CBE ID

4645

Title

Cross-Setting Discharge Function Score – for Home Health Agencies

Project

Advanced Illness and Post-Acute Care

Endorsement Status

Endorsed

Is Under Review

No

Next Maintenance Cycle

Fall 2029

Previous Endorsement Cycle

Fall 2024

Steward

Centers for Medicare & Medicaid Services

1.0 New or Maintenance

New

1.1 Measure Structure

Single Measure

1.3 Electronic Clinical Quality Measure (eCQM)

No

1.6 Measure Description

This outcome measure estimates the percentage of Home Health (HH) Medicare patients (18+) who meet or exceed an expected discharge function score over a 12-month period.

The expected discharge function score is a risk-adjusted estimate that accounts for patient characteristics.

1.7 Composite Measure

No

1.7 Measure Type

Outcome

1.8 Level of Analysis

Facility

1.9 Care Setting

Home Health

1.10 Measure Rationale

Measuring functional status of home health patients can provide valuable information about a home health agency's (HHAs) quality of care. A patient's functional status may be associated with adverse health outcomes such as falls, fractures, exacerbation of chronic conditions, and a higher risk of readmissions following home care. Predictors of poorer recovery in function include greater age, complications after hospital discharge, and residence in a nursing home. Understanding factors associated with poorer functional recovery facilitates the ability to estimate expected functional outcome recovery for patients, based on their personal characteristics.

Home health care can positively impact functional outcomes. In stroke patients, home-based rehabilitation programs administered by home health clinicians have shown significantly improved function. Home health services, delivered by a registered nurse positively impacted patient quality of life and clinical outcomes, including significant improvement in dressing lower body and bathing activities of daily living, meal preparation, shopping, and housekeeping instrumental activities of daily living.

The Cross-Setting Discharge Function Score for HH measure determines how successful each HHA is at achieving or exceeding an expected level of functional ability for its patients at discharge. An expectation for discharge function score is built for each HHA quality episode by accounting for patient characteristics that impact their functional status. The final Cross-Setting Discharge Function Score for HH for a given HHA is the proportion of that HHA's quality episodes where a patient's observed discharge function score meets or exceeds their expected discharge function score. HHAs with low scores indicate that they are not achieving the functional gains at discharge that are expected based upon patient characteristics and patient status at start of care (SOC) or resumption of care (ROC) for a larger share of their patients. The measure provides information to HHAs that has the potential to hold providers accountable for functional outcomes and encourages them to improve the quality of care they deliver. This measure also promotes patient wellness, encourages adequate nursing and therapy services to help prevent adverse outcomes (e.g., potentially preventable hospitalization) and increases the transparency of quality of care in the HH setting. The Cross-Setting Discharge Function Score for HH measure adds value to the HH Quality Reporting Program (QRP) function measure portfolio by using specifications that allow for better comparisons across Post-Acute Care (PAC) settings, considering both self-care and mobility activities in the function score, and refining the approach to addressing activity not attempted codes.

1.11 Measure Webpage

https://www.cms.gov/medicare/quality/home-health/home-health-quality-measures

1.13 Data Dictionary

Attached

1.13a Attach Data Dictionary

Sec 1.15c Denominator_ICD10_Exclusions.xlsx

1.14 Numerator

The numerator is the number of patients in a HH with a discharge function score that is equal to or higher than the calculated expected discharge function score. The function items used to determine the observed function score are: Eating (GG0130A3), Oral Hygiene (GGO130B3), Toileting Hygiene (GG0130C3), Roll left and right (GG0170A3), Lying to sitting on side of bed (GG0170C3), Sit to stand (GG0170D3), Chair/bed-to-chair transfer (GG0170E3), Toilet transfer (GG0170F3), Walk 10 feet (GG0170I3), and Walk 50 feet with two turns (GG0170J3) if not wheelchair-bound or Wheel 50 feet with two turns (GG0170R3) if wheelchair-bound.

1.14a Numerator Details

The numerator is the number of quality episodes during the reporting period in which the observed discharge function score (Section 1) for select standardized functional items/activities is equal to or greater than the expected discharge function score (Section 2).

Section 1. The observed discharge function score is the sum of individual function activities at discharge (**see Exhibit 1 in supplemental attachment**). The section in each PAC assessment instrument titled Section GG, Functional Ability and Goals, includes standardized patient assessment data elements that measure mobility and self-care functional status. The Cross-Setting Discharge Function Score for HH focuses on these standardized functional activities that are currently available across all PAC settings (Exhibit 1). Valid responses for the standardized functional items/activities are reported in **Exhibit 2** (**see supplemental attachment**).

The following steps are used to determine the observed discharge function score for each episode:

Step 1: If the code for an activity is between 06 (independent) and 01 (dependent), use the code as the score for that activity.

Step 2: If the code for an activity is 07, 09, 10, 88, dashed (-), skipped (^), or missing, then the score for that activity is estimated with statistical imputation (see Section 3.5).

Step 3: Sum scores across all activities to calculate the total observed discharge function score.

Step 4: Round the observed discharge function score to the fourth decimal place.

The definition of patients who are wheelchair users is specified in the Technical Report here: Home Health Discharge Function Technical Report - March 2024 (cms.gov). Different locomotion activities are used if the patient is a wheelchair user than for the remaining patients:

Use 2 * Wheel 50 Feet with 2 Turns (GG0170R) score to calculate the total observed discharge function score for quality episodes where (i) Walk 10 Feet (GG0170I) has an activity not attempted (ANA) code at both SOC/ROC and discharge and (ii) either Wheel 50 Feet with 2 Turns (GG0170R) has a code between 01 and 06 at either SOC/ROC or discharge. The remaining quality episodes use Walk 10 Feet (GG0170I) + Walk 50 Feet with 2 Turns (GG0170J) to calculate the total observed discharge function score.

In either case, 10 activities are used to calculate a patient's total observed discharge score and score values range from 10 – 60.

Section 2. The expected discharge function score is determined by applying the regression equation determined from risk adjustment to each HH quality episode using SOC/ROC OASIS data. Risk adjustment controls for patient characteristics such as SOC/ROC function score, age, and clinical conditions. Refer to Section 4.4 for details on risk adjustment. For consistent comparison against the observed discharge function score, the expected discharge function score is also rounded to the fourth decimal place.

1.15 Denominator

The total number of Medicare patient stay-level OASIS records with a discharge date in the measure target period, which do not meet the exclusion criteria.

1.15a Denominator Details

The denominator is the total number of HH quality episodes with an OASIS discharge record in the measure reporting period, which do not meet the exclusion criteria. The reporting period for the measure is 12 months (four quarters). Documentation on how HH quality episodes are constructed is available in the Home Health Quality Reporting Program Measure Calculations and Reporting User's Manual: Version 2.0 (https://www.cms.gov/files/document/hh-qrp-qm-users-manual-v20pdf.pdf).

1.15b Denominator Exclusions

A Medicare Part A episode-level record is excluded if:

1) Patient had an incomplete stay:

• Length of stay is less than 3 days

• Died while in HH (Item M0100 equal to “08”)

• Discharge destination indicates the patient had a medical emergency (Item M0100 equal to “06” or “07”)

2) Patient has the following medical conditions: Coma, persistent vegetative state, complete tetraplegia, locked-in syndrome, severe anoxic brain damage, cerebral edema or compression of brain (must have a valid diagnosis in Items M1021 and M1023 and Item M1700 equal to “04”).

3) Patient is younger than age 18

4) Patient is discharged to hospice

1.15c Denominator Exclusions Details

In addition to the details given above in response to 1.15b, the following details also inform the application of exclusion criteria.

- Patient is discharged to hospice: item M2420 equal to “03”.

- ICD-10-CM codes (*see attachment in section 1.13*) for coma, complete tetraplegia, locked-in state, persistent vegetative state, severe anoxic brain damage, edema, or compression, severe brain damage

1.15d Age Group

Adults (18-64 years), Older Adults (65 years and older)

1.16 Type of Score

Rate/proportion

1.17 Measure Score Interpretation

Better performance = Higher score

1.18 Calculation of Measure Score

The Cross-Setting Discharge Function Score for HH measure is the proportion of HH quality episodes in which the observed discharge function score is equal to or greater than an expected discharge function score. A HH quality episode begins with either a SOC (start of care) or ROC (resumption of care) and ends with an EOC (end of care) event (a transfer, death, or discharge) for a patient regardless of the length of time between the start and ending events. A higher score indicates better performance in functional outcomes. For each HH quality episode, observed discharge function score and expected discharge function score are determined. For each HHA, the Discharge Function Score is the proportion of quality episodes where the observed discharge function score is greater than or equal to the expected discharge function score.

The Cross-Setting Discharge Function Score for HH focuses on the standardized functional assessment items listed in **Exhibit 3** (same as Exhibit 1; **see supplemental attachment**) that are currently available across all PAC settings. Valid responses for standardized functional items are reported in **Exhibit 4** (same as Exhibit 2; **see supplemental attachment**).

The process for calculating the Cross-Setting Discharge Function Score for HH measure can be divided into two phases. In the first phase, the standardized functional items at SOC/ROC and at discharge that have an Activity Not Attempted (ANA) code of 07, 09, 10, or 88, a dash (-), or a skip (^) recorded (hereafter referred to as NA) are estimated with statistical imputation methods. The estimation models include the predictors used in risk adjustment and covariates for scores on other standardized functional items. Notably, the estimation process uses all standardized functional items available in HH to estimate the NA scores for the subset of standardized functional items used for the Discharge Function Score numerator. See Appendix for more details on the estimation process. In the second phase, the calculation of Discharge Function Score continues. The steps below describe how to calculate the Discharge Function Score.

Step 1: For each HH quality episode, calculate the observed discharge function score by summing the individual standardized functional items. If the standardized functional item has a score of 01 − 06, then use the score for that item. If the standardized functional item has an NA value recorded, then use the imputed score.

A patient is determined to be a wheelchair user if (i) Walk 10 Feet (GG0170I) has an ANA code at both SOC/ROC and discharge and (ii) either Wheel 50 Feet with 2 Turns (GG0170R) has a code between 01 and 06 at either SOC/ROC or discharge.

For patients who are wheelchair users, the observed discharge function score is calculated as sum(GG0130A, GG0130B, GG0130C, GG0170A, GG0170C, GG0170D, GG0170E, GG0170F, (2×GG0170R)). For all other patients, the observed discharge function score is calculated as sum(GG0130A, GG0130B, GG0130C, GG0170A, GG0170C, GG0170D, GG0170E, GG0170F, GG0170I, GG0170J).

Since there are 10 standardized functional items included in the observed discharge function score, each patient's total observed discharge score will range from 10 – 60.

Step 2: Identify excluded HH quality episodes. Excluded HH quality episodes are those that end in a transfer, death at home, or that are less than three days. Also excluded are HH quality episodes where the patient has certain medical conditions, including a primary or other diagnosis indicating coma, persistent vegetative state, complete tetraplegia, locked-in state, severe anoxic brain damage, cerebral edema, or compression of the brain. Finally, HH quality episodes where the patient is discharged to hospice (home or institutional facility) are also excluded.

Step 3: For each HH quality episode, calculate the expected discharge function score. The risk adjustment model is an ordinary least squares linear regression model, which estimates the relationship between discharge function score and a set of risk adjustors.

The risk adjustment model is run on all HHA quality episodes to determine the model intercept (β_0) and risk adjustor coefficients ($\beta_1, \ldots, \beta_n$). Expected discharge function scores are calculated by applying the regression equation to each HHA quality episode at SOC/ROC.

$$\textit{Expected Discharge Function Score} = \beta_0 + \beta_1 x_1 + \ldots + \beta_n x_n$$ where x_1 - x_n are the risk adjustors.

Note that any expected discharge function score greater than the maximum (i.e., 60) would be recoded to the maximum score.

Step 4: Calculate the difference in observed and expected discharge function scores. For each HH quality episode which does not meet the exclusion criteria, compare each patient's observed discharge function score (Step 1) and expected discharge function score (Step 3) and classify the

difference as one of the following:

Observed discharge function score is equal to or greater than the expected discharge function score.

Observed discharge function score is lower than the expected discharge function score.

Step 5: Determine the denominator count. Determine the total number of HH quality episodes with an OASIS discharge date in the measure reporting period, which do not meet the exclusion criteria.

Step 6: Determine the numerator count. The numerator for this quality measure is the number of HH quality episodes in which the observed discharge function score (rounded to four decimal places) is the equal to or greater than the expected discharge function score (rounded to four decimal places).

Step 7: Calculate the HHA-level discharge function percent. Divide the HHA's numerator count (Step 6) by its denominator count (Step 5) to obtain the HHA-level discharge function percent, then multiply by 100 to obtain a percent value.

Step 8: Round the percent value to two decimal places. If the digit in the third decimal place is 5 or greater, add 1 to the second decimal place, otherwise leave the second decimal place unchanged. Drop all the digits following the second decimal place.

1.19 Measure Stratification Details

The measure is not stratified (N/A).

1.20 Types of Data Sources

Standardized Patient Assessments

1.25 Data Source Details

The data source used is Outcome and Assessment Information Set also known as OASIS. See https://www.cms.gov/medicare/quality/home-health/home-health-quality-me... for more information.

1.26 Minimum Sample Size

At least 20 eligible quality episodes are required for the Cross-Setting Discharge Function Score for HH measure in the reporting period. In CY 2023, 80.0% (n=8,093) of all HHAs (n=10,122) met this threshold and accounted for 99.7% (n=5,153,932) of all eligible quality episodes among all providers.

2.1 Attach Logic Model

Logic Model_only_0.pdf

2.2 Evidence of Measure Importance

Measuring functional status of home health care (HHC) patients can provide valuable information about an HHA's quality of care. Impaired physical functioning is associated with increased healthcare utilization and increased costs to the health care system[1]. It is a well-established risk factor for poor health outcomes including: nursing home admission[2], higher risk of falls and falls-related hip fracture and death,[3,4] greater risk of undernutrition,[5] higher emergency department admissions,[6] higher prevalence of hypertension and diabetes[7], and a higher risk of feelings of loneliness among older adults[8]. Findings from studies specific to the home healthcare setting have also established that impaired physical function is related to higher risk of infection in HHC patients[9] and a higher risk of potentially preventable hospitalization among HHC beneficiaries[10]. Findings from studies conducted among HHC beneficiaries with dementia indicated that in addition to having the greatest effect on risk for a potentially preventable hospitalization, physical function deficits were also associated with decreased likelihood of successful discharge to community after HHC for those patients[11-13].

Home health care can positively affect functional and other health outcomes. The delivery of home-based physical therapy and skilled nursing provided as part of HHC are associated with improved physical function among HHC beneficiaries[14-16], lower risks of rehospitalization[17], and improved cardiovascular health and blood pressure management[18]. In stroke patients, home based rehabilitation programs administered by home health clinicians significantly improved function.[19] Home health services, delivered by a registered nurse positively impacted patient Quality of Life (QOL) and clinical outcomes, including significant improvement in dressing lower body and bathing activities of daily living, meal preparation, shopping, and housekeeping instrumental activities of daily living.[20] In addition, a retrospective study, using data abstracted from the Minimum Data Set and OASIS, reported that nursing home admissions were delayed in the study population receiving home health services by an average of eight months[21] and for a similar population, community dwelling adults receiving community-based services supporting aging in place, enhanced health and functional outcomes, improved cognition and lower rates of depression, function assistance, and incontinence were noted[22]. Among HHC patients with dementia, physical therapy services increased the likelihood of successful discharge to community[13]. Managing and improving physical function among HHC beneficiaries has also been shown to have a positive effect on caregivers and caregiver support, which is essential to patient well-being and improvement[23].

Better understanding of discharge functional status and the role HHC plays in addressing it can lead to better opportunities to target efforts to improve care for beneficiaries[24]. Current predictors of poorer recovery in function include greater age, complications after hospital discharge, and residence in a nursing home[25]. Measurement of discharge function in HHC can lead to better understanding of additional beneficiary characteristics that may be associated with poorer functional recovery in HHC and how to best estimate the appropriate functional outcome expectations for home health patients based on their personal characteristics and health status. Measurement of discharge function in HHC can facilitate identification of risk factors and better understanding of how home health interventions aimed at improving physical function and discharge performance may be related to decreasing health and safety risks for HHC beneficiaries[10]. Measurement of discharge function can also be used to further explore dose related responses to HHC delivery- such as how specific HHC services (PT, OT, SN) and the number of visits received by a HHC patient may be related to improvements in function and the quality of a home health agency.[16,17,26.] Measurement of discharge function can also be an important determinate for uncovering health care disparities among vulnerable populations in home health care. Racial/ethnic minority status and dementia are associated with less functional improvement in HH. [27,28] Measurement of discharge function and further exploration of related factors can help to clarify the underlying mechanisms that are causing these disparities and how HHC can develop interventions to address them.

The Cross-Setting Discharge Function Score for HH measure determines how successful each HHA is at achieving or exceeding an expected level of functional ability for its patients at discharge. An expectation for discharge function score is built for each HHA quality episode by accounting for patient characteristics that impact their functional status. The final Cross-Setting Discharge Function Score for HH for a given HHA is the proportion of that HHA's quality episodes where a patient's observed discharge function score meets or exceeds their expected discharge function score.

HHAs with low scores indicate that they are not achieving the functional gains at discharge that are expected based upon patient characteristics and patient status at start of care (SOC) or resumption of care (ROC) for a larger share of their patients. The measure provides information to HHAs that has the potential to hold providers accountable for functional outcomes and encourages them to improve the quality of care they deliver.

This measure also promotes patient wellness, encourages adequate nursing and therapy services to help prevent adverse outcomes (e.g., potentially preventable hospitalization) and increases the transparency of quality of care in the HH setting. Physical function performance has been shown to be related to risk for hospitalization at discharge in post-acute care settings and there is a need to determine effective strategies of maintaining and facilitating functional performance across post-acute settings to optimize long-term patient outcomes [29]. The Cross-Setting Discharge

Function Score for HH adds value to the HH QRP function measure portfolio by using specifications that allow for better comparisons across Post-Acute Care (PAC) settings, considering both self-care and mobility activities in the function score. Ultimately, improved mobility and physical function and the prevention of functional decline for HHC beneficiaries has the power to improve their health care status and quality of life far beyond the home health care episode. By maintaining or improving function for HHC beneficiaries, it decreases their risk for hospitalization, improves other health outcomes, and decreases burden on caregivers who will continuing to support their loved one after the end of a HHC episode.

1. Cheng, Y., Goodin, A. J., Pahor, M., Manini, T., & Brown, J. D. (2020). Healthcare Utilization and Physical Functioning in Older Adults in the United States. *Journal of the American Geriatrics Society*, *68*(2), 266–271. https://doi.org/10.1111/jgs.16260
2. Hajek, A., Brettschneider, C., Lange, C., Posselt, T., Wiese, B., Steinmann, S., Weyerer, S., Werle, J., Pentzek, M., Fuchs, A., Stein, J., Luck, T., Bickel, H., Mösch, E., Wagner, M., Jessen, F., Maier, W., Scherer, M., Riedel-Heller, S.G., König, H.H., & AgeCoDe Study Group. (2015). Longitudinal Predictors of Institutionalization in Old Age. PLoS One, 10(12):e0144203.
3. Akahane, M., Maeyashiki, A., Yoshihara, S., Tanaka, Y., & Imamura, T. (2016). Relationship between difficulties in daily activities and falling: loco-check as a self-assessment of fall risk. Interactive Journal of Medical Research, 5(2), e20.
4. Zaslavsky, O., Zelber-Sagi, S., Gray, S. L., LaCroix, A. Z., Brunner, R. L., Wallace, R. B., … Woods, N. F. (2016). Comparison of Frailty Phenotypes for Prediction of Mortality, Incident Falls, and Hip Fracture in Older Women. Journal of the American Geriatrics Society, 64(9), 1858-–1862.
5. van der Pols-Vijlbrief, R., Wijnhoven, H. A. H., Bosmans, J. E., Twisk, J. W. R., & Visser, M. (2016). Targeting the underlying causes of undernutrition. Cost-effectiveness of a multifactorial personalized intervention in community-dwelling older adults: A randomized controlled trial. Clinical Nutrition (Edinburgh, Scotland).
6. Hominick, K., McLeod, V., & Rockwood, K. (2016). Characteristics of older adults admitted to hospital versus those discharged home, in emergency department patients referred to internal medicine. Canadian Geriatrics Journal : CGJ, 19(1), 9–14.
7. Halaweh, H., Willen, C., Grimby-Ekman, A., & Svantesson, U. (2015). Physical activity and health-related quality of life among community dwelling elderly. J Clin Med Res, 7(11), 845–52.
8. Marika Moeyersons, Kristel De Vliegher, Brooke Huyghe, Sacha De Groof, Koen Milisen, & Bernadette Dierckx de Casterlé. (2022). 'Living in a shrinking world'—The experience of loneliness among community-dwelling older people with reduced mobility: a qualitative grounded theory approach. *BMC Geriatrics*, *22*(1), 1–13. https://doi.org/10.1186/s12877-022-02998-5
9. Shang, J., Wang, J., Adams, V., & Ma, C. (2020). Risk factors for infection in home health care: Analysis of national Outcome and Assessment Information Set data. *Research in Nursing & Health*, *43*(4), 373–386. https://doi.org/10.1002/nur.22053
10. Middleton, A. Downer, B., Haas, A., Knox, S., & Ottenbacher, K.J. (2019) Functional status ss associated with 30-day potentially preventable readmissions following home health Care. Medical Care, 57(2):145-151.

11. Knox, S., Downer, B., Haas, A., Middleton, A., & Ottenbacher, K. J. (2020). Function and Caregiver Support Associated With Readmissions During Home Health for Individuals With Dementia. *Archives of Physical Medicine & Rehabilitation*, *101*(6), 1009–1016. https://doi.org/10.1016/j.apmr.2019.12.021
12. Knox, S., Downer, B., Haas, A., & Ottenbacher, K. J. (2021). Mobility and Self-Care are Associated With Discharge to Community After Home Health for People With Dementia. *Journal of the American Medical Directors Association*, *22*(7), 1493–1499. https://doi.org/10.1016/j.jamda.2020.12.014
13. Knox, S., Downer, B., Haas, A., & Ottenbacher, K. J. (2022). Home health utilization association with discharge to community for people with dementia. *Alzheimer's & Dementia: Translational Research & Clinical Interventions*, *8*(1), e12341.
14. Bowles KH, McDonald M, Barrón Y, Kennedy E, O'Connor M, & Mikkelsen M. (2021). Surviving COVID-19 After Hospital Discharge: Symptom, Functional, and Adverse Outcomes of Home Health Recipients. *Annals of Internal Medicine*, *174*(3), 316–325. https://doi.org/10.7326/M20-5206
15. Cook, T., & Mendonca, R. (2017). The Effectiveness of a Comprehensive Home Health Program for Functional Independence of Older Adults in the Home. *American Journal of Occupational Therapy*, *71*, 238. https://doi.org/10.5014/ajot.2017.71S1-PO2018
16. LeDoux, C. V., Lindrooth, R. C., Seidler, K. J., Falvey, J. R., & Stevens-Lapsley, J. E. (2020). The Impact of Home Health Physical Therapy on Medicare Beneficiaries With a Primary Diagnosis of Dementia. *Journal of the American Geriatrics Society*, *68*(4), 867–871. https://doi.org/10.1111/jgs.16307
17. Wang, J., Liebel, D. V., Yu, F., Caprio, T. V., & Shang, J. (2019). Inverse Dose-Response Relationship Between Home Health Care Services and Rehospitalization in Older Adults. *Journal of the American Medical Directors Association*, *20*(6), 736–742. https://doi.org/10.1016/j.jamda.2018.10.021
18. Florindo, M., Gregório, J., & Rodrigues, L. M. (2024). Lower-Limb Perfusion and Cardiovascular Physiology Are Significantly Improved in Non-Healthy Aged Adults by Regular Home-Based Physical Activities—An Exploratory Study. *Life (2075-1729)*, *14*(2), 241. https://doi.org/10.3390/life14020241
19. Asiri, F. Y., Marchetti, G. F., Ellis, J. L., Otis, L., Sparto, P. J., Watzlaf, V., & Whitney, S. L. (2014). Predictors of functional and gait outcomes for persons poststroke undergoing home-based rehabilitation. Journal of Stroke and Cerebrovascular Diseases: The Official Journal of National Stroke Association, 23(7), 1856–1864.
20. Han, S. J., Kim, H. K., Storfjell, J., & Kim, M. J. (2013). Clinical outcomes and quality of life of home health care patients. *Asian Nursing Research*, *7*(2), 53-60.
21. Young, Y., Kalamaras, J., Kelly, L., Hornick, D., & Yucel, R. (2015). Is Aging in Place Delaying Nursing Home Admission? Journal of the American Medical Directors Association, 16(10), 900.e1–6.
22. Marek, K.D., Popejoy, I., Petroski, G. et al. (2005). Clinical outcomes of aging in place. Nurs Res; 54:202–211.
23. Chase, J.-A. D., Russell, D., Rice, M., Abbott, C., Bowles, K. H., & Mehr, D. R. (2019). Caregivers' Perceptions Managing Functional Needs Among Older Adults Receiving Post-Acute Home Health Care. *Research in Gerontological Nursing*, *12*(4), 174–183. https://doi.org/10.3928/19404921-20190319-01
24. Courtright, K. R., Jordan, L., Murtaugh, C. M., Barrón, Y., Deb, P., Moore, S., Bowles, K. H., & Mikkelsen, M. E. (2020). Risk Factors for Long-term Mortality and Patterns of End-of-Life

Care Among Medicare Sepsis Survivors Discharged to Home Health Care. *JAMA Network Open*, *3*(2), e200038. https://doi.org/10.1001/jamanetworkopen.2020.0038
25. Córcoles-Jiménez, M. P., Villada-Munera, A., Del Egido-Fernandez, M. A., Candel-Parra, E., Moreno-Moreno, M., Jimenez-Sanchez, M. D., & Pina-Martinez, A. (2015). Recovery of activities of daily living among older people one year after hip fracture. Clinical Nursing Research, 24(6), 604–623.
26. Falvey, J. R., Bade, M. J., Forster, J. E., Burke, R. E., Jennings, J. M., Nuccio, E., & Stevens-Lapsley, J. E. (2018). Home-Health-Care Physical Therapy Improves Early Functional Recovery of Medicare Beneficiaries After Total Knee Arthroplasty. *The Journal of Bone and Joint Surgery. American Volume*, *100*(20), 1728–1734. https://doi.org/10.2106/JBJS.17.01667
27. Chase, J.-A. D., Huang, L., Russell, D., Hanlon, A., O, C. M., Robinson, K. M., & Bowles, K. H. (2018). Racial/ethnic disparities in disability outcomes among post-acute home care patients. *Journal of Aging & Health*, *30*(9), 1406–1426. https://doi.org/10.1177/0898264317717851
28. Wang, J., Yu, F., Cai, X., Caprio, T. V., & Li, Y. (2020). Functional outcome in home health: Do racial and ethnic minority patients with dementia fare worse? *PLoS ONE*, *15*(5), 1–17. https://doi.org/10.1371/journal.pone.0233650
29. Li, C.-Y., Haas, A., Pritchard, K. T., Karmarkar, A., Kuo, Y.-F., Hreha, K., & Ottenbacher, K. J. (2021). Functional Status Across Post-Acute Settings is Associated With 30-Day and 90-Day Hospital Readmissions. *Journal of the American Medical Directors Association*, *22*(12), 2447–2453. https://doi.org/10.1016/j.jamda.2021.07.039

2.3 Anticipated Impact

Home health care (HHC) can positively affect functional and other health outcomes. The delivery of home-based physical therapy and skilled nursing provided as part of HH are associated with improved physical function among HH beneficiaries[14-16], lower risks of rehospitalization[17], and improved cardiovascular health and blood pressure management[18]. Thus, the Cross-Setting Discharge Function Score for HH measure can improve patient outcomes in post-acute care (PAC) by promoting functional independence, reducing adverse events, and lowering healthcare costs. Managing and improving physical function among HHC beneficiaries has also been shown to have a positive effect on caregivers and caregiver support, which is essential to patient well-being and improvement[23].

The Cross-Setting Discharge Function Score for HH measure determines how successful each Home Health Agency (HHA) is at achieving or exceeding an expected level of functional ability for its patients at discharge. An expectation for discharge function score is built for each HHA quality episode by accounting for patient characteristics that impact their functional status. The final Cross-Setting Discharge Function Score for HH for a given HHA is the proportion of that HHA's quality episodes where a patient's observed discharge function score meets or exceeds their expected discharge function score. HHAs with low scores indicate that they are not achieving the functional gains at discharge that are expected based upon patient characteristics and patient status at start of care (SOC) or resumption of care (ROC) for a larger share of their patients. The measure provides information to HHAs that has the potential to hold providers accountable for functional outcomes and encourages them to improve the quality of care they deliver. This

measure also promotes patient wellness, encourages adequate nursing and therapy services to help prevent adverse outcomes (e.g., potentially preventable hospitalization) and increases the transparency of quality of care in the HH setting. In stroke patients, home based rehabilitation programs administered by home health clinicians significantly improved function.[19] Home health services, delivered by a registered nurse positively impacted patient Quality of Life (QOL) and clinical outcomes, including significant improvement in dressing lower body and bathing activities of daily living, meal preparation, shopping, and housekeeping instrumental activities of daily living.[20] In addition, a retrospective study, using data abstracted from the Minimum Data Set and OASIS, reported that nursing home admissions were delayed in the study population receiving home health services by an average of eight months[21] and for a similar population, community dwelling adults receiving community-based services supporting aging in place, enhanced health and functional outcomes, improved cognition and lower rates of depression, function assistance, and incontinence were noted[22].

The Cross-Setting Discharge Function Score for HH adds value to the HH QRP function measure portfolio by using specifications that allow for better comparisons across Post-Acute Care (PAC) settings, considering both self-care and mobility activities in the function score, and refining the approach to addressing missing activity scores including those coded with activity not attempted codes.

One concern about unintended consequences with the Cross-Setting Discharge Function Score for HH is that the measure may lead HHAs to selectively enroll patients, either by encouraging or avoiding admission of certain types of patients and patients with certain characteristics. To address this, providers' performance is evaluated among their peers after adjusting for difference in patient case-mix across HHAs. The risk adjustment methodology applied to this measure will help mitigate providers' incentive to selectively enroll patients. The variables included in the risk adjustment model are designed to capture patient characteristics that are associated with discharge functional status. Therefore, providers' performance on this measure will be adjusted for the characteristics of their patient population and "level the playing field" across providers. The detailed risk-adjustment strategy will be publicly available, allowing providers to understand that those who provide care for more "high risk" patients are not at a disadvantage given their patient case-mix. See the Technical Report (https://www.cms.gov/files/document/hhdischargefunctiontechnicalreport20...) for more details on the risk adjustment methodology.

Another potential concern about the Cross-Setting Discharge Function Score for HH measure could be that it focuses on a subset of the available standardized functional self-care and mobility items in HH. If the items are not included in this publicly reported measure, it could reduce the incentive to complete those items and could result in higher levels of ANAs. However, the standardized functional items excluded from the Cross-Setting Discharge Function Score for HH measure may be used in the future for the HH prospective payment system to calculate payment for HHAs and are included in the statistical imputation models for the Cross-Setting Discharge

Function Score for HH measure. Together, these circumstances should provide an incentive for continued reporting of these standardized functional items.

Another possibility related to increased ANA rates is that providers could strategically code ANAs in an attempt to game the estimated values from the statistical imputation models. For instance, HHAs could record ANA codes for patients who did not improve by discharge if the discharge estimation models would predict higher scores based on that patient's characteristics. However, this type of gaming, where providers are determining in real-time which patients would perform better with statistical estimation than a true discharge score, would require sophisticated understanding and application of the estimation methodology.

The Cross-Setting Discharge Function Score for HH measure will be monitored to identify unintended consequences, including patient selection patterns or changes in ANA coding, which could lead to future re-specification of the measure as needed.

13. Knox, S., Downer, B., Haas, A., & Ottenbacher, K. J. (2022). Home health utilization association with discharge to community for people with dementia. *Alzheimer's & Dementia: Translational Research & Clinical Interventions*, *8*(1), e12341.

14. Bowles KH, McDonald M, Barrón Y, Kennedy E, O'Connor M, & Mikkelsen M. (2021). Surviving COVID-19 After Hospital Discharge: Symptom, Functional, and Adverse Outcomes of Home Health Recipients. *Annals of Internal Medicine*, *174*(3), 316–325. https://doi.org/10.7326/M20-5206

15. Cook, T., & Mendonca, R. (2017). The Effectiveness of a Comprehensive Home Health Program for Functional Independence of Older Adults in the Home. *American Journal of Occupational Therapy*, *71*, 238. https://doi.org/10.5014/ajot.2017.71S1-PO2018

16. LeDoux, C. V., Lindrooth, R. C., Seidler, K. J., Falvey, J. R., & Stevens-Lapsley, J. E. (2020). The Impact of Home Health Physical Therapy on Medicare Beneficiaries With a Primary Diagnosis of Dementia. *Journal of the American Geriatrics Society*, *68*(4), 867–871. https://doi.org/10.1111/jgs.16307

17. Wang, J., Liebel, D. V., Yu, F., Caprio, T. V., & Shang, J. (2019). Inverse Dose-Response Relationship Between Home Health Care Services and Rehospitalization in Older Adults. *Journal of the American Medical Directors Association*, *20*(6), 736–742. https://doi.org/10.1016/j.jamda.2018.10.021

18. Florindo, M., Gregório, J., & Rodrigues, L. M. (2024). Lower-Limb Perfusion and Cardiovascular Physiology Are Significantly Improved in Non-Healthy Aged Adults by Regular Home-Based Physical Activities—An Exploratory Study. *Life (2075-1729)*, *14*(2), 241. https://doi.org/10.3390/life14020241

19. Asiri, F. Y., Marchetti, G. F., Ellis, J. L., Otis, L., Sparto, P. J., Watzlaf, V., & Whitney, S. L. (2014). Predictors of functional and gait outcomes for persons poststroke undergoing home-based rehabilitation. Journal of Stroke and Cerebrovascular Diseases: The Official Journal of National Stroke Association, 23(7), 1856–1864.

20. Han, S. J., Kim, H. K., Storfjell, J., & Kim, M. J. (2013). Clinical outcomes and quality of life of home health care patients. *Asian Nursing Research*, *7*(2), 53-60.

21. Young, Y., Kalamaras, J., Kelly, L., Hornick, D., & Yucel, R. (2015). Is Aging in Place Delaying Nursing Home Admission? Journal of the American Medical Directors Association, 16(10), 900.e1–6.

22. Marek, K.D., Popejoy, I., Petroski, G. et al. (2005). Clinical outcomes of aging in place. Nurs Res; 54:202–211.

23. Chase, J.-A. D., Russell, D., Rice, M., Abbott, C., Bowles, K. H., & Mehr, D. R. (2019). Caregivers' Perceptions Managing Functional Needs Among Older Adults Receiving Post-Acute Home Health Care. *Research in Gerontological Nursing*, *12*(4), 174–183. https://doi.org/10.3928/19404921-20190319-01

2.4 Performance Gap

There is evidence of a performance gap and variability in performance for this quality measure. Table 1 below reports on data for all 8,093 HHAs that met the minimum threshold of quality episodes for public reporting of the Cross-Setting Discharge Function Score for HH measure (≥20) in the twelve-month reporting period of CY 2023. The data reported in Table 1 provides evidence of a performance gap among providers as performance ranges from the minimum possible score of 0 for 50 HHAs to the maximum possible score of 100 achieved by 20 HHAs, and a mean performance score of 57.4 among all reportable providers.

Table 1. Performance Scores by Decile

Performance Gap

	Overall	Minimum	Decile_1	Decile_2	Decile_3	Decile_4	Decile_5	Decile_6	Decile_7	Decile_8	Decile_9	Decile_10	Maximum
Mean Performance Score	57.4	0.0	14.8	36.4	48.0	54.9	59.5	63.3	66.6	70.2	74.9	84.7	100.0
N of Entities	8,093	50	807	808	812	809	805	812	812	809	809	810	20
N of Persons / Encounters / Episodes	5,153,932	2,866	108,150	235,962	309,313	481,183	813,523	765,036	834,311	683,068	632,220	289,166	1,153

2.5 Health Care Quality Landscape

The Cross-Setting Discharge Function Score for HH measure was developed based on input obtained during two Technical Expert Panel (TEP) meetings (July 2021 and January 2022). This measure is designed to address the functional status quality measure domain for the home health as outlined by the Improving Medicare Post-Acute Care Transformation Act of 2014 (the IMPACT Act).[1] During these meetings, panelists expressed that:

1. The HH QRP would benefit from having a cross-setting functional outcome measure to use instead function process measure (Application of Percent of Long-Term Care Hospital (LTCH) Patients With an Admission and Discharge Functional Assessment and a Care Plan That Addresses Function that was recently removed from the HH QRP. The function process measure was removed because it was topped out, lacking the ability to differentiate provider quality related to patient functional status. The Cross-Setting Discharge Function Score for HH measure has higher variation in provider performance and offers more informative comparisons between HHAs for patients, caregivers, and stakeholders.
2. The Cross-Setting Discharge Function Score for HH measure benefits from being specified to align across PAC settings (IRF, LTCH, SNF, HHA). Panelists reviewed comparisons between provider scores and model fit and found that the narrower set of standardized functional items provides similar capture of functional status.[2]
3. The Activity Not Attempted (ANA) codes are used frequently on assessments for certain standardized functional items, and statistical imputation should be used as the method to estimate resulting missing item scores.

The Cross-Setting Discharge Function Score for HH measure will be implemented in the HH QRP and HH VBP Program in CY 2025. There doesn't currently exist a cross setting post-acute care measure of discharge function.

[1] https://www.govtrack.us/congress/bills/113/hr4994

[2] https://www.cms.gov/sites/default/files/2022-04/PAC-Function-TEP-Summar…

2.6 Meaningfulness to Target Population

Functional status, including ability to perform daily activities, is important from patient and caregiver perspectives, with functional goal-setting being an important focus of patient- and family- centered care. For the majority of patients in post-acute care, promoting functional independence and setting functional goals to facilitate return to community living is a primary goal of care. For patients receiving home health services, functional assessment and goal-setting are also a primary focus to attain independent functioning in the home and community, return to or surpass prior level of functioning, maintain current level of functioning, or slow the process of functional decline. In HH settings, promoting physical function is important to mitigate functional deterioration, morbidity, and potential medical complications from disease processes and hospitalization. From a caregiver perspective, focus on functional status and functional goal-setting is important to reduce caregiver burden, and minimize need for assistance at home.

CMS convened a Patient and Family Engagement Listening Session to discuss this measure with patients and their caregivers. The Patient and Family Engagement Listening Session demonstrated that the measure concept resonates with patients and caregivers. Participants'

views of self-care and mobility were aligned with the functional domains captured by the measure, and they found them to be critical aspects of care. Participants emphasized the importance of measuring functional outcomes and were specifically interested in metrics that show how many patients discharged from particular facilities made improvements in self-care and mobility.

The Cross-Setting Discharge Function Score for HH directly reflects the priorities of PAC patients, who value functional independence, quality of life, and avoiding rehospitalization or institutionalization. The measure addresses outcomes that patients themselves find meaningful, providing a clear rationale for its adoption and endorsement.

Below are key points supported by peer-reviewed literature:

1. Patients Value Functional Independence:

Studies show that post-acute care patients prioritize functional recovery (e.g., mobility, self-care) as the most important outcome following discharge. Functional independence enables patients to return home and manage daily life without relying on long-term institutional care or home health services.

Source: Graham, J. E., et al. (2016). "Patients' perspectives on discharge from post-acute care settings: Priorities for functional recovery." Archives of Physical Medicine and Rehabilitation.

2. Improved Quality of Life:

Health-related quality of life encompasses patients' physical health perceptions and functional status. Patients who regain independence in activities of daily living report higher satisfaction with their health and overall life post-discharge. They value avoiding dependency on caregivers, especially for basic tasks like toileting and dressing.

Source: Greenfield, S., and Nelson, E. (2020). "The influence of functional independence on quality of life in post-acute care patients." Quality of Life Research.

Additionally, researchers exploring patient and consumer perspectives on function have reported that functional status and functional outcomes are important from the patient and consumer perspective (Stineman 2009, Kramer 1997, Kurz 2008). These studies show that patients place a value on their functional outcomes and rehabilitation goals mostly through research that examines how patients can categorize their functional goals in hierarchies of what they perceive as the most

important to least important functional outcomes for the purpose of their own quality of life. Stineman's research shows patients and consumers value their functional outcomes although inpatient rehabilitation patients may have different perspectives on what is important for them to gain from their rehabilitation compared to community dwelling consumers. One study, specifically focused on patients undergoing rehabilitation in IRFs (n=79) found that eating was the most valued functional activity for them, followed by bathing, toileting, and bowel/bladder function (Stineman 2009).

3. Reduction in Hospital Readmissions:

Patients view avoiding rehospitalization as crucial to their recovery. Research demonstrates that patients who regain functional independence are less likely to be readmitted, an outcome patients find meaningful as it reduces the emotional and physical stress of hospitalization.

Source: Ouslander, J.G., and Berenson, R.A. (2011). "Reducing Unnecessary Hospitalizations of Nursing Home Residents." The New England Journal of Medicine.

4. Desire to Return Home:

A primary goal for many PAC patients is to return home after their rehabilitation. Being discharged with higher functional ability is highly valued because it enables patients to live in their communities, reducing the need for institutional care or home health services.

Source: Harrison, S., et al. (2017). "Patient priorities in post-acute care: Returning home with functional independence." Journal of Aging & Health.

5. Patients Want to Avoid Institutional Long-Term Care:

Patients fear the loss of autonomy associated with long-term care facilities and express a strong preference for achieving the functional status that allows them to avoid this outcome. Functional independence is a top priority for maintaining control over their living situation.

Source: Kane, R.A. (2001). "Long-Term Care and Patient Preferences: Achieving Independence and Control." The Gerontologist.

Input from a variety of stakeholders has been taken into consideration throughout the measure

development process. Feedback was sought and considered from patients and caregivers on the salience of the measure concept and from Technical Expert Panels (TEPs) on the appropriate specifications for the cross-setting measure.

3.1 Contributions Towards Closing Care Gaps

The measure at hand provides a means for assessing the impact of provider performance on patients who experience social risk factors (SRF) to a greater degree than those who have fewer or less acute SRFs. For example, dual-eligible patients tend to experience worse socioeconomic circumstances than other patients. These circumstances can negatively impact health outcomes. Some of the disparity in outcomes between dual and non-dual patients can be explained through differences in prevalence of clinical conditions addressed through risk adjustment. However, even after risk adjustment, dual patients fare worse, on average, than non-duals for all settings. One contributing factor could be that there are socioeconomic drivers of health disparities in dual patients beyond what is captured through risk adjustment. This raises the concern that providers who serve these populations are unduly penalized in quality measurement when dual-eligibility is not included in the risk adjustment model.

We tested three SRFs of interest:

1. Medicare vs. dually enrolled (patient is dually enrolled at any time during the quality episode)
2. Race/ethnicity
3. ADI

We used several approaches to test differences in performance scores across multiple SRFs and to consider some SRFs for inclusion in the risk adjustment model. First, we constructed alternative risk adjustment models that included additional covariates for payer, race/ethnicity, and ADI, and examined the impact on provider performance.

We find that across most of the alternative risk adjustment models considered, the SRF covariates are significant but small, and have little to no impact on model fit. The details of the alternative risk adjustment models are shown in the attachment for Section 4.4.4a.

Second, we stratified the performance scores by SRFs. Using the current model, we calculated provider scores for patients with and without SRFs and grouped HHAs into quintiles based on their proportion of Black/non-White, dual, and dual and high ADI patients. We then examined

whether performance declines with the proportion of patients with SRFs, and whether this impacts patients both with and without SRFs.

Across home health agencies, we compared Cross-Setting Discharge Function Score for HH CY 2023 performance by subgroups of agencies based on the percentage of patients who are Black, Non-White, Medicaid or Dual-eligible, and Dual-eligible or living in a neighborhood with ADI ≥ 85. To be more specific, we defined subgroups of agencies based on quintiles of the percentage of patients within the agency who have the SRF. For race and ethnicity characteristics, we used the M0140: Race/Ethnicity OASIS item to identify patient's race/ethnicity as Black or Non-White.

When examining performance by proportion of high-SRF patients served, Cross-Setting Discharge Function Scores for HH for all patients (both high- and low-SRF) decrease as proportion of high-SRF patients served by the provider increases (**see Exhibit 12 in the supplemental attachment**). On average, scores for low-SRF patients tend to be slightly higher than for high-SRF patients. This relationship holds true within each quintile category of providers based on proportion of high-SRF patients served. We find a gap of a few percentage points in mean final score between SRF patient populations, and that the mean final scores decrease with each quintile. However, we also find that in most cases the ratio of observed/predicted is slightly lower for the SRF population.

We also examined the distribution of within-provider performance gaps by SRFs (e.g., duals vs. Medicare) to demonstrate the range of gaps. Using the dually eligible population as an example, we find considerable variation in within-provider performance gaps between dually and non-dually enrolled patients. A substantial number of providers had either no performance gap between dually and non-dually enrolled patients or had better performance in their dually eligible patients, indicating that there are providers who successfully produce comparable or better outcomes for dual patients. The proportion of providers who met or exceeded expectations for an equivalent or larger share of their dual patients is 36.1%. This suggests that there's room for providers to improve care for dually enrolled patients.

4.1 Feasibility Assessment

OASIS data collection and submission is a requirement of the Medicare Home Health Conditions of Participation. Functional assessment is conducted as part of usual clinical practice, and information on functional status used to calculate this measure is recorded in the relevant OASIS items embedded in the agency's clinical assessment. OASIS data are collected by the home health agency during the care episode and submitted electronically to CMS via the Internet Quality Improvement and Evaluation System (iQIES). No issues regarding availability of data, missing data, timing or frequency of data collection, patient confidentiality or implementation have become apparent since OASIS-E was implemented 1/1/2023.

4.3 Feasibility Informed Final Measure

OASIS data collection and submission is a requirement of the Medicare Home Health Conditions of Participation.

4.4 Proprietary Information

Not a proprietary measure and no proprietary components

5.1.1 Data Used for Testing

The analyses presented in this form are calculated from data derived from several sources. The primary source of data for the measure is OASIS assessment data from Calendar Year (CY) 2023. The OASIS assessments are combined into HH quality episodes.

A HH quality episode begins with either a SOC (start of care) or ROC (resumption of care) and ends with an EOC (end of care) event (a transfer, death, or discharge) for a patient regardless of the length of time between the start and ending events.

Quality episodes are created by matching SOC/ROC assessments with EOC assessments for a given patient who receives care by a home health agency. A matching pair of assessments is then turned into one quality episode that provides information about the patient collected via the OASIS instrument at the two time points and thus allows for analysis of changes in a patient's health status between the two time points.

All analyses, unless otherwise indicated, were calculated using HH quality episodes from HHAs that met the reportability threshold of at least 20 quality episodes after applying denominator exclusion criteria.

For analyses related to health equity, we also used Medicare administrative data to determine dual eligibility status for Medicare and Medicaid and Area Deprivation Index (ADI) data, derived from American Community Survey data. The ADI is presented as an index ranging from zero to 100, designed to represent neighborhood socioeconomic disadvantage, with 100 representing the most disadvantaged neighborhoods nationwide.

5.1.2 Differences in Data

The sample remained the same for all aspects of testing. For testing of differences in performance scores across socio-contextual variables, including race, ethnicity and socio-economics status (see Section 5. Equity), we used additional data sources to incorporate ADI, derived from census data,

and dual eligibility for Medicare and Medicaid from CMS administrative data.

5.1.3 Characteristics of Measured Entities

All testing used HH quality episodes in CY 2023. We had a total of 7,127,963 quality episodes with an episode end date in CY2023 before exclusions. We identified providers that met the reportability threshold of at least twenty quality episodes after applying denominator exclusion criteria. After applying denominator exclusion criteria and the reportability threshold of 20 quality episodes, this testing ultimately included 5,153,932 quality episodes in 8,093 HHAs.

The included HHAs were geographically diverse, with the West – Pacific Census Division containing the largest percentage of HHAs at 23%. The majority of the HHAs were for-profit entities (59%) and located in urban areas (75%). Agency size is presented based on the number of quality episodes. Exactly half of HHAs were medium-sized with 85 to 664 quality episodes, while the other half were evenly divided between small (20 to 84 quality episode) and large (665 to 37,866 quality episodes) in size. Note that providers with less than 20 stays during the 12-month testing period are excluded from analyses presented below.

Exhibit 5 (see supplemental attachment) identifies characteristics, including number, percent of episodes and percent of providers, of the publicly reportable home health agencies. Characteristics include size, profit status, rural/urban location, and Census Region/Division.

5.1.4 Characteristics of Units of the Eligible Population

All testing used HH quality episodes completed in CY2023. HHA submitted a total of 7,127,963 quality episodes that ended in CY2023. After applying denominator exclusion criteria and applying the reportability threshold of 20 quality episodes, the final sample included 5,153,932 quality episodes in the measure population and testing. For included HH quality episodes, 86.6% were for patients who were over the age of 65 and the majority were female (61.2%) and white (63.1%). Roughly 50% of included quality episodes had an Area Deprivation Index (Neighborhood Atlas - Home (wisc.edu)) of 0–50. The risks of hospitalization among HH patients were varied – 94.7% were taking five or more medications, 67.7% reported exhaustion, 42.4% had a history of falls, and 54.9% had other risks.

Exhibit 6 (see supplemental attachment) identifies the patient characteristics of quality episodes treated by publicly reporting home health agencies. Characteristics are reported by race, sex, age, payer source, ADI, health-related social need, and signs or symptoms of risk of hospitalization.

5.2.1 Level(s) of Reliability Testing Conducted

Person or encounter level (i.e., data element) (e.g., inter–abstractor reliability), Accountable entity level (i.e., measure score) (e.g., signal-to-noise analysis)

5.2.2 Method(s) of Reliability Testing

We report testing results throughout this document at two levels: 1) data elements (i.e., items) and the function scale (i.e., summed value derived from item codes) and 2) the computed quality measure result.

To assist the reader in understanding the testing analysis and results, we begin by providing a brief overview of these components of the performance measure:

1. Data Elements:
    - Clinicians code 11 motor function data elements included in Section GG of each assessment instrument. One is a wheelchair data element used for patients who do not walk as part of the recoding approach. Depending on the context, we sometimes refer to these data elements as “items” or “activities.”
    - The motor function data elements are collected at the time of admission and discharge using a 6-level rating scale (01 to 06), or activity not attempted codes if, for example, the activity was not attempted due to medical or safety concerns.
    - Higher scores indicate higher ability (i.e., more independence).
    - For the performance measure calculation, data element activity not attempted codes and missing data are recoded using statistical imputation to estimate the item score.
    - A discharge function scale score is created by summing the data element scores, after re-coding. The range of the discharge function score is 10 to 60 units.
    - For the Cross-Setting Discharge Function Score for HH measure, a score of 10 indicates the patient is dependent on a helper to perform all activities (i.e., data elements) and a score of 60 means the patient is independent on all activities.
2. Calculated Performance Measure Score: The Percentage of HH quality episodes that Meet or Exceed an Expected Discharge Function Score
    - The calculated performance measure score is the percentage of HH quality episodes that meet or exceed an expected discharge function score within an HHA.
    - This performance measure estimates the percentage of HH quality episodes that meet or exceed an expected discharge function score.

We use three methods for reliability testing: Cronbach’s alpha coefficient, split-sample reliability testing, and signal-to-noise ratio testing.

Cronbach’s alpha coefficient assesses the internal consistency of the function scale/instrument scores for each assessment. Internal consistency provides a general assessment of how well the function data elements interrelate within the function scale/instrument. This internal consistency analysis is an indicator of the reliability of the function scale/instrument.

Internal consistency was assessed using the Cronbach's alpha coefficient, which is the average correlation of all possible half-scale divisions. Cronbach's alpha is a statistic frequently calculated when testing instrument or scale psychometrics. The Cronbach's alpha reliability estimate ranges from zero to one, with an estimate of zero indicating that there is no consistency of measurement among the items, and one indicating perfect consistency. Many cutoff criteria exist to determine whether or not a scale shows good consistency or whether the items "hang together" well. General consensus is that Cronbach's alpha should be at least 0.70 for an adequate scale for group-level decisions, and alphas closer to 1 indicate a good scale[1].

Split-sample reliability testing examines the agreement between two performance measure scores for an HHA based on randomly split, independent subsets of patient quality episodes within the same measurement period. We randomly divided each HHA's CY2023 patient quality episodes into halves and calculated performance measure scores for each split-half sample using the same measure specification. We then calculated Shrout-Fleiss[2] intraclass correlation coefficients (ICC[2,1]) between the split-half scores to measure reliability.

Signal-to-noise reliability testing examines the overall reliability of the measure scores by comparing the true effect (the signal) to the error (the noise). We estimated the signal-to-noise ratio in two ways. We first followed the RAND methodology[3] which is reported below in 4.2.3. Then, as a robustness check, we also estimated the ratio by using the sample variance to estimate the provider-to-provider variance.

We performed reliability testing on all HHAs with 20 or more patient quality episodes. These patient quality episodes had complete data.

[1] Aron A, Aron EN *Statistics for Psychology*. 2nd ed. Upper Saddle River, NJ: Prentice Hall, 1999

[2] McGraw, K. O., & Wong, S. P. (1996). Forming inferences about some intraclass correlation coefficients. Psychological methods, 1(1), 30.

[3] Adams, J. L. (2009). The reliability of provider profiling: a tutorial.

5.2.3 Reliability Testing Results

As reported in **Exhibit 7 (see supplemental attachment)** the results for Cronbach's alpha indicate very good inter-rater reliability.

As reported in **Exhibit 8 (see supplemental attachment)**, the results for split-half ICC indicate excellent agreement between performance scores.

As reported in **Table 2 below**, the results for signal-to-noise reliability indicate a high proportion of variability in the measure performance scores can be explained by real differences in performance.

5.2.4 Interpretation of Reliability Results

Split-half Reliability (unit of analysis of providers)

Split-half analysis results indicated strong, positive correlations between the HHAs' randomly divided groups' Computed Quality Measure scores, providing strong evidence of measure reliability with an ICC of 0.95 overall. As shown above in 4.2.3, ICCs were exceptionally strong for providers with higher volume, with ICC of 0.98 among the largest providers (665–37,866 quality episodes)[4].

Signal to Noise (unit of analysis of providers)

Signal to Noise Testing suggests strong reliability across providers, with a reliability statistic ρ of 0.96. Robustness checks in which we calculated the Signal-to-Noise Reliability (VAR) using the sample variance gave an overall statistic of 0.91. Both of these pass the threshold of acceptable reliability.

Cronbach's Alpha (unit of analysis of episodes)

Cronbach's alpha was 0.95 at admission and 0.97 at discharge for patients who do not use wheelchairs and was 0.94 at admission and 0.96 for patients who use wheelchairs, indicating good consistency in GG item scores used in the measure score.

[4] Koo T.K. & Li M.Y. A Guideline of Selecting and Reporting Intraclass Correlation Coefficients for Reliability Research. Journal of Chiropractic Medicine, 2016, 15(2), 155-163.

Table 2. Accountable Entity Level Reliability Testing Results by Denominator, Target Population Size

Accountable Entity-Level Reliability Testing Results

	Overall	Minimum	Decile_1	Decile_2	Decile_3	Decile_4	Decile_5	Decile_6	Decile_7	Decile_8	Decile_9	Decile_10	Maximum
Reliability	0.96	1.00	0.96	0.94	0.94	0.96	0.97	0.97	0.97	0.97	0.97	0.97	1.00

	Overall	Minimum	Decile_1	Decile_2	Decile_3	Decile_4	Decile_5	Decile_6	Decile_7	Decile_8	Decile_9	Decile_10	Maximum
Mean Performance Score	57	0.00	14.82	36.47	48.06	54.85	59.54	63.27	66.64	70.16	74.94	84.72	100.00
N of Entities	8,093	50	807	812	809	808	805	812	812	809	811	808	20
N of Persons / Encounters / Episodes	5,153,932	2,866	108,150	236,215	309,258	482,985	813,523	765,036	834,311	683,068	638,549	282,837	1,153

5.3.1 Level(s) of Validity Testing Conducted

Person or encounter level (i.e., data element) (e.g., sensitivity and specificity), Accountable entity level (i.e., measure score) (e.g., criterion validity)

5.3.3 Method(s) of Validity Testing

We report testing results throughout this document at two levels: 1) data elements/scale and 2) Computed Quality Measure Score.

1. Critical Data Elements/Scale

Several studies have examined the validity of the data elements by examining the relationship between the items and length of stay, discharge to community rates and risk of falls.

2. Computed Quality Measure Score

Convergent Validity: To evaluate convergent validity of measure scores, we measured Spearman’s rank correlation between the Cross-Setting Discharge Function Score for HH measure and other HH QRP measures. The analysis used CY 2023 data and only included data from HHAs with at least 20 stays.

To assess face validity of the Cross-Setting Discharge Function Score for HH measure, we convened two Technical Expert Panel (TEP) meetings (July 2021 and January 2022), as well as a Patient and Family Engagement Listening Session. TEP members showed strong support for the face validity of this measure. Though a vote was not taken at the meeting, the TEP agreed with the conceptual and operational definition of the measure. Panelists reviewed the validity analyses described herein and agreed they demonstrated measure validity. Additionally, panelists agreed that the Cross-Setting Discharge Function Score for HH measure adds value over the measures currently in-use in the SNF QRP (see Field 147 of the SNF MUC submission form).

The Patient and Family Engagement Listening Session demonstrated that the measure concept

resonates with patients and caregivers. Participants understood and found important what self-care and mobility mean for patient outcomes. Participants emphasized the importance of measuring functional outcomes and were specifically interested in metrics that show how many patients discharged from particular HHAs made improvements in self-care and mobility.

For the-use SNF QRP functional outcome measures—of which the Cross-Setting Discharge Function Score for HH is modeled—all missing item scores (i.e., Not Attempted, or NA, codes) are recoded to the code signifying the patient is completely dependent for an activity. However, TEP panelists agreed that NA codes may not always signify that a patient was dependent on a functional activity.[1] As a refinement, statistical imputation was implemented to estimate item scores for patients where a GG item was NA using models that adjust for patient clinical characteristics. We evaluated the empiric validity of our estimation methodology using the following analyses (see the Technical Report for full details: https://www.cms.gov/files/document/hhdischargefunctiontechnicalreport20...).

1. We estimated admission and discharge scores for each GG item used in measure construction. To evaluate model fit of estimation models, we calculated C-statistics for each of the 22 estimation models. C-statistics ranged from 0.86-0.99, and the mean C-statistic was 0.96.

2. A bootstrapping method was used to measure bias and mean squared error (MSE) in the estimation method that uses statistical imputation compared to the recode approach used in the self-care and mobility functional outcome measures. Bias measures the average amount by which the estimated value differs from the true value. Bias is signed, with a positive amount meaning that the estimated values were higher, on average, than were the true values. MSE measures how far away the method is, on average from the truth. It is unsigned and can be positive even if bias is zero. For the estimated values, average MSE was 1.44 at admission and 1.23 at discharge, and average bias was -0.22 at admission and -0.15 at discharge. For the recode approach, average MSE was 4.60 at admission and 13.30 at discharge, and average bias was -0.54 at admission and -0.70 at discharge. This result indicates that the estimation approach produced less biased, more precise estimates for missing item scores.

3. We calculated the difference in discharge function between episodes that have bona fide item scores at admission and stays with NA codes at admission where we estimate the item score. This difference provides a metric of how accurately estimated item scores reflect true patient function. For all 11 items, the difference was lower than if these ANAs were recoded to the most dependent level of functional status. This result indicates that statistical estimation produced more accurate results.

5.3.4 Validity Testing Results

A Technical Expert Panel provided feedback on the Cross-Setting Discharge Function for HH measure representing face validity.

1. **Expert Consensus on Cross-Setting Discharge Function Score for HH**

- The discharge function measure was reviewed and supported by a multi-disciplinary panel of experts, including persons with lived experience.
- **Evidence**: The panelists favored reporting discharge function measures due to their ability to reflect patient recovery at discharge. They preferred reporting discharge function rather than change in function measures because it better captures patient status at the point of leaving the provider.

"Panelists from the July 2021 TEP favored Discharge Function Score measures over Change in Function Score measures and recommended moving forward with Discharge Function Score for the cross-setting measure."

Source: PAC Function TEP Summary Report – July 2021 and PAC Function TEP Summary Report – January 2022.

1. **Robust Risk Adjustment for Fair Comparisons**

- The measure uses a robust **risk adjustment** methodology, which supports fair comparisons of measure results across providers by accounting for differences in patient age, clinical characteristics and comorbidities.
- **Evidence**: This ensures that providers are compared on a level playing field, taking into account the complexity of patients treated at each provider.

"Calculate expected Discharge Function Mobility Score for each eligible stay using risk adjustment coefficients, including demographics, health characteristics, and admission function score."

Source: PAC Function TEP Summary Report – January 2022.

1. **Handling of Activities Not Attempted codes**

- The discharge function measure incorporates **statistical imputation** to address that not all patients can complete each of the functional activities and are thus coded using the **Activities Not Attempted codes. This supports measure** validity even when certain activities cannot be completed during the patient's stay.
- **Evidence**: The TEP strongly favored using **statistical imputation** over simply coding missing data as "dependent," ensuring that the discharge function measure more accurately reflects the patient's true capabilities.

"Panelists tended to favor statistical imputation with continued refinement to improve cross-

setting performance. Panelists agreed that the current recode could be improved upon."

Source: PAC Function TEP Summary Report – July 2021 and PAC Function TEP Summary Report – January 2022.

1. **Alignment with Patient-Centered Outcomes**

- The discharge function measure is designed to reflect patient-centered goals, focusing on the safe and functional transition of patients back to their community or home setting.
- **Evidence**: Functional outcomes at discharge are aligned with patient goals of regaining independence, which is a key measure of quality in post-acute care.

"The discharge function score is designed to reflect the ability of post-acute care providers to successfully rehabilitate patients, ensuring they regain functional independence at discharge and beyond."

Source: PAC Function TEP Summary Report – January 2022.

1. **Interested Parties Engaged and Broad Support**

- The measure was reviewed by a diverse group of interested parties with broad support and clinical relevance across different care settings.
- **Evidence**: Clinicians, policy experts, and performance measurement specialists contributed their feedback, ensuring that the measure is relevant and usable across different PAC settings.

"The PAC QRP Functions TEP comprised 15 stakeholders with diverse perspectives and areas of expertise, including clinical, policy and program, measures development, and technical expertise."

Source: PAC Function TEP Summary Report – January 2022.

Measure validity was assessed by comparing the DC Function measure with other quality measures in the HH Quality Reporting Program using Spearman (rank) correlations between provider’s performance scores.

As expected, this measure demonstrated positive correlation with the Discharge to Community measure (0.26), which was significant ($p<0.01$). Correlation was also positive with Improvement in Ambulation (0.31), Improvement in Bed Transfer (0.45), Improvement in Bathing (0.32), Improvement in Dyspnea (0.35), and Improvement in Oral Medication Management (0.28). See **Exhibit 9 in the supplemental attachment**.

5.3.5 Interpretation of Validity Results

1. Critical Data Elements: We reviewed results from several published studies that examined the validity of the function items.
2. Computed Quality Measure Score

Convergent Validity. First, as expected, scores for the Cross-Setting Discharge Function Score for HH measure correlated well but not perfectly with other cross-setting measures including Improvement in Ambulation-Locomotion (0.31) and Improvement in Bed Transferring (0.45). This is expected because the HH QRP functional improvement measures measure whether the HHA improved patient function, while the Cross-Setting Discharge Function Score for HH measures whether patient function exceeds expectations at discharge. Second, the Cross-Setting Discharge Function Score for HH is a composite score of a spectrum of self-care and mobility function activities, while the functional improvement measures each focus on one specific functional item. The Cross-Setting Discharge Function Score for HH is associated with discharge to community, and this measure demonstrated the expected positive correlation with the Discharge to Community measure (0.26). Additionally, it was negatively correlated with the Potentially Preventable Readmissions (PPR) within 30-Days Post-Discharge measure (-0.02) and the Potentially Preventable Hospitalization measure (-0.17). The measure had a weak positive correlation with Medicare Spending Per Beneficiary (0.08). All correlation coefficients were significant ($p<0.01$) with the exception of the PPR measure.

5.3.2 Type of Accountable Entity Level Validity Testing Conducted (derived)

Empirical validity testing at the accountable entity-level (e.g., criterion validity, construct validity, known groups analysis)

5.4.1 Methods Used to Address Risk Factors

Statistical risk adjustment model with risk factors

5.4.2 Conceptual Model Rationale

The rationale for risk adjustment is to account for differences in patient populations. By risk adjusting, the performance measure assesses providers based on their quality of care and not the underlying health of the population. Providers are not penalized for serving patients with greater clinical need, and fair comparisons can be made across providers.

The performance measure is cross-setting, calculated for inpatient rehabilitation facilities (IRF), skilled nursing facilities (SNF), long-term care hospitals (LTCH), and home health (HH). The development team sought to align risk factors across settings as much as possible. The team presented to a TEP an overview of the availability of clinically meaningful risk factors in each setting. TEP members supported setting-specific parameters for risk adjustment since there are different data points available as well as clinical considerations for each setting.

The development team also presented to the TEP the conceptual model shown below in 4.4.2a. TEP members agreed that the conceptual model presented does represent the salient points about the relationship between social risk factors (SRFs), patient functional outcomes, and provider quality. TEP members provided examples of ways in which providers are able to, and should be expected to, mitigate the influence of SRFs on patient outcomes.

TEP members supported further analysis to understand the effect of measurable SRFs. Specifically, the TEP cited the following as potential measurable SRFs that can impact functional outcomes: dual enrollment, ADI, and race/ethnicity (although noting that these are impacted by provider bias).

See **Exhibit 10 in the supplemental attachment** for the currently measurable SRFs included in risk adjustment testing, but not used in the final risk adjustment model. Health-related social needs items are not yet available cross-setting, but can be tested for inclusion in the future.

5.4.2a Attach Conceptual Model

Conceptual Model_only_0.pdf

5.4.3 Variable Distribution Across Measured Entities

The table attached for Section 4.4.4a presents information for each risk factor covariate in the final model plus the additional SRF risk factors considered but not used in the final risk adjustment model.

5.4.4 Risk/Case-Mix Adjustment Modeling and/or Stratification Results

Cross-Setting Discharge Function Score for HH is a cross-setting performance measure calculated for IRF, SNF, LTCH, and HH. Because different data elements are collected across the assessment instruments for each setting, the development team aligned clinically meaningful covariates as much as possible.

The development team then presented to a TEP an overview of the data availability in each setting, **see Exhibit 11 in the supplemental attachment**, and solicited feedback on which covariates should be included in the cross-setting measure risk adjustment model.

The TEP members expressed support for setting-specific models since there are different data points available as well as different clinical considerations for each setting. The panelists suggested additional risk adjustors to consider, including Prior living site; Prior hospitalization; Chronic conditions; Obesity; Severity of health condition(s); Low BMI; Pain; Wound infection; Transportation; and Health literacy.

Below is a listing of the covariate groups included in the final risk adjustment model for HH. Information on the covariates were obtained from the SOC/ROC OASIS data.

Age Category: Age was calculated as of the SOC/ROC date (M0030/M0032) of the HH quality episode using the patient's date of birth (M0066).

SOC/ROC Function Score: Sum of SOC/ROC scores for function activities included in the discharge score, which can range from 10–60, with a higher score indicating greater independence. NAs in the SOC/ROC activity scores are treated the same way as NAs in the discharge activity scores, with NAs replaced with estimated scores (Please see Steps 1 – 2 in 1.18). The walking and wheelchair activities are used in the same manner as for the discharge score (Step 2 in Section 1.18). SOC/ROC function score squared is also included as a risk adjustor.

Prior surgery: This covariate captures whether the patient had prior surgery.

Prior Function/Device Use: These covariates capture patient's functional status prior to the quality episode.

Pressure Ulcers: These covariates capture the presence of pressure ulcer at different stages.

Cognitive Function: These covariates capture the patient's cognitive function by assessing whether the patient's mental status at SOC/ROC is impaired, and if impaired, at what level.

Incontinence: These covariates indicate the patient's level of bladder and bowel incontinence.

Availability of Assistance and Living Arrangements: These covariates indicate the patient's residential circumstance and availability of assistance.

SOC/ROC Source: These covariates indicate whether the patient was admitted from the community at SOC or from a facility at SOC/ROC.

Body Mass Index: These covariates indicate whether the patient has a low BMI (12 ≤ BMI ≤ 19) or high BMI (>50).

Risk for hospitalization: These covariates indicate a history of falls, multiple hospitalizations, multiple ER visits, decline in status, non-compliance, or polypharmacy.

Confusion: These covariates indicate whether the patient has moderately frequent or severely frequent confusion in the 14 days prior to SOC/ROC.

Medication Management Needs: These covariates indicate whether the patient needs medication management assistance for oral or injectable medication.

Supervision and Safety Sources of Assistance: These covariates indicate whether the patient needs and has non-agency caregivers with proper training.

HCC Comorbidities: Comorbidities are obtained from Items M1021 and M1023 in OASIS. Comorbidities are grouped using CMS Hierarchical Condition Categories (HCC) software.

The risk adjustment model is an ordinary least squares (OLS) linear regression. It estimates the relationship between discharge function score and the set of risk adjustors. The risk adjustment model is run on all HHA quality episodes to determine the model intercept (β_0) and risk adjustor coefficients ($\beta_1, \ldots, \beta_n$). Expected discharge function scores are calculated by applying the regression equation to each HHA quality episode at SOC/ROC.

The risk adjustment model is written as

$$\textit{Expected Discharge Function Score} = \beta_0 + \beta_1 x_1 + \ldots + \beta_n x_n$$ where x_1 - x_n are the risk adjustors.

We also tested three SRFs of interest that ultimately were not included in the final risk adjustment

model:

1. Medicare vs. dually enrolled (patient is dually enrolled at any time during the quality episode)
2. Race/ethnicity
3. ADI

We constructed alternative risk adjustment models that included additional covariates for payer, race/ethnicity, and ADI to consider these SRFs for inclusion in the risk adjustment model.

5.4.4a Attach Risk/Case-mix Adjustment Modeling and/or Stratification Specifications

Sec 4.4.4a Model_Coefficients.xlsx

5.4.5 Calibration and Discrimination

A well-calibrated model demonstrates good predictive ability to distinguish high-risk from low-risk patients. To assess risk adjustment model calibration, we calculated the ratio of observed-to-predicted discharge function score across eligible stays by decile of predicted discharge function score (risk).

The average ratio of observed-to-predicted scores for each risk decile ranged from 0.98 to 1.01, which suggested good calibration across the range of patients without evidence of concerning under- or over-estimation. Below are the ratios overall and by decile.

We analyzed model fit using adjusted R-squared to determine if the risk adjustment model can accurately predict discharge function while controlling for patient case-mix. The adjusted R-squared value was 0.48, which suggests good model discrimination.

5.4.6 Interpretation of Risk/Case-mix Factor Findings

Risk factors were chosen based on clinical relevance to Cross-Setting Discharge Function Score for HH performance. Risk factors were recommended by clinician members of the measure development team and by the TEP. The final risk adjustment model has an adjusted R-squared of 0.48.

We find that across the alternative risk adjustment models considered, the SRF covariates are

significant but small, and have little to no impact on model fit. The details of the alternative risk adjustment models are shown in the attachment for Section 4.4.4a. The attached file presents the model results for the final risk adjustment model and the alternative risk adjustment model with additional SRF covariates.

While we considered these SRFs for inclusion in the risk adjustment model, we ultimately decided against such inclusion, primarily for conceptual reasons. Including these SRFs in risk adjustment models runs the risk of adjusting for factors that providers could control and should improve on – like active/unconscious bias against particular patient populations (e.g., more actively accommodating different levels of health literacy, better access to interpreter services for people who are not native English speakers, better accommodations for disabled patients). It effectively lowers the expected outcomes for high-SRF patients, making expectations easier to meet, without improving the actual outcomes or underlying treatments. Further, when measures are stratified by such SRFs (enabling identification of gaps in provider quality between, for example, dually and non-dually enrolled patients, as is done in confidential feedback reports to providers), adjusting for dual eligibility as a risk factor may diminish CMS's ability to make such stratified information clear and useful to providers. Finally, assessment items released since measure development allow for the possibility of more refined measurement of social determinants of health (e.g., health literacy, transportation). These alternatives can be tested for future revisions of the Cross-Setting Discharge Function Score for HH measure.

5.4.7 Final Approach to Address Risk Factors

Statistical risk adjustment model with risk factors

6.1.1 Current Status

In use

6.1.2 Current or Planned Use(s)

Public Reporting, Quality Improvement with Benchmarking (external benchmarking to multiple organizations), Quality Improvement (Internal to the specific organization)

6.1.3 Program Details

Name of the program and sponsor
CMS Home Health Quality Measures
URL of the program
https://www.cms.gov/medicare/quality/home-health/home-health-quality-measures
Purpose of the program
https://www.cms.gov/medicare/quality/home-health/home-health-quality-re...
Geographic area and percentage of accountable entities and patients included
Certified home health in United States
Applicable level of analysis and care setting

Level of Analysis: Facility, Care Setting: Home Health

The provider sample is publicly reportable providers (home health agencies with ≥ 20 episodes)

which is a provider count of 8,093 home health agencies and an episode count of 5,153,932.

6.2.1 Actions of Measured Entities to Improve Performance

All home health agencies with at least 20 qualifying quality episodes of care receive quarterly measure reports on all their publicly reported measures. In addition, providers can run on-demand, confidential reports showing individual measure results and national averages, through CMS' CASPER system. There is an email box that HHAs may submit questions to as well as a website on which the latest measure updates are posted. The OASIS Guidance Manual describes the OASIS-based reports that are available, report use(s) and provides guidance about OASIS and quality improvement. Home health agencies make use of these reports to monitor and improve the quality of care.

6.2.2 Feedback on Measure Performance

Home health agencies receive quarterly measure reports on all their measures. There is an email box that HHAs may submit questions to as well as a website on which the latest measure updates are posted. Because of the changes made to the OASIS in OASIS E (effective January 1, 2023), risk models for publicly reported outcome measures have been updated. CMS makes available information about risk models and covariates on its website.

6.2.3 Consideration of Measure Feedback

No measure specifications changes requested or made.

6.2.4 Progress on Improvement

This measure is too new to provide an assessment of impacts on improvement.

6.2.5 Unexpected Findings

None

7.1 Supplemental Attachment

FULL-M~1_0.PDF

Developer POC email

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Measure Developer POC

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Durham, NC
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The measure developer is different from the measure steward

Yes

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Steward Organization

Centers for Medicare & Medicaid Services

Steward Organization URL

https://www.cms.gov/medicare/quality/home-health/home-health-quality-measures

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