

# 2024 Measure Set Review (MSR): Final Preliminary Assessment

The following information was sourced in June of 2024 from the Centers for Medicare & Medicaid Services Measures Inventory Tool (CMIT), discussions with CMS program leads, and publicly available CMS datasets (see links below).

## I. Measure Information

CMIT ID	Title
<a href="#">00575-04-C-HHQR</a>	Potentially Preventable 30-Day Post-Discharge Readmission Measure for HH Quality Reporting Program
Measure Steward	CMS Program
Centers for Medicare & Medicaid Services (CMS)	<a href="#">Home Health Quality Reporting Program</a>

Measure Overview	
<p><b>Rationale:</b> Evidence suggests<sup>1,2</sup> that careful discharge planning in hospitals that ensures smooth care transition can avert readmission. Effective reengineering of discharge planning often involves assisting patients with managing medication reconciliation and scheduling follow-up appointments.</p>	
<p><b>Description:</b> Percentage of home health (HH) stays in which patients who had an acute inpatient discharge within the 30 days before the start of their home health stay and were admitted to an acute care hospital or long-term care hospital (LTCH) for unplanned, potentially preventable readmissions in the 30-day window beginning 2 days after home health discharge.</p>	
<p><b>Numerator:</b> Number of home health stays for patients who have a Medicare claim for unplanned, potentially preventable readmissions in the 30-day window beginning 2 days after discharge.</p>	
<p><b>Denominator:</b> Number of home health stays that begin during the 3-year observation period for patients who had an acute inpatient hospital discharge within the 30 days prior to the start of the HH stay and were discharged to the community from HH.</p>	
<p><b>Exclusions:</b> 1) Under 18; 2) Died during the home health stay; 3) Did not have a short-term acute-care stay within 30 days prior to a HH admission date; 4) Are transferred at the end of a stay to another home health agency (HHA) or short-term acute care hospital; 5) Are not continuously enrolled in Parts A and B FFS Medicare for the 12 months prior to the post-acute admission date and at least 31 days after the post-acute discharge date or are ever enrolled in Part C Medicare Advantage during this period; 6) Are not discharged to the community 7) Are discharged against medical advice (AMA) 8) The prior short-term acute-care stay was for nonsurgical treatment of cancer 9) Are transferred to a federal hospital from the HHA. 10) Received care from a provider located outside of the United States, Puerto Rico, or a U.S. territory.</p>	
<p><b>Measure type:</b> Outcome</p>	<p><b>Measure is a composite:</b> No  <b>Measure is digital and/or an eCQM:</b> No</p>

<sup>1</sup> Jack BW, Chetty VK, Anthony D, Greenwald JL, Sanchez GM, Johnson AE, Forsythe SR, O'Donnell JK, Paasche-Orlow MK, Manasseh C, Martin S, Culpepper L. (2009). A reengineered hospital discharge program to decrease rehospitalization: a randomized trial. *Ann Intern Med* 150(3):178-87.

<sup>2</sup> Bradley EH, Sipsma H, Horwitz LI, Ndumele CD, Brewster AL, Curry LA, Krumholz HM. (2015). Hospital strategy uptake and reductions in unplanned readmission rates for patients with heart failure: a prospective study. *J Gen Intern Med* 30(5):605-11.

<b>Level(s) of analysis:</b> Facility/Hospital/Agency	<b>Care setting:</b> Home Health
<b>Risk adjustment and/or stratification:</b> No	<b>Data source(s):</b> Claims Data
<b>Data collection method:</b> Claims data review	<b>Reporting frequency:</b> Annually with the October Care Compare refresh.
<b>All required data are collected as part of clinical workflow:</b> Yes, routinely submitted as part of claims data.	<b>Reporting overlap with similar/related measures:</b> Part of four measure variations assessing 30-day post discharge readmission across PAC/LTC settings. Includes 00575-02-C-LTCHQR, 00575-01-C-IRFQR, 00575-03-C-SNFQRP, and 00575-04-C-HHQR.
<b>Does this measure fill a statutorily required category for the program?</b> Yes, this topic area is required by <a href="#">IMPACT Act</a> and addresses the discharge to community and potentially preventable readmissions rate	<b>Is this measure included in upcoming rulemaking?</b> No

Measure Status	
<b>Current CBE Endorsement Status:</b> Not Endorsed	<b>CBE Endorsement History:</b> None

## II. Measure Performance

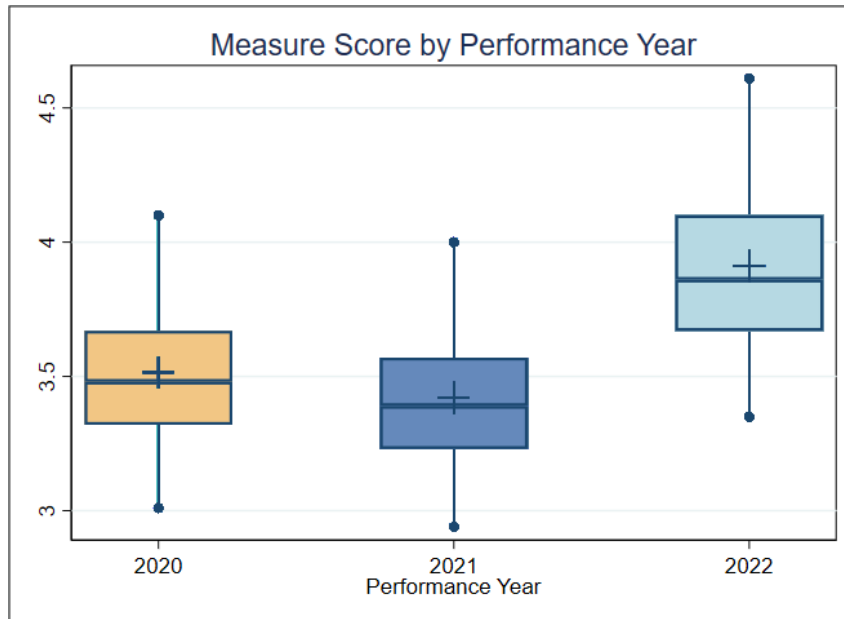
### 00575-04-C-HHQR Performance in 2020-2022

For this measure, the MSR evaluation and analysis team reviewed the publicly available dataset [Home Health Care Agencies](#) and archived [Home Health Services](#).

Figure 1 is a boxplot that shows the distribution of the performance over the past 3 years (where available). For each performance year, the dots indicate the lower 5th and upper 95th percentiles, and the vertical line is the range between these values (90% of the measure scores are between the dots). The box spans the lower 25th to the upper 75th percentile (50% of the measure scores are within the box). The horizontal line in the box indicates the median score, and the “+” indicates the mean score. This plot can be used to assess overall trends in the score over time.

**Interpretation:** In the plot below, the median score decreases slightly from 3.5 in 2020 to about 3.3 in 2021 and then increases substantially to about 3.8 in 2022.

**Figure 1. Boxplot of Measure Score by Year**



### Importance Table

**Interpretation of measure scores:** This table shows the relative spread of the scores and how many patients are impacted. Often the lowest or highest deciles (which, by definition, each represent 10% of the entities) may represent a disproportionately higher or lower percentage of patients. If the lowest decile contains only 5% of the patients for example, it suggests that low patient population may be related to low scores.

The table can also be used to evaluate the impact of improving the score. It is common practice to use the performance of the top 20% of the entities as a benchmark. Here, 20% of the entities perform better than the 3rd Decile (3.7%), which could be considered the benchmark. The number of adverse events for each decile can be estimated by multiplying the total patients by the corresponding rate. Here the estimated total number of adverse events across all deciles is 86,385. If Deciles 4-10 performed at the benchmark of 3.7%, there would be an estimated 9% fewer adverse events (about 78,638).

**Table 1. Importance (Decile by measure score, 2022)**

Data Type	Overall	Min	Decile 1	Decile 2	Decile 3	Decile 4	Decile 5	Decile 6	Decile 7	Decile 8	Decile 9	Decile 10	Max
Mean Score (SD)	3.91 (0.41)	2.6	3.3	3.6	3.7	3.7	3.8	3.9	4.0	4.1	4.3	4.8	8.6
Entities	5,856	1	586	586	585	586	585	586	586	585	586	585	1
Total Patients	2,170,492	1,302	353,276	256,844	154,061	144,317	123,049	169,356	136,689	166,873	223,721	442,306	1,372

### Reliability Tables

Two tables are used to summarize reliability. For Table 2, entities are sorted by patient volume, and the mean reliability is reported along with the number of entities and mean number and total patients for each decile. These tables can be used to assess the impact of population size on the reliability of an entity's measure score. In cases where reliability has a strong relationship to population size, reliability will be the lowest at Decile 1 and progressively increase up to Decile 10.

For Table 3, entities are sorted by reliability, and the mean reliability by decile is reported. Mean, standard deviation, minimum and maximum reliability, and inter-quartile range (IQR) are also included. This table can be used to see the distribution of the reliability of the entities. A measure score is generally considered reliable when the reliability for at least 70% of the individual entities is above 60%.

**Table 2. Reliability (Decile by Denominator-Target Population Size)**

Data Type	Overall	Min	Decile 1	Decile 2	Decile 3	Decile 4	Decile 5	Decile 6	Decile 7	Decile 8	Decile 9	Decile 10	Max
Mean Target Population Size	371	20	25	40	61	92	130	183	267	400	643	1,866	18,620
Mean Reliability	29.9	22.7	22.9	23.3	24.0	25.0	25.9	27.5	29.8	32.8	37.4	50.9	86.9
Entities	5,856	60	586	586	585	586	585	586	586	585	586	585	1
Total Patients	2,170,492	1,200	14,753	23,322	35,726	53,796	76,255	107,429	156,644	233,776	376,960	1,091,831	18,620

**Table 3. Mean reliability (By reliability decile)**

Mean	SD	Min	Decile 1	Decile 2	Decile 3	Decile 4	Decile 5	Decile 6	Decile 7	Decile 8	Decile 9	Decile 10	Max	IQR
29.9	9.5	13.3	20.0	22.3	23.6	24.9	26.3	28.0	30.2	33.4	38.5	52.2	88.0	9.6

**Interpretation:** The overall variation between entities (as estimated by the variance of the measure scores) is low relative to the variation within each entity (as estimated by the square of ¼ of the difference between the upper limit and the lower limit of the risk-standardized rate). Nearly all entities have an estimated reliability of less than 60%, suggesting that this measure may not be effective in differentiating entities by quality of performance.