

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

Expanded Home Health Value-Based Purchasing (HHVBP) Model

August 2022

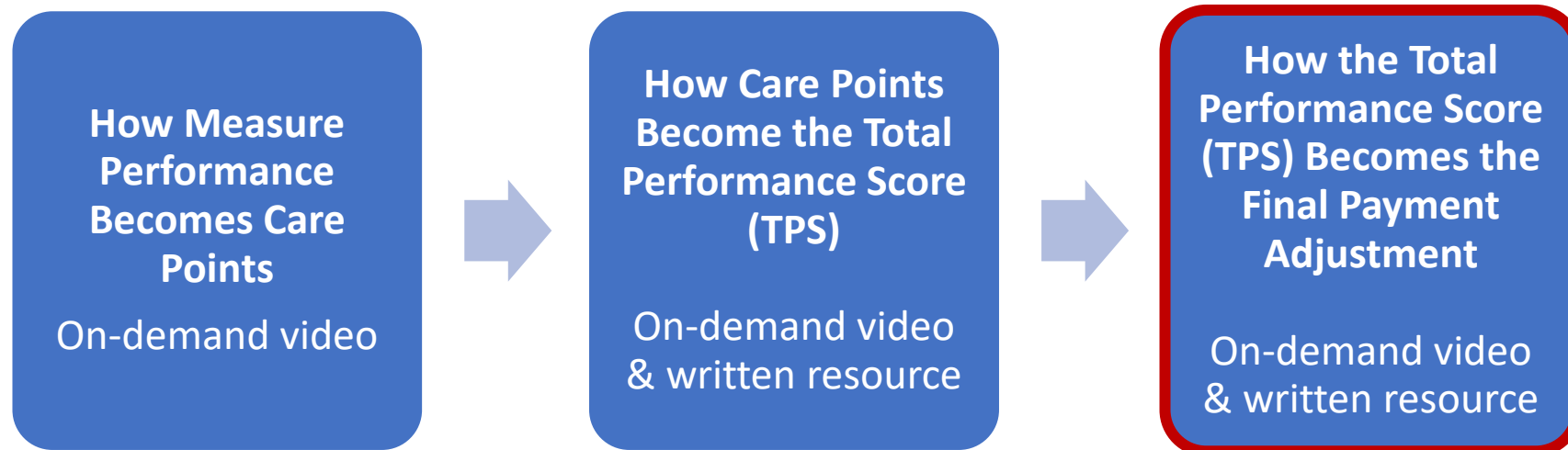


This material was prepared by Lewin Group under the HHVBP Technical Assistance contract (HHS-500-2014-00331.) with the Centers for Medicare & Medicaid Services (CMS), an agency of the U.S. Department of Health and Human Services (HHS). Views expressed in this material do not necessarily reflect the official views or policy of CMS or HHS, and any reference to a specific product or entity herein does not constitute endorsement of that product or entity by CMS or HHS.



Care Points, Total Performance Score, and Payment Adjustment Series

This resource is the third in a series that describes quality measurement, performance, and payment adjustment methods. Resources in this series include:

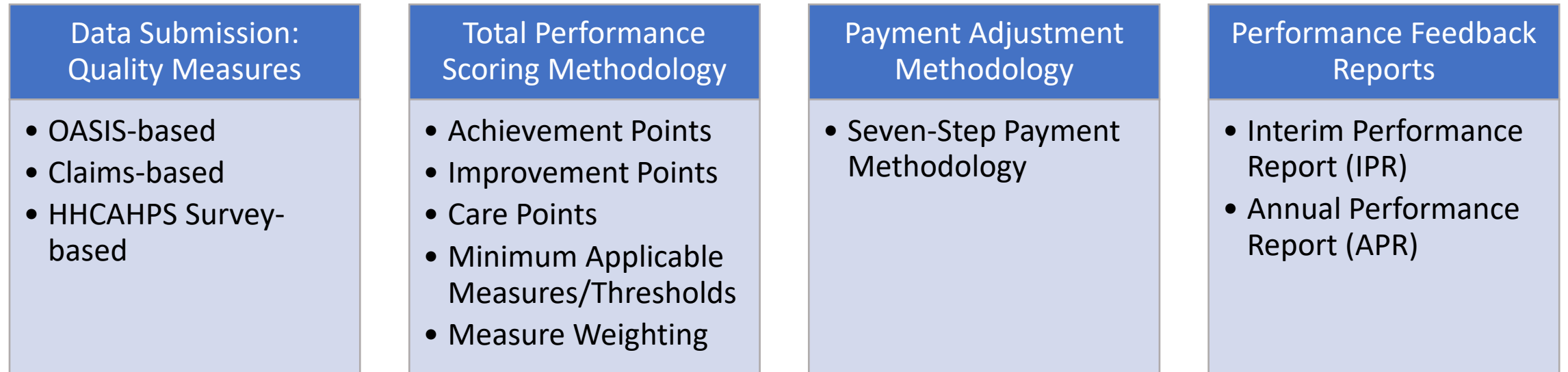


These resources are available on the Expanded HHVBP Model webpage:
<https://innovation.cms.gov/innovation-models/expanded-home-health-value-based-purchasing-model>

Expanded HHVBP Model Payment Adjustment

- Home health services for Medicare fee-for-service (FFS) beneficiaries are paid under the Home Health Prospective Payment System (HH PPS).
- Beginning in calendar year (CY) 2025, HH PPS payments will be adjusted by up to 5% (upward or downward) based on CY 2023 home health agency (HHA) performance.
- HHVBP payment adjustment does not apply to Medicare Advantage payments.
- Payment adjustment is based on performance year Total Performance Score (TPS).
- Annual payment percentage and calculations are provided in the HHA's Annual Performance Report (APR).

Components of the Expanded HHVBP Model: From Quality Care to Payment Adjustment



Additional information and resources now available on the Expanded HHVBP Model webpage
<https://innovation.cms.gov/innovation-models/expanded-home-health-value-based-purchasing-model>

Payment Adjustment Methodology

Linear Exchange Function (LEF)

- The amount that an HHA's payments will be adjusted is called the HHA Final TPS-adjusted payment percentage, or APP.
- A linear exchange function (LEF) is a mathematical function used to translate the TPS into the APP.
- The LEF is specific to a given payment year.
- The LEF is specific to the smaller-volume and larger-volume HHA cohorts.

Payment Adjustment Overview

Calculate Payment Year and Cohort-Specific LEF Ratio

Step 1	Determine Prior Year Payment
Step 2	Determine Unadjusted Payment Amount
Step 3	Determine TPS-Adjusted Payment Amount
Step 4	Calculate LEF Ratio for the Cohort

Apply LEF Ratio to Determine APP for Each HHA

Step 5	Determine HHA Final TPS-Adjusted Payment Amount
Step 6	Determine HHA TPS-Adjusted Payment Percentage
Step 7	Determine HHA Final TPS-Adjusted Payment Percentage (APP)

APP Calculation Footnotes

Step 1

Your HHA's total Medicare FFS home health claim payments from the prior year is shown in (C2). The total amount of prior year Medicare FFS home health claim payments for HHAs in your HHA's cohort is shown below the value for your HHA.

Step 2

The Unadjusted Payment Amount in (C3) is calculated by multiplying the 5% maximum payment percentage for CY 2023 by your Prior Year Payments in (C2). The total Unadjusted Payment Amount for all HHAs in your cohort is below the value for your HHA.

Step 3

The TPS-Adjusted Payment Amount (C4) is calculated by dividing your HHA's TPS in (C1) by 100 and multiplying it by the Unadjusted Payment Amount in (C3). The total TPS-Adjusted Payment Amount across all HHAs in your HHA's cohort is shown below the value for your HHA. Note that this cohort-level value is obtained by applying the calculation to each HHA in the cohort separately and then summing across the individual values (and thus is not exactly the same as applying the calculation for Step 3 to the cohort values for (C1) and (C3)).

Step 4

The Linear Exchange Function (LEF) ratio in (C5) is calculated by dividing the total cohort-level Unadjusted Payment Amount (C3) by the total cohort-level TPS-Adjusted Payment Amount (C4). This ratio is needed to ensure that the total TPS-Adjusted Payment Amount is equal to the total Unadjusted Payment Amount across all HHAs in your HHA's cohort. The LEF ratio is the same for each HHA in your HHA's cohort.

APP Calculation Footnotes (continued)

Step 5

The Final TPS-Adjusted Payment Amount (C6) is calculated by multiplying the TPS-Adjusted Payment Amount (C4) by the LEF ratio (C5). The total Final TPS-Adjusted Payment Amount for all HHAs in your HHA's cohort is below the value for your HHA.

Step 6

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

Step 7

The Final TPS-Adjusted Payment Percentage (C8) is calculated by subtracting the 5% maximum payment adjustment percentage from the TPS-Adjusted Payment Percentage (C7). This percentage represents the overall payment percentage that will be applied to your CY 2025 Medicare FFS home health claim payments. A positive Final TPS-Adjusted Payment Percentage would result in increases to your CY 2025 Medicare FFS home health claim payments. A negative Final TPS-Adjusted Payment Percentage would result in reductions to your CY 2025 Medicare FFS home health claim payments. The Final TPS-Adjusted Payment Percentage (C8) is capped at 5%.

Example – Cohort LEF Ratio

Payment Adjustment Calculation								
	(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%
HHA 6	63	\$340,000	\$17,000	\$10,710	1.931	\$20,683	6.083%	1.083%
HHA 7	74	\$660,000	\$33,000	\$24,420	1.931	\$47,160	7.146%	2.146%
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		

Step 1: Determine the HHA Prior Year Payment (C2)

Payment Adjustment Calculation								
	(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 $(C7) - 5\%$
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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		

Step 2: Determine the HHA Unadjusted Payment Amount (C3)

Payment Adjustment Calculation								
	(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 $(C7) - 5\%$
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HHA 5	50	\$190,000	\$9,500	\$4,750	1.931	\$9,173	4.828%	-0.172%
HHA 6	63	\$340,000	\$17,000	\$10,710	1.931	\$20,683	6.083%	1.083%
HHA 7	74	\$660,000	\$33,000	\$24,420	1.931	\$47,160	7.146%	2.146%
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		

Step 3: Determine the HHA TPS-Adjusted Payment Amount (C4)

Payment Adjustment Calculation								
	(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%
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HHA 5	50	\$190,000	\$9,500	\$4,750	1.931	\$9,173	4.828%	-0.172%
HHA 6	63	\$340,000	\$17,000	\$10,710	1.931	\$20,683	6.083%	1.083%
HHA 7	74	\$660,000	\$33,000	\$24,420	1.931	\$47,160	7.146%	2.146%
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		

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

Payment Adjustment Calculation								
	(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 $(C7) - 5\%$
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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%
HHA 6	63	\$340,000	\$17,000	\$10,710	1.931	\$20,683	6.083%	1.083%
HHA 7	74	\$660,000	\$33,000	\$24,420	1.931	\$47,160	7.146%	2.146%
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		

Results from Steps 1-4

Annual Payment Adjustment Calculation

	(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 $(C7) - 5\%$
Your HHA:	23.411	\$2,307,857	\$115,393	\$27,015	4.574	\$123,569	5.354%	0.354%
Your HHA's Cohort (all HHAs):	22.501	\$17,184,680,726	\$859,234,036	\$187,845,948	4.574	\$859,234,036	5.000%	-

TPS (23.411) – from Measure Scorecard tab.

LEF Ratio (4.574) – calculated by CMS (in Steps 1-4).

Calculation steps are also shown on the Annual Payment Adjustment tab.

Step 5: Determine HHA Final TPS-Adjusted Payment Amount

Annual Payment Adjustment Calculation								
	(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 $(C7) - 5\%$
Your HHA:	23.411	\$2,307,857	\$115,393	\$27,015	4.574	\$123,569	5.354%	0.354%
Your HHA's Cohort (all HHAs):	22.501	\$17,184,680,726	\$859,234,036	\$187,845,948	4.574	\$859,234,036	5.000%	-

(C4) x (C5) = Final TPS–Adjusted Payment Amount

$$\$27,015 \times 4.574 = \$123,569$$

Figures may not match exactly due to rounding of displayed results.

Step 6: Determine HHA TPS-Adjusted Payment Percentage

Annual Payment Adjustment Calculation								
	(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% x (C2)	TPS-Adjusted Payment Amount (C1/100) x (C3)	Linear Exchange Function (LEF) Ratio Total (C3)/Total (C4)	Final TPS-Adjusted Payment Amount (C4) x (C5)	TPS-Adjusted Payment Percentage (C6)/(C2)	Final TPS-Adjusted Payment Percentage (C7) -5%
Your HHA:	23.411	\$2,307,857	\$115,393	\$27,015	4.574	\$123,569	5.354%	0.354%
Your HHA's Cohort (all HHAs):	22.501	\$17,184,680,726	\$859,234,036	\$187,845,948	4.574	\$859,234,036	5.000%	-

(C6)/(C2) = TPS-Adjusted Payment Percentage

$$(\$123,569)/(\$2,307,857) * 100\% = 5.354\%$$

Figures may not match exactly due to rounding of displayed results.

Step 7: Determine HHA Final TPS-Adjusted Payment Percentage

Annual Payment Adjustment Calculation								
	(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 $(C7) - 5\%$
Your HHA:	23.411	\$2,307,857	\$115,393	\$27,015	4.574	\$123,569	5.354%	0.354%
Your HHA's Cohort (all HHAs):	22.501	\$17,184,680,726	\$859,234,036	\$187,845,948	4.574	\$859,234,036	5.000%	-

(C7) – 5% = Final TPS–Adjusted Payment Percentage (APP)

$$5.354\% - 5\% = 0.354\%$$

*Figures may not match exactly due to rounding of displayed results.
Note: The Final TPS-Adjusted Payment Percentage is capped at +/- 5%.*

Expanded HHVBP Model Resources

Expanded HHVBP Model Help Desks

HHVBP Model Help Desk		iQIES Help Desk	
<p>Questions related to implementation, measures, resources, HHVBP report content, or other questions related to the HHVBP Model.</p> <p>Email: HHVBPquestions@lewin.com</p>		<p>Technical questions related to Internet Quality Improvement Evaluation System (iQIES) platform registration, navigation, or assistance with accessing reports.</p> <p>Email: iQIES@cms.hhs.gov Web page: iQIES Help</p> <p>Phone: 1 (800) 339-9313</p>	
<p>When sending an email to either help desk, please include the following information:</p> <ul style="list-style-type: none"> • Your first and last name • Email address • CCN(s) or Facility ID • Facility/agency name and address • If CCN or Facility ID is unknown, please include facility/agency name and zip code 			
Home Health Quality Reporting Program Help Desks			
Home Health Quality Help Desk		Home Health CAHPS	
<p>Questions related to: Home Health Quality, including Care Compare (excluding HHCAHPS), OASIS coding and OASIS documentation, Quality reporting requirements & deadlines, Data reported in quality reports, Measure calculations, Quality of Patient Care Star Rating (excluding suppression requests), Public reporting, Risk adjustment, and Quality Assessment Only (QAO)/Pay for Reporting (P4P).</p> <p>Email: homehealthqualityquestions@cms.hhs.gov</p>		<p>Questions related to the Home Health CAHPS Survey or the Patient Survey Star Ratings.</p> <p>Email: hhcahps@rti.org Phone: 1 (866) 354-0985</p>	

Want to Learn More?



The screenshot shows the CMS.gov website with the following content:

- Navigation: Home | About CMS | Newsroom | Archive | Help | Print
- Search bar
- Menu: Medicare, Medicaid/CHIP, Medicare-Medicaid Coordination, Private Insurance, Innovation Center, Regulations & Guidance, Research, Statistics, Data & Systems, Outreach & Education
- Breadcrumbs: Innovation Center Home > Innovation Models > Expanded Home Health Value-Based Purchasing Model
- Section: **Expanded Home Health Value-Based Purchasing Model**
- Text: Building upon experience from the original Home Health Value-Based Purchasing Model (HHVBP Model), this page provides information, resources, and technical assistance to support implementation of the expanded HHVBP Model nationwide.
- Contact: Have questions about the expanded HHVBP Model? Please send questions to HHVBPquestions@lewin.com. Be sure to include your name and the home health agency's name and CCN.
- Subscription: Want to stay up to date on the expanded HHVBP Model? Please subscribe to the [HHVBP Model Expansion List Serv.](#)
- Section: **Background**
- Text: As authorized by section 1115A of the Act and finalized in the Calendar Year (CY) 2016 Home Health Prospective Payment System (HH PPS) final rule (80 FR 68624), the Center for Medicare and Medicaid Innovation (Innovation Center) implemented the Home Health Value-Based Purchasing (HHVBP) Model ("original Model") in nine (9) states on January 1, 2016. The design of the original HHVBP Model leveraged the successes and lessons learned from other CMS value-based purchasing programs and demonstrations to shift from volume-based payments to a model designed to promote the delivery of higher quality care to Medicare beneficiaries. The specific goals of the original HHVBP Model were to:
 1. Provide incentives for better quality care with greater efficiency;
 2. Study new potential quality and efficiency measures for appropriateness in the home health setting; and
 3. Enhance the current public reporting process.
- Text: The original HHVBP Model resulted in an average 4.6 percent improvement in HHAs' total performance scores (TPS) and an average annual savings of \$141 million to Medicare without evidence of adverse risks. The evaluation of the original model also found reductions in unplanned acute care hospitalizations and skilled nursing facility (SNF) stays, resulting in reductions in inpatient and SNF spending. The U.S. Secretary of Health and Human Services determined that expansion of the original HHVBP Model would further reduce Medicare spending and improve the quality of care. In October 2020, the CMS Chief Actuary certified that expansion of the HHVBP Model would produce Medicare savings if expanded to all states.
- Text: On January 8, 2021, CMS announced the certification of the HHVBP Model for expansion nationwide, as well as the intent to expand the Model through notice and comment rulemaking. On July 7, 2021, CMS published the proposed rule for public comment.
- Section: **Model Summary**
- Text: Stage: Ongoing
Number of Participants: N/A
Category: Initiatives to Accelerate the Development and Testing of New Payment and Service Delivery Models
Authority: Section 3021 of the Affordable Care Act
- Section: **Milestones & Updates**
- Text: November 2, 2021
Announced: CY 2022 Home Health Proposed Payment System Final Rule published
- Section: **Stay Connected with the Innovation Center**
- Image: Social media icons for Facebook and Twitter
- Section: **Timeline**
- Text: January 1, 2022
Anticipated start of the pre-implementation year. HHAs will not be assessed on their

- Explore more resources on the [Expanded HHVBP Model Webpage](#):
 - Frequently Asked Questions (updated monthly)
 - Expanded HHVBP Model Guide
 - "How Measure Performance Becomes Care Points" Instructional Video
 - "How Care Points Become the Total Performance Score (TPS)" Recording & Written Resource
 - "How the Total Performance Score (TPS) Becomes the Final Payment Adjustment" Recording & Written Resource

- Contact the HHVBP TA Help Desk HHVBPquestions@lewin.com
- Subscribe to the [HHVBP Model Expansion listserv](#)
- Refer to the [CY 2022 HH PPS final rule](#)

Thank you!