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EXPANDED HOME HEALTH VALUE-BASED PURCHASING (HHVBP) MODEL

# How the Total Performance Score (TPS) Becomes the Final Payment Adjustment



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## Introduction

Beginning January 1, 2022, the Centers for Medicare & Medicaid Services (CMS) launched the expanded [Home Health Value-Based Purchasing \(HHVBP\) Model](#). The expanded HHVBP Model incentivizes all competing Medicare-certified home health agencies (HHAs) receiving payment from CMS in the 50 states, District of Columbia, and U.S. territories to provide higher-quality and more efficient care within the Medicare Home Health Prospective Payment System (HH PPS).

Beginning in calendar year (CY) 2025, under the expanded Model, HH PPS payments will be adjusted upward or downward by up to 5% based on the Total Performance Score (TPS) of competing HHAs. The amount that an HHA's payments will be adjusted is called the Final TPS-adjusted payment percentage, or APP.

**Adjusted payment percentage (APP)** is the percentage by which an HHA's final claim payment amount under the HH PPS changes in accordance with the methodology described in [§ 484.370](#). CMS reports the payment adjustment percentage in the HHA's Annual Report and applies the percentage to an HHA's Medicare fee-for-service (FFS) payments for the corresponding payment year.

This resource reviews the steps in the adjusted payment percentage (APP) calculation and is the third in a series that focuses on methods for care points, total performance scoring, and payment adjustment. Resources in this series include:

1. *"How Measure Performance Becomes Care Points"* – on-demand video
2. *"How Care Points Become the Total Performance Score (TPS)"* – on-demand video and written resource
3. *"How the Total Performance Score (TPS) Becomes the Final Payment Adjustment"* – on-demand video and this written resource

These resources are available on the [Expanded HHVBP Model webpage](#).

## Overview

The APP is calculated and reported to HHAs in the Annual Performance Report (APR) under the Annual Payment Adjustment tab. For each HHA, the APP is specific to a payment year and based on the HHA's TPS for the respective performance year. The performance year is two (2) years prior to the payment year. For example, HHAs certified by Medicare before January 1, 2022, and that have sufficient data, will have their performance assessed during CY 2023 (the first performance year), receive their APR in CY 2024, and have the APP applied to all Medicare fee-for-service (FFS) claims payments in CY 2025 (the first payment year).<sup>1</sup>

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<sup>1</sup> For a description of care points, cohorts, data reporting requirements, TPS calculations, and other expanded HHVBP Model features, see resources available on the [Expanded HHVBP Model webpage](#).

A linear exchange function (LEF) is a mathematical function used to translate the TPS into the APP. The LEF is specific to each cohort, smaller-volume and larger-volume. The data inputs used in LEF and APP calculations are:

- Performance year HHA-specific TPS values and cohort assignments.
- HHA-specific Medicare FFS claims payments from the year prior to the performance year.

There are seven (7) steps used to calculate the APP, grouped as follows:

- Calculate payment year and cohort-level LEF (Steps one (1) through four (4)).
- Apply the LEF ratio to determine APP for each HHA (Steps five (5) through seven (7)).

## Adjusted Payment Percentage Calculation

**Appendix A** contains a complete table highlighting each of the seven (7) steps for the APP calculation, adapted from an example provided in the [CY 2022 HH PPS final rule](#). The eight (8) HHAs represent one (1) cohort. Data contained in this table are for illustrative purposes only.

### CALCULATE PAYMENT YEAR AND COHORT-SPECIFIC LEF RATIO

The payment year LEF ratio is calculated separately for each expanded HHVBP Model cohort, based on the following steps. **Exhibit 1** illustrates the calculations for steps one (1) to four (4). Column C1 in Exhibit 1 contains the TPS for each of the eight HHAs.

**Exhibit 1. Payment Adjustment Calculation Example, Steps 1 – 4**

Home Health Agency (HHA) #	(C1)	Step 1 (C2)	Step 2 (C3)	Step 3 (C4)	Step 4 (C5)
	Total Performance Score (TPS)	Prior Year Payment	Unadjusted Payment Amount $5\% \times (C2)$	TPS-Adjusted Payment Amount $(C1/100) \times (C3)$	Linear Exchange Function (LEF) Ratio $Total (C3) / Total (C4)$
HHA 1	38	\$100,000	\$5,000	\$1,900	1.931
HHA 2	55	\$145,000	\$7,250	\$3,988	1.931
HHA 3	22	\$800,000	\$40,000	\$8,800	1.931
HHA 4	85	\$653,222	\$32,661	\$27,762	1.931
HHA 5	50	\$190,000	\$9,500	\$4,750	1.931
HHA 6	63	\$340,000	\$17,000	\$10,710	1.931
HHA 7	74	\$660,000	\$33,000	\$24,420	1.931
HHA 8	25	\$564,000	\$28,200	\$7,050	1.931
			\$172,611	\$89,379	
			Sum C3	Sum C4	

**Step 1:** Determine the HHA's Prior Year Payment

- For each HHA in the cohort, the Prior Year Payment (Column C2) is the total Medicare FFS home health claims payment for the year prior to the payment year.

**Step 2:** Determine the HHA Unadjusted Payment Amount

- For each HHA in the cohort, the HHA Unadjusted Payment Amount (Column C3) is calculated by multiplying the 5% maximum payment percentage by the Prior Year Payment in Step 1 (Column C2).
- The total Unadjusted Payment Amount for all HHAs in the cohort is in the row below (Sum C3).

**Step 3:** Determine the HHA TPS-Adjusted Payment Amount

- For each HHA in the cohort, the HHA TPS Adjusted Payment Amount (Column C4) is calculated by dividing the TPS (Column C1) by 100 and multiplying it by the Unadjusted Payment Amount (Column C3).
- The total TPS-Adjusted Payment Amount for all HHAs in the cohort is in the row below (Sum C4).

**Step 4:** Calculate the Linear Exchange Function (LEF) Ratio (Column C5)

- Divide the cohort-level Unadjusted Payment Amount (Column C3) by the cohort-level TPS-Adjusted Payment Amount (Column C4). This is the Linear Exchange Function (LEF) Ratio.
- *The LEF ratio is the same for each HHA in the respective cohort.*

## **APPLY LEF RATIO TO DETERMINE APP FOR EACH HHA**

The LEF ratio is used to ensure that the total TPS-Adjusted Payment Amount (Sum C3) is equal to the total Unadjusted Payment Amount (Sum C6) across all HHAs a cohort. It is calculated using the following steps. The results are available in **Exhibit 2**.

**Exhibit 2. Payment Adjustment Calculation Example, Steps 5 – 7**

Home Health Agency (HHA) #	Step 5 (C6)	Step 6 (C7)	Step 7 (C8)
	Final TPS-Adjusted Payment Amount (C4) x (C5)	TPS-Adjusted Payment Percentage (C6) / (C2)	Final TPS-Adjusted Payment Percentage (C7) -5%
HHA 1	\$3,669	3.669%	-1.331%
HHA 2	\$7,701	5.311%	0.311%
HHA 3	\$16,995	2.124%	-2.876%
HHA 4	\$53,614	8.208%	3.208%
HHA 5	\$9,173	4.828%	-0.172%
HHA 6	\$20,683	6.083%	1.083%
HHA 7	\$47,160	7.146%	2.146%
HHA 8	\$13,615	2.414%	-2.586%
	\$172,611		
	Sum C6		

**Step 5:** Determine the HHA Final TPS-Adjusted Payment Amount

- The HHA Final TPS-Adjusted Payment Amount (Column C6) is calculated by multiplying the HHA TPS-Adjusted Payment Amount (Column C4) by the LEF Ratio (Column C5).

**Step 6:** Determine the HHA TPS-Adjusted Payment Percentage

- The HHA TPS-Adjusted Payment Percentage (Column C7) is calculated by dividing the HHA TPS-Adjusted Payment Amount (Column C6) by the Prior Year Payment (Column C2). This represents the gross payment percentage applicable to your HHA without accounting for the 5% payment reduction.

**Step 7:** Determine the HHA Final TPS-Adjusted Payment Percentage (APP)

- Subtract 5% from the HHA TPS-Adjusted Payment Percentage (Column C7).
- The Final TPS-Adjusted Payment Percentage (Column C8) is capped at +/- 5%.

Each competing HHA will receive their HHA-specific TPS and APP calculations, in addition to the respective aggregate cohort statistics, in the APR.

For questions about the content of the expanded HHVBP Model interim IPR and APR, email the HHVBP Help Desk at [HHVBPquestions@lewin.com](mailto:HHVBPquestions@lewin.com).

## Appendix A

Payment Adjustment Calculation Example<sup>2</sup>

Home Health Agency (HHA) #	(C1)	Step 1 (C2)	Step 2 (C3)	Step 3 (C4)	Step 4 (C5)	Step 5 (C6)	Step 6 (C7)	Step 7 (C8)
	Total Performance Score (TPS)	Prior Year Payment	Unadjusted Payment Amount $5\% \times (C2)$	TPS-Adjusted Payment Amount $(C1/100) \times (C3)$	Linear Exchange Function (LEF) Ratio $Total (C3) / Total (C4)$	Final TPS-Adjusted Payment Amount $(C4) \times (C5)$	TPS-Adjusted Payment Percentage $(C6) / (C2)$	Final TPS-Adjusted Payment Percentage $(C7) -5\%$
HHA 1	38	\$100,000	\$5,000	\$1,900	1.931	\$3,669	3.669%	-1.331%
HHA 2	55	\$145,000	\$7,250	\$3,988	1.931	\$7,701	5.311%	0.311%
HHA 3	22	\$800,000	\$40,000	\$8,800	1.931	\$16,995	2.124%	-2.876%
HHA 4	85	\$653,222	\$32,661	\$27,762	1.931	\$53,614	8.208%	3.208%
HHA 5	50	\$190,000	\$9,500	\$4,750	1.931	\$9,173	4.828%	-0.172%
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HHA 8	25	\$564,000	\$28,200	\$7,050	1.931	\$13,615	2.414%	-2.586%
			\$172,611	\$89,379		\$172,611		
			Sum C3	Sum C4		Sum C6		

<sup>2</sup> From [CY 2022 HH PPS final rule](#), Table 31 (page 62327). Note that this example, showing eight (8) HHAs, is used only to illustrate the calculation steps. Actual expanded HHVBP Model cohorts include hundreds of HHAs located throughout the country. APRs will provide each HHA with their own TPS and APP calculations, and aggregate cohort data.