

# 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="#">00575-03-C-SNFQRP</a>	Potentially Preventable 30-Day Post-Discharge Readmission Measure for Skilled Nursing Facility (SNF) Quality Reporting Program (QRP)
Measure Steward	CMS Program
Centers for Medicare & Medicaid Services (CMS)	<a href="#">Skilled Nursing Facility Quality Reporting Program</a>

Measure Overview
<p><b>Rationale:</b> The peer-reviewed literature specific to potentially preventable readmissions following SNF discharge is limited. However, MedPAC has estimated that 76% of 30-day readmissions for Medicare beneficiaries overall were due to five potentially preventable conditions (heart failure, electrolyte imbalance, respiratory infection, sepsis, and urinary tract infection).</p>
<p><b>Description:</b> The risk-standardized rate of unplanned, potentially preventable readmissions for SNF Medicare fee-for-service (FFS) beneficiaries within 30 days of discharge from the SNF.</p>
<p><b>Numerator:</b> The risk-adjusted estimate of the number of unplanned readmissions that occurred within 30 days of discharge from the SNF. The numerator of this measure is mathematically related to the number of patients/residents in the target population who have the event of a potentially preventable, unplanned readmission during the specific readmission window (i.e., 30-day post discharge). The measure does not have a simple form for the numerator and denominator; that is, the risk-adjustment method does not make the observed number of readmissions the numerator, and a predicted number the denominator. Instead, the numerator is the risk-adjusted estimate of the number of unplanned readmissions that occurred within 30 days of PAC discharge. This estimate starts with the observed readmissions and is then risk adjusted for patient/resident characteristics and a statistical estimate of the PAC provider's effect, beyond patient/resident case mix.</p>
<p><b>Denominator:</b> The risk-adjusted expected number of potentially preventable readmissions. This estimate includes risk adjustment for patient characteristics with the facility effect removed. The expected number of potentially preventable readmissions is the predicted number of risk-adjusted potentially preventable readmissions if the same patients were treated at the average PAC provider appropriate to the measure.</p>
<p><b>Exclusions:</b> 1. Patients/residents who died during the SNF/inpatient rehabilitation facility (IRF)/long-term care hospital (LTCH) stay. 2. Patients/residents less than 18 years old. 3. Patients/residents who were transferred at the end of a stay to another SNF/IRF/LTCH or short-term acute-care hospitals. 4. Patients/residents who were not continuously enrolled in Part A FFS Medicare for the 12 months prior to the SNF/IRF/LTCH admission date and at least 30 days after SNF/IRF/LTCH discharge date. 5. Patients/residents who did not have a short-term acute-care stay within 30 days prior to a SNF/IRF/LTCH admission date. 6. Patients/residents</p>

discharged against medical advice (AMA). 7. Patients/residents for whom the prior short-term acute-care stay was for nonsurgical treatment of cancer. 8. Patients/residents who were transferred to a federal hospital from the PAC facility. 9. Patients/residents who received care from a provider located outside of the United States, Puerto Rico, or a U.S. territory. 10. SNF/IRF/LTCH stays with data that are problematic (e.g., anomalous records for hospital stays that overlap wholly or in part or are otherwise erroneous or contradictory). This also includes SNF stays for residents who exhausted their Medicare benefits for SNF coverage. 11. SNF stays in which the prior proximal hospitalization was for pregnancy.	
<b>Measure type:</b> Outcome	<b>Measure is a composite:</b> No <b>Measure is digital and/or an eCQM:</b> No
<b>Level(s) of analysis/measured entity:</b> Facility/Hospital/Agency	<b>Care setting:</b> <ul style="list-style-type: none"> <li>• Inpatient rehabilitation facility (IRF)</li> <li>• Long-term care hospital</li> <li>• Skilled nursing facility (SNF)/Nursing Home</li> </ul>
<b>Risk adjustment and/or stratification:</b> Yes, risk adjusted for variables including age, sex, comorbidities, and other variables outlined <a href="#">here</a> .	<b>Data source(s):</b> Claims data
<b>Data collection method:</b> Claims data review	<b>Reporting frequency:</b> Annually
<b>All required data are collected as part of clinical workflow:</b> Yes, routinely collected as part of claims data.	<b>Reporting overlap with similar/related measures:</b> One 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> .	<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

### 00575-03-C-SNFQRP Performance in 2020-2022

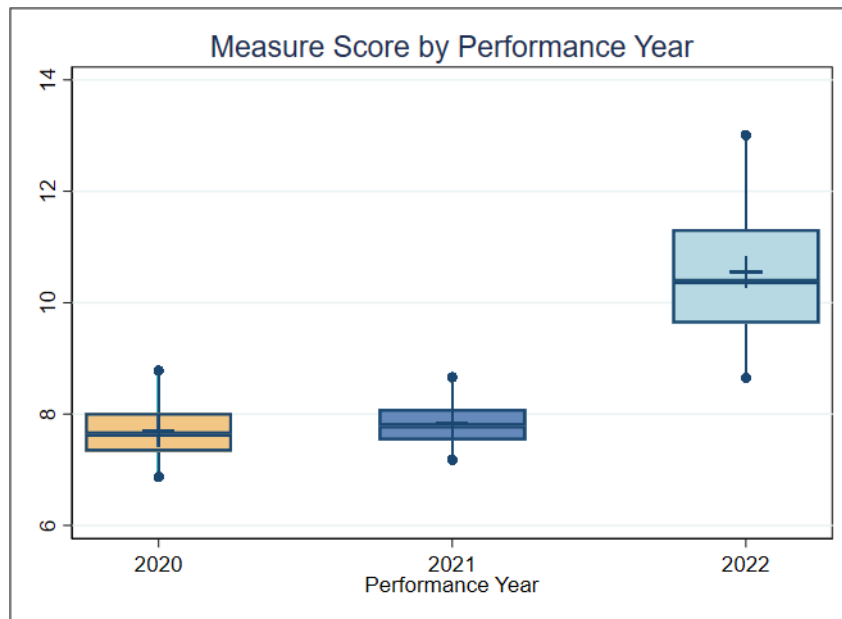
For this measure, the MSR evaluation and analysis team reviewed the publicly available dataset [Skilled Nursing Facility Quality Reporting Program - Provider Data](#) and archived [Nursing Homes and Rehab Services](#).

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.

**Interpretation:** This plot can be used to assess overall trends in the score over time. In the plot below, the median score increases substantially from less than 8 in 2020-2021 to over 10 in 2022. There was a wider range in performance in 2022 than prior years examined.

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



### Importance Table

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.

Interpretation of measure 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 (9.6), 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 198,171. If Deciles 4-10 performed at the benchmark of 9.6, there would be an estimated 11% fewer adverse events (about 175,859).

**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	10.6 (1.37)	6.6	8.5	9.2	9.6	9.9	10.2	10.5	10.9	11.3	11.9	13.3	20.6
Entities	13,036	1	1,304	1,304	1,303	1,304	1,303	1,304	1,304	1,303	1,304	1,303	1
Total Patients	1,865,951	580	234,923	172,067	159,192	161,870	155,301	167,719	172,769	191,374	199,380	251,356	254

### Reliability Tables

Two tables are used to summarize reliability. For Table 2, entities are sorted by patient volume, and the average reliability is reported along with the number of entities and average 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 average 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	143	25	31	44	58	73	91	111	138	178	244	463	1,978
Mean Reliability	40.2	31.8	32.0	33.4	35.1	36.2	37.6	39.4	41.4	43.9	47.4	55.7	82.0
Entities	13,036	95	1,304	1,304	1,303	1,304	1,303	1,304	1,304	1,303	1,304	1,303	1
Total Patients	1,865,951	2,375	40,765	57,906	75,658	95,420	118,209	144,807	180,272	231,711	318,010	603,193	1,978

**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
40.2	8.3	20.9	28.7	32.2	34.2	36.0	37.9	39.9	42.1	44.9	48.8	57.4	82.0	10.7

**Interpretation:** The overall variation between entities (as estimated by the variance of the measure scores) is low relative to the variation within each entity. 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.