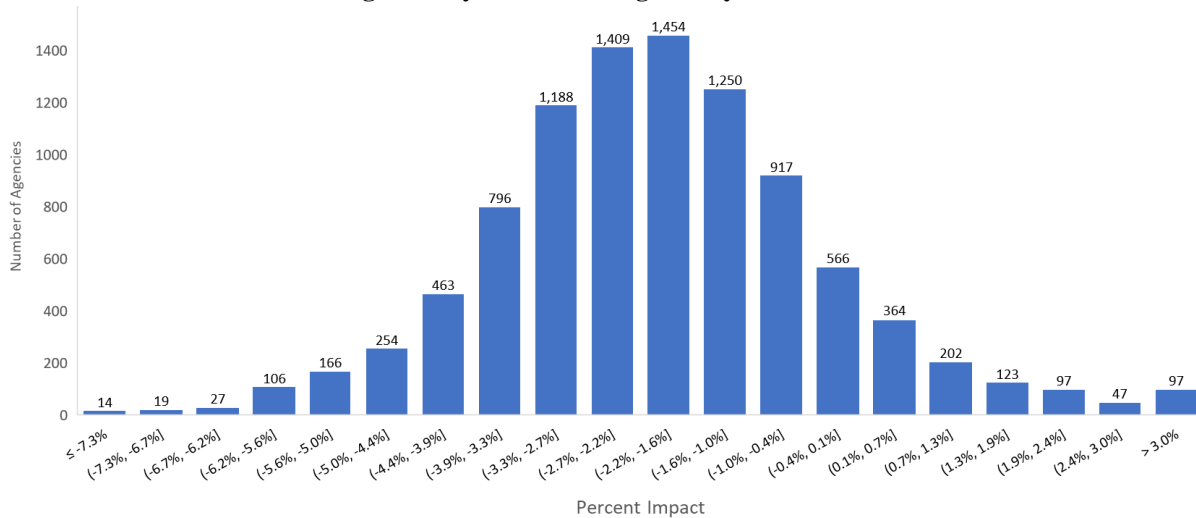
We note that the total CY 2024 payments determined from the CY 2024 CMS OASIS-LDS impact dataset were short of the projected CY 2024 payments that would have resulted in a -\$375 million reduction in payments following a -2.2 percent reduction. We calculated that CY 2024 payments of \$15.6 billion and CY 2023 payments of \$15.9 billion equate to a -\$342 million (or a -2.1 percent) reduction in payments over the two years. We therefore applied adjustments at the agency level such that the CY 2023 and CY 2024 payments differences for each agency summed up to a \$375 million reduction. For each agency, we first determined the proportion of the agency's calculated payment reduction as a fraction of the overall payment reduction determined from the OASIS-LDS dataset. We then applied that proportion to the overall projected reduction of \$375 million to determine the adjusted payment reduction. We used the same method to adjust the CY 2023 and CY 2024 payments for each agency.

RESULTS

Agency Impacts

When comparing the percent impact (i.e., the percent change between CY 2023 and projected CY 2024 budget neutral payments) at the agency level, we find that home health agencies have impacts that are roughly normally distributed around the average impact of 2.2 percent. The percent impact ranges between -29.0% to 33.8% with a 5th and 95th percentile range of -4.6% and 1.0%. We also estimate that roughly 45 percent of HHAs in 2024 will have larger negative payment reductions than -2.2 percent. The full distribution of projected agency percentage impacts is shown in **Exhibit 1** below.

Exhibit 1: Distribution of Agencies by Percent Change in Payments between CY 2023 and CY 2024



Source: Dobson | DaVanzo Analysis of HH Claims in LDS DUA 59233

Rural vs. Urban Impacts

We also examined the distribution of projected revenue changes for agencies in rural versus urban areas. We found that agencies in rural areas represent 15 percent of the agencies and cases and will experience a higher percent reduction compared to agencies in urban areas. These results are shown in **Exhibit 2**.

Exhibit 2: Percent Impact between CY 2023 and CY 2024 for Agencies in Rural vs. Urban Areas

| Location | Percent of Agencies | Percent of Cases | Projected 2024 Payment Impact | Percent Impact |
|--------------------|---------------------|------------------|-------------------------------|----------------|
| Rural | 15% | 14% | -\$47,817,596 (13%) | -2.4% |
| Urban | 85% | 86% | -\$326,907,178 (87%) | -2.2% |
| Grand Total | 100% | 100% | -\$375,000,000 (100%) | -2.2% |

Source: Dobson | DaVanzo Analysis of HH Claims in LDS DUA 59233

State Impacts

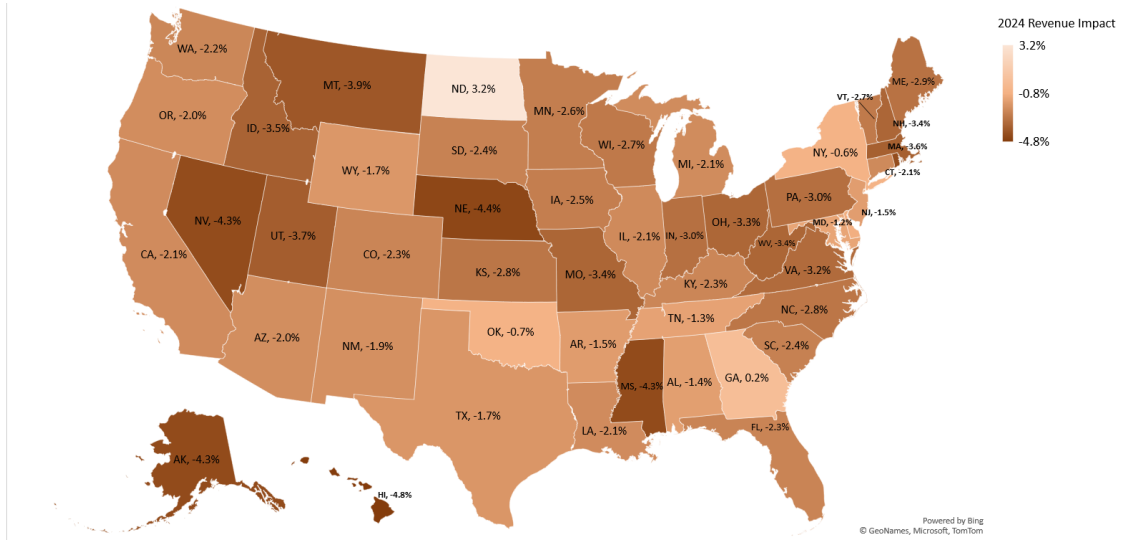
In **Exhibits 3** and **4** below, we show the projected revenue changes for each state. Results show that while CMS estimates an aggregate reduction of -2.2 percent, the top 10 states with the highest percent reduction in payments are projected to experience average percent reductions ranging from -4.8 percent to -3.5 percent—reductions that are much larger than the overall percent impact of -2.2 percent.

Exhibit 3: Top 10 States with Highest Projected Revenue Changes between CY 2023 and CY 2024⁴

| State | Number of HHAs | Case Count | 2023 Simulated Total Case Payment | 2024 Total Case Payment | Impact of 2024 Proposed Payments | Percent Impact | Range of Agency Impacts (Min-max) | Range of Agency Impacts (5th - 95th percentile) |
|------------|----------------|------------------|-----------------------------------|-------------------------|----------------------------------|----------------|-----------------------------------|---|
| HI | 12 | 9,187 | \$24,303,708 | \$23,137,309 | (\$1,166,399) | -4.8% | -7.1%, -3.7% | -6.5%, -3.8% |
| NE | 62 | 38,318 | \$78,222,857 | \$74,755,231 | (\$3,467,626) | -4.4% | -6.6%, 1.2% | -5.9%, -2.3% |
| AK | 14 | 8,038 | \$19,653,166 | \$18,809,224 | (\$843,943) | -4.3% | -5.1%, -2.6% | -4.9%, -2.8% |
| MS | 43 | 189,412 | \$297,722,623 | \$284,971,231 | (\$12,751,392) | -4.3% | -5.3%, -2.6% | -5.1%, -3.3% |
| NV | 162 | 108,134 | \$233,058,224 | \$223,134,780 | (\$9,923,444) | -4.3% | -6.8%, 0.0% | -5.7%, -2.0% |
| RI | 21 | 25,601 | \$57,393,900 | \$54,972,475 | (\$2,421,424) | -4.2% | -4.7%, -0.5% | -4.6%, -2.6% |
| MT | 23 | 12,588 | \$23,453,159 | \$22,547,333 | (\$905,826) | -3.9% | -4.8%, -1.5% | -4.8%, -2.2% |
| UT | 86 | 60,083 | \$120,397,194 | \$115,980,584 | (\$4,416,610) | -3.7% | -6.5%, -1.2% | -5.2%, -2.2% |
| MA | 165 | 254,118 | \$576,617,629 | \$555,973,154 | (\$20,644,475) | -3.6% | -7.1%, 3.7% | -4.5%, 1.7% |
| ID | 47 | 36,829 | \$70,674,726 | \$68,224,858 | (\$2,449,868) | -3.5% | -5.2%, -2.1% | -4.4%, -2.3% |
| All | 9,559 | 8,321,990 | \$17,045,454,545 | \$16,670,454,545 | (\$375,000,000) | -2.2% | -29.0%, 33.8% | -4.6%, 1.0% |

Source: Dobson | DaVanzo Analysis of HH Claims in LDS DUA 59233

Exhibit 4: Distribution of Projected Revenue Changes by State, between CY 2023 and CY 2024



Source: Dobson | DaVanzo Analysis of HH Claims in LDS DUA 5923

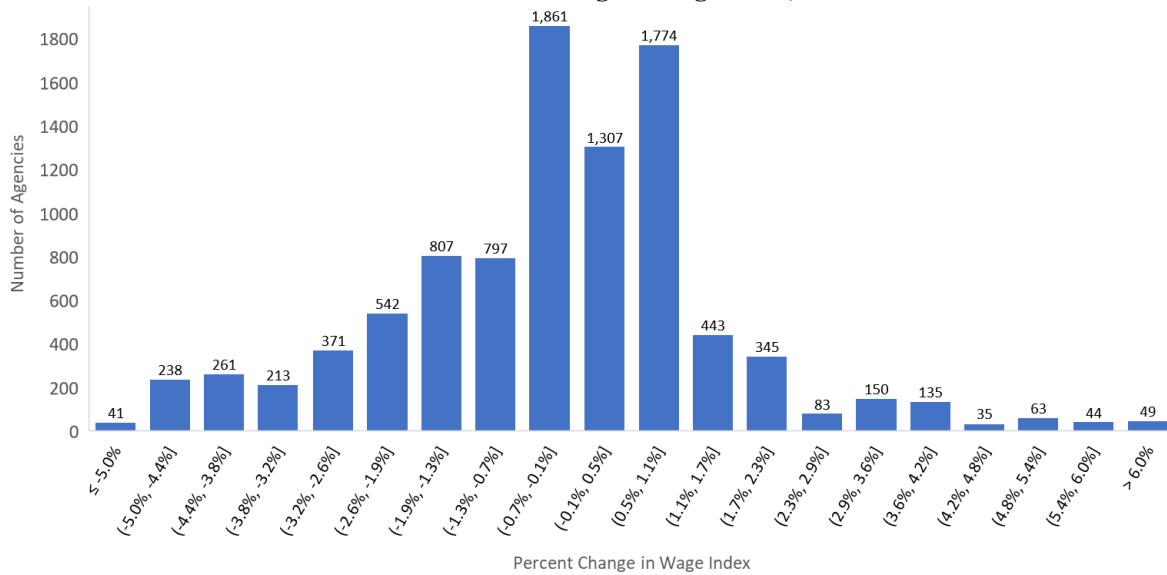
IMPACT OF THE CY 2024 PROPOSED WAGE INDEX

We examined the changes in the average wage index for each home health agency using the data on CY 2022, CY 2023, and CY 2024 wage indices for each case available in the CMS OASIS LDS dataset.

In Exhibits 5 and 6 below, we show the percent change in wage index between CY 2022 and CY 2023 and CY 2023 and CY 2024 for each agency. As shown, there is significant volatility in the wage index, despite the recently introduced -5 percent cap. For instance, between CY 2023 and CY 2024, more than half of the agencies had a larger negative percent reduction than -2.0 percent, and yet in comparison only 7.7 percent of agencies did so between CY 2022 and CY 2023.

⁴ Numbers may not add up due to the effects of rounding.

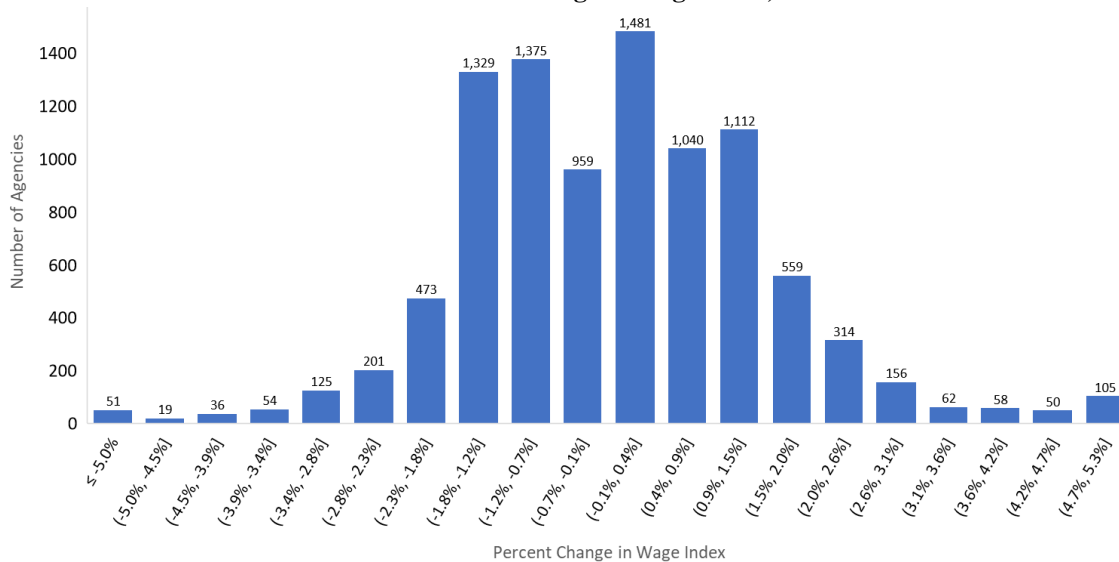
Exhibit 5: Distribution of Percent Change in Wage Index, CY 2023 to CY 2024



| Threshold* | Number of HHAs | Percentage |
|---|----------------|------------|
| Agencies with $\geq -5.0\%$ & $< -4.4\%$ change | 601 | 6.3% |
| Agencies with $\geq -5.0\%$ & $< -2.0\%$ change | 4,815 | 50.4% |

*Not included in chart

Exhibit 6: Distribution of Percent Change in Wage Index, CY 2023 to CY 2024



| Threshold* | Number of HHAs | Percentage |
|---|----------------|------------|
| Agencies with $\geq -5.0\%$ & $< -4.4\%$ change | 73 | 0.8% |
| Agencies with $\geq -5.0\%$ & $< -2.0\%$ change | 735 | 7.7% |

Source: Dobson | DaVanzo analysis of OASIS LDS Files for CY 2024 HH PPS Proposed Rule, DUA 59233

*Not included in chart

3. Impact of the Existing and Proposed Permanent Reductions and Future Temporary Reductions

IMPACT OF THE PROPOSED TEMPORARY REDUCTIONS FOR CY 2020 THROUGH CY 2023 PAYMENT RECONCILIATION

In addition to the proposed permanent behavioral adjustment, CMS also calculated temporary reductions of \$3.4 billion that would be required to reconcile CY 2020, CY 2021, and CY 2022 aggregate payments to budget neutral levels. CMS further indicates in the CY 2024 HH PPS Proposed Rule that they are not applying the temporary reduction to the CY 2024 payments and instead will propose a temporary adjustment factor in future rulemaking.

Finally, because only half of the permanent adjustment was applied to the CY 2023 payment rate, we estimated the temporary adjustment that would be required to offset for such increases in the estimated aggregate expenditures for CY 2023. We developed these estimates based on the methodology CMS uses to determine overpayments for CYs 2020 through CY 2022 in the CY 2024 Proposed Rule as described below.

METHODOLOGY

We estimated the magnitude of the impact of the temporary reductions to individual HHA revenues in CY 2024 and future years, we assumed that payments in CY 2024 and beyond would remain at CY 2024 levels through the following steps.

Step 1: We estimated the volume of home health episodes in CY 2023 by inflating the CY 2022 volume using the CBO baseline projected changes in Medicare part A enrollment.⁵

Step 2: Next, we obtained the CY 2023 budget neutral rate with assumed and actual behavior changes from the CY 2023 Final Rule as follows:

- 1) The CY 2023 budget neutral rate with assumed behavior changes is the CY 2023 standardized 30-day payment rate of \$2,010.69 (which applies only half of the permanent behavior adjustment), and
- 2) We obtained the CY 2023 budget neutral rate with actual behavior changes by multiplying the recalculated CY 2022 base payment rate of \$1,841.55⁶ by the CY 2023 case-mix weights recalibration neutrality factor, the wage index budget neutrality factor and payment update.

Step 3: We then calculated the total CY 2023 payments with assumed and actual behavior changes by multiplying the projected volume (from *Step 1*) by the payment rates with assumed and actual behavior changes (from *Step 2*). We estimated CY 2023 overpayments of \$643 million from the difference between total payments with assumed and actual behavior changes.

⁵ CBO Baseline Medicare, May 2023. <https://www.cbo.gov/system/files/2023-05/51302-2023-05-medicare.pdf>.

⁶ Obtained from CMS' analysis in the CY 2024 HH PPS Proposed Rule.

RESULTS

In total, we estimated temporary reductions of \$4.1 billion would be required to reconcile CY 2020, CY 2021, CY 2022, and CY 2023 aggregate payments to budget neutral levels. This represents a reduction of 24.5 percent (\$4.1 billion/ \$16.7 billion) to the CY 2024 projected payments.

OVERALL IMPACT OF CY 2024 HH PPS PROPOSED RULE REDUCTIONS AND FUTURE REDUCTIONS: IMPACT TO HHA REVENUES

In aggregate, we estimate that the payment reductions due to behavioral adjustments will lead to an approximate reduction of \$25 billion in cumulative home health-related payments in the period between 2020 through 2029. This amount includes the cumulative impacts of the CY 2020 -4.36 percent behavioral adjustment, the cumulative impacts of the CY 2023 and CY 2024 permanent adjustments, and a \$4.1 billion reduction due to temporary adjustments for CY 2020, CY 2021, CY 2022, and CY 2023. We note that this assumes that there are no further permanent reductions after CY 2024, although it is likely that CMS could calculate additional permanent reductions as new data becomes available.

METHODOLOGY

We determined the impact of the assumed behavioral, permanent, and temporary adjustments on home health payments between 2020 and 2029 through the following steps.

Step 1: We obtained the volume of home health episodes in CY 2020, CY 2021, and CY 2022 from 100% Medicare FFS claims data and estimated the volume of home health episodes in CY 2023 and beyond by inflating the CY 2022 volume using the CBO baseline projected changes in Medicare part A enrollment.

Step 2: Next, we obtained the CY 2020 through CY 2024 base payment rates from the respective Final Rules and projected payment rates for CY 2025 and CY 2029 by assuming that the base payment rates in subsequent years would be inflated using CMS' forecasts of the HH PPS market basket, less assumed productivity adjustments.

Step 3: We also modeled base payment rates for CY 2020 through CY 2029 without any behavioral adjustments by excluding the -4.36 percent behavioral adjustment in CY 2020 and permanent adjustments in CY 2023 and CY 2024.

Step 4: We determined the impact of the assumed behavioral, permanent, and temporary adjustments as the difference in total payments with and without any behavioral adjustments. Total payments with behavioral adjustments for CY 2020 through CY 2029 were calculated by multiplying the projected volume (in *Step 1*) by the base payment rates with behavioral adjustments (in *Step 2*). Total payments without behavioral adjustments for CY 2020 through CY 2029 were calculated by multiplying the projected volume (in *Step 1*) by the base payment rates without behavioral adjustments (in *Step 3*).

RESULTS

The results of our analysis are shown in **Exhibit 7**.

Exhibit 7: Projected Impact of Behavioral Adjustments in CY 2020 through CY 2029

| Total Payments | Impact of BA |
|---|---------------------------|
| 2020 | (\$699,933,751) |
| 2021 | (\$705,823,319) |
| 2022 | (\$766,304,099) |
| 2023 | (\$1,499,483,870) |
| 2024 | (\$2,616,280,420) |
| 2025 | (\$2,724,403,981) |
| 2026 | (\$2,874,694,185) |
| 2027 | (\$2,988,650,510) |
| 2028 | (\$3,149,653,923) |
| 2029 | (\$3,272,567,415) |
| Total Impact of Permanent Adjustments (CY 2020-CY 2029) | (\$21,297,795,473) |
| Total Impact of Temporary Adjustments (if applied between CY 2020-CY 2029) | (\$4,082,326,332) |
| Total Impact of Permanent and Temporary Adjustments (CY 2020-CY 2029) | (\$25,380,121,805) |

Source: Dobson | DaVanzo Analysis of HH Claims in LDS DUA 59233

OVERALL IMPACT OF CY 2024 HH PPS PROPOSED RULE REDUCTIONS AND FUTURE REDUCTIONS: IMPACT TO HHA MARGINS

We modeled the impact of the proposed permanent and temporary reductions to CY 2024 Medicare margins. Our analyses to determine home health agency Medicare margins are based on the MedPAC and CMS methodologies, as best as we understand them, and our results are closely aligned with other benchmarks produced using the same methodologies.

METHODOLOGY

Step 1: We first extracted data from the 2022 cost reports, the most recent cost report data available.⁷ We then extracted the Medicare PPS payments and corresponding costs from the 2022 Medicare Cost Reports.

Step 2: We calculated 2022 Medicare margins by (1) calculating Medicare PPS net income by subtracting costs from Medicare PPS payments, and (2) dividing Medicare PPS net income by Medicare PPS payments using the formula illustrated below.

$$2022 \text{ Medicare Margins} = \frac{\text{Medicare PPS payments} - \text{Medicare PPS Costs}}{\text{Medicare PPS Payments}}$$

Step 3: To determine the 2023 and 2024 Medicare margins, we modeled Medicare payments for each agency for 2023 by increasing 2022 payments by 0.7 percent and for 2024 payments by

⁷ Cost reports. CMS. (n.d.). Retrieved August 03, 2023, from <https://www.cms.gov/Research-Statistics-Data-and-Systems/Downloadable-Public-Use-Files/Cost-Reports>.

reducing modeled 2023 payments by 2.2 percent. We identified these payment updates from the CY 2023⁸ HH PPS proposed rule and CY 2024 HH PPS proposed rule.⁹

We modeled costs by increasing 2022 costs by the market basket updates identified from annualized Home Health Agency market basket data published by CMS.¹⁰

We then calculated the Medicare margins from each year using the same formula as in *Step 2* above.

Step 4: To model the impact of temporary adjustments, we assumed that temporary reductions due to 2020 to 2023 overpayments would be applied over a 3-year period from 2025 to 2027, equating to payment reductions of \$1.36 billion each year between 2025 and 2027. We calculated the percent reduction in revenues by dividing the overpayments for each year by projected 2024 payments obtained from the CMS LDS OASIS files, equating to a reduction of 8.2% each year. We then calculated the Medicare margins using the same formula in *Step 2*.

Step 5: We determined the counts and percentages of agencies with negative and positive for each scenario in *Step 2* and *Step 4*.

RESULTS

As shown in **Exhibit 8**, the percentage of HHAs with negative Medicare margins will increase from 16.2 percent in CY 2022 to 26.5 percent in 2024 due to the proposed CY 2024 payments. Further, the additional payment reductions due to temporary adjustments of \$4.1 billion could result in 40 percent of HHAs experiencing negative Medicare margins by 2027.

Exhibit 8: Percent of Home Health Agencies with Negative Medicare Margins

| | Percent of HHAs with Negative Medicare Margins | | | | | |
|---------------------|--|-------|-------|-------|-------|-------|
| | 2022 | 2023 | 2024 | 2025* | 2026* | 2027* |
| All Agencies | 16.2% | 21.2% | 26.5% | 38.8% | 39.1% | 39.5% |

Source: Dobson | DaVanzo Analysis of 2022 Medicare Cost Reports

*Includes temporary reductions

4. Analysis of HH PPS Market baskets

HH PPS MARKET BASKETS MAY NOT BE REFLECTIVE OF ACTUAL PRICE TRENDS IN THE HH INDUSTRY

In the CY 2024 HH PPS proposed rule, CMS proposes a 3.0 percent market basket update. However, this does not reflect the actual price trends in the industry as the market basket composite index is determined on a 4-quarter rolling average basis—failing to account for home health specific price changes on a real-time basis.

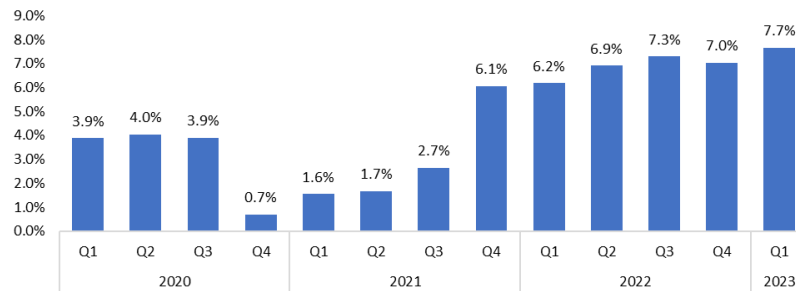
⁸ CY 2023 HH PPS Proposed Rule, 85 FR 70298. Available at: <https://www.federalregister.gov/documents/2022/06/23/2022-13376/medicare-program-calendar-year-cy-2023-home-health-prospective-payment-system-rate-update-home>.

⁹ CY 2024 HH PPS Proposed Rule, 87 FR 37600. Available at: <https://www.federalregister.gov/documents/2023/07/10/2023-14044/medicare-program-calendar-year-cy-2024-home-health-hh-prospective-payment-system-rate-update-hh>.

¹⁰ Market basket data. CMS. (n.d.). Retrieved August 12, 2022, from <https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/MedicareProgramRatesStats/MarketBasketData>.

For example, while CMS proposes a 3.0 percent market basket update for CY 2024, BLS data shows that nursing staff wages will grow by 7.7 percent in Q1 2023 compared to Q1 2022. These results are shown in **Exhibit 9**.

Exhibit 9: Quarterly Growth (Year-over-Year) in Nursing Staff Hourly Wages, 2020-2023



Source: Bureau of Labor Statistics¹¹

IMPACT OF THE CY 2021 AND CY 2022 FORECAST ERROR ON FUTURE PAYMENTS

We determined the impact of the 5.2 percent forecast error on home health payments between 2021 and 2030 through the steps outlined below.

METHODOLOGY

Step 1: We obtained the projected market basket rates used by CMS in the CY 2021 HH PPS¹² and CY 2022 HH PPS¹³ Final Rules and compared them to the actual market basket rates subsequently published by CMS for the respective years.¹⁴ We then calculated actual and projected market basket cumulative rates for CY 2021 and CY 2022 as follows:

- *Actual market basket cumulative rate* – We determined the cumulative actual market basket rate by multiplying the actual market basket increase of 4.1% in CY 2021 (104.1% of CY 2020) by the actual market basket increase of 6.5% in CY 2022 (106.3% of CY 2020), yielding a 10.7% cumulative market basket rate $((104.1\% * 106.3\%) - 1 = 10.7\%)$; and
- *CMS projected market basket cumulative rate* – Using the same methodology, we determined the cumulative projected market basket rate by multiplying the projected market basket increase of 2.3% used in the CY 2021 NPRM (102.3% of CY 2020) by the projected market basket increase of 3.1% used in the CY 2022 NPRM (103.1% of CY 2021), yielding a 5.5% cumulative market basket rate $((102.3\% * 103.1\%) - 1 = 5.5\%)$.

As illustrated in **Exhibit 9**, the forecast error of 5.2% is the difference between the actual cumulative market basket rates and the projected cumulative market basket rates as identified in Final Rules.

¹¹ https://data.bls.gov/cew/apps/table_maker/v4/table_maker.htm#type=1&year=2022&qtr=A&own=5&ind=6216&supp=0

¹² 85 FR 70298: <https://www.federalregister.gov/documents/2020/11/04/2020-24146/medicare-and-medicaid-programs-cy-2021-home-health-prospective-payment-system-rate-update-home>.

¹³ 86 FR 62240: <https://www.federalregister.gov/documents/2021/11/09/2021-23993/medicare-and-medicaid-programs-cy-2022-home-health-prospective-payment-system-rate-update-home>.

¹⁴ <https://www.cms.gov/files/zip/market-basket-history-and-forecasts.zip>.

Exhibit 9: Market Basket Forecast Error in CY 2021 through CY 2022

| MB Forecast Error Impact | CY 2021 | CY 2022 | Cumulative |
|--|-------------|-------------|-------------|
| Actual Market Basket | 4.1% | 6.3% | 10.7% |
| HH PPS Projected Market Basket (Used in Final Rules) | 2.3% | 3.1% | 5.5% |
| Difference | 1.8% | 3.2% | 5.2% |

Source: Dobson | DaVanzo Analysis

Step 2: We then calculated the current and projected home health payments for CY 2021 through CY 2030 by multiplying the standard base payment rates by the projected volume of fully paid home health cases for each year and adjusting for PEPs, LUPA and Outlier payments. We obtained the payment rates for CY 2021 through CY 2023 from Final Rules and applied the projected market basket update rates, less assumed productivity adjustments, to obtain payment rates for CY 2024 through CY 2030. The steps for the analysis are described below:

Step 2a: Base Payment Rates (P)

- **Base Payment Rates for CY 2021 through CY 2023.** We obtained base payment rates for CY 2021 through CY 2023 from the published Final Rules for each respective year.
- **Base Payment Rate for CY 2024.** In the CY 2023 HH PPS Final Rule, CMS indicated it would need to apply a -7.85% permanent prospective adjustment to the CY 2023 base payment rate to offset increased estimated aggregate expenditures, but the agency only finalized half (-3.925%) of the proposed permanent adjustment. We applied an additional -5.653% in permanent behavioral adjustments to the CY 2024 base payment rate as stated by CMS in the CY 2024 HH PPS Proposed Rule.
- **Base Payment Rates for CY 2025 through CY 2030.** Next, we modelled payments for CY 2025 through CY 2030 by assuming that the base payment rates in subsequent years would be inflated using CMS’ forecasts of the HH PPS market basket, less assumed productivity adjustments.¹⁵

Step 2b: Home Health Case Volume (Q)

- **Volume of Home Health Cases for CY 2021 through CY 2030.** We projected the volume of home health cases from CY 2021 through CY 2030 using the growth rate of Medicare Part A beneficiaries provided by the CBO and the CY 2020 home health volume of cases as a base.¹⁶

Step 2c: Total Medicare Payments (P x Q)

- **Total Payments for CY 2021 through CY 2030.** To determine total payments for each year, we multiplied the base payment rate for each year (Step 1b) by the respective volume of fully paid estimated home health cases (Step 1c). From the HH Claims data¹⁷, we identified that fully paid cases are 86 percent of all cases. We then adjusted the total payments for fully paid cases for non-fully paid cases including PEPs, LUPAs and outliers to determine payments for all cases. From the HH Claims data¹⁸, we determined that 91 percent of payments in CY 2021 are fully paid cases, therefore

¹⁵ We assumed that no further adjustments due to the wage index or case mix budget neutrality factor are made for CY 2025 through CY 2026.

¹⁶ CBO Baseline Medicare, May 2023. <https://www.cbo.gov/system/files/2023-05/51302-2023-05-medicare.pdf>.

¹⁷ Dobson | DaVanzo Analysis of HH PPS Claims Data Under DUA RIF 54757

¹⁸ Dobson | DaVanzo Analysis of HH PPS Claims Data Under DUA RIF 54757

total payments for all cases can be obtained by dividing the payments for fully paid cases by 91 percent.

- Payment Adjustments for CY 2025 through CY 2027.** In the CY 2023 HH PPS Final Rule, CMS indicated it would need to make temporary adjustments of offset payments it assessed as over-payments. In the CY 2023 HH PPS Final Rule, CMS calculated temporary adjustments of -\$873,073,121 for CY 2020, -\$1,211,002,953 in CY 2021. In the CY 2024 HH PPS Proposed Rule, CMS calculated temporary adjustments of -\$1,355,208,655 for CY 2022. We estimated that CMS would identify additional temporary adjustments of -\$643,041,603 for CY 2023, yielding a total of -\$4,082,326,332 in temporary adjustments. We assumed CMS would apply these reductions over 3 years from CY 2025 to CY 2027 at -\$1,360,775,444 each year and applied these reductions to the total payments.

Step 3: We estimated current and projected home health payments for CY 2021 through CY 2030 by multiplying the base payment rates by the projected volume of home health cases for each year. In this scenario we used the base payment rates determined by applying the actual market basket update rates for CY 2021 and CY 2022 and keeping all other inputs constant. We then followed the same steps in Step 1 to determine the alternative total payments.

Step 4: We calculated the impact of the forecast error as the difference between total payments based on projected market basket forecasts, as calculated in *Step 1*, and total payments based on actual market basket updates, alternative payments, as calculated from *Step 2*.

RESULTS

We calculated a cumulative impact of \$10.99 billion in underpayments to home health agencies over the 10-year period CY 2021 through CY 2030 due to the forecast errors in CY 2021 and CY 2022. Results are summarized in *Exhibit 10*, below.

Exhibit 10: Projected Impact of 5.2 Forecast Market Basket Error in CY 2021 through CY 2030

| Total Payments | Impact of CY 2021 and CY 2022 |
|----------------|-------------------------------|
| | Forecast Error |
| 2021 | -\$285,512,085 |
| 2022 | -\$867,452,091 |
| 2023 | -\$871,874,624 |
| 2024 | -\$1,115,186,361 |
| 2025 | -\$1,161,316,235 |
| 2026 | -\$1,225,352,343 |
| 2027 | -\$1,273,931,221 |
| 2028 | -\$1,342,554,653 |
| 2029 | -\$1,394,931,985 |
| 2030 | -\$1,449,139,655 |
| Total | -\$10,987,251,254 |

Source: Dobson | DaVanzo Analysis