

**Overall Hospital Quality Star Ratings:
2024 SAS Pack Software Documentation**

Centers for Medicare and Medicaid Services (CMS)

July 2024 Publication

1. Introduction

This document provides the details for the Overall Hospital Quality Star Rating Statistical Analysis System (SAS) package (SAS Pack), used to produce the Centers for Medicare & Medicaid Services' (CMS's) Overall Hospital Quality Star Rating published to the [Compare Tool on Medicare.gov](https://www.qualitynet.org) (hereinafter, Overall Star Ratings). This SAS Pack comprises three main SAS programs and one macro file to provide a specified quarter's group scores, summary scores, and star ratings using a simple average of measure scores into group scores, a weighted average of group scores into a summary score, and *k*-means clustering. This instruction document, the SAS code, and the input file are available on the Star Rating *QualityNet* page at www.qualitynet.org > Hospitals-Inpatient > Public Reporting > Overall Hospital Ratings > Statistical Analysis System (SAS) Package.

Goal of Overall Star Ratings

The Overall Star Rating is designed to provide summary information for patients and consumers about existing publicly reported quality data. More specifically, the primary objective of the Star Rating is to summarize information from the existing measures published to the [Compare Tool on Medicare.gov](https://www.qualitynet.org) in a way that is useful and easy to interpret for patients and consumers, while using a statistically sound methodology. Consistent with other CMS Star Rating efforts, the methodology assigns each hospital between one and five stars, reflecting the hospital's overall performance on selected quality measures. For more information on the Overall Hospital Quality Star Rating methodology, please refer to the Star Ratings *QualityNet* page at www.qualitynet.org > Hospitals-Inpatient > Public Reporting > Overall Hospital Ratings > Resources > Preview > Quarterly Updates and Specifications (QUS) Report ([July 2024 QUS Report](#)).

Principles of Overall Star Ratings Methodology

For the development and reevaluation of the Overall Star Rating methodology, CMS set the following guiding principles:

- Be scientifically valid;
- Be inclusive of hospital and measure information;
- Account for the heterogeneity of available measures and hospital reporting;
- Align with the [Compare Tool on Medicare.gov](https://www.qualitynet.org) and CMS programs;
- Ensure transparency of methodological decisions; and
- Be responsive to stakeholder input.

CMS considered the above principles for all key decisions. To maintain transparency and impartiality, the Overall Star Rating developers discussed methodology and policy decisions with four Technical Expert Panels (spanning 2014 – 2015, 2017 – 2019, 2019 – 2021, and 2023 – present). The developers also worked with patients, patient advocates, and family caregivers during the development of the Star Rating methodology to discuss the importance, calculation, and display of the Star Rating; a Person & Family Engagement (PFE) Workgroup continues to provide input to the developers on display of the Star Rating and ongoing reevaluation, most recently in October 2023. A Provider Leadership Workgroup allows hospital leaders and representatives the opportunity to share feedback on the Overall Star Rating methodology in addition to more specific topics identified by the developers, meeting most recently in November 2023. The Star Ratings developers have also held five public input periods and a dry run. CMS continues efforts to engage the public through numerous channels including National Provider Calls, presentations at national meetings and the CMS Quality Conference, all of which maximize transparency and engagement with a broad range of stakeholders.

This SAS Pack documentation reflects version 4.1 of the Star Ratings methodology. Consistent with the guiding principle of transparency and prior iterations of the methodology, CMS will continue to provide updated SAS Pack and documentation with each Overall Star Rating publication.

Support for SAS Pack Users

CMS aims to maintain a high level of engagement with stakeholders throughout the implementation of the Star Rating. Stakeholders may submit questions and comments about the Star Rating to the [QualityNet Question and Answer Tool](#). CMS will seek to answer stakeholder questions regarding the SAS Pack and Star Rating methodology as they pertain to the development and implementation of the Overall Star Rating. Questions regarding individual measures are beyond the scope of the Star Rating project, as these quality measures are supported by distinct contractors and CMS measure developers.

Lastly, due to resource limitations, CMS cannot provide technical support to each user of the SAS Pack for individual recalculation of each publication of the Star Rating. However, CMS seeks to be as responsive as possible to the comments and questions about the methodology that stakeholders submit to the [QualityNet Question and Answer Tool](#) and will incorporate this feedback into future user support materials.

Intended Use of SAS Pack and Data

To maximize transparency and responsiveness to stakeholders, CMS has made the Star Rating SAS Pack and documentation available to the public. Using these resources and the supplied SAS Pack input file, stakeholders may review the code for calculating the star ratings and run the statistical software to reproduce the Overall Star Rating results for all hospitals publicly reporting information through the [Compare Tool on Medicare.gov](#).

These programs only require a few minutes to run.

Of note, if the user modifies this SAS Pack, uses different measure results, or uses a system other than that described in [Section 3. System Requirements](#), the user may produce results inconsistent with the results publicly reported by CMS.

2. Overview of Contents of SAS Pack

This SAS Pack computes and outputs Overall Star Rating results for each hospital¹ (based on publicly reported measures) in the [Compare Tool on Medicare.gov](#) downloadable database using three main SAS programs and one macro file. The SAS programs are used to complete the seven steps of the Overall Star Rating methodology:

- Assess measures/hospitals for inclusion;
- Standardize hospitals' measure scores;
- Generate group scores;²
- Calculate and apply group weights to obtain hospital summary scores;
- Apply minimum reporting thresholds to summary scores;
- Peer group hospitals based on the number of measure groups; and
- Derive the star ratings within peer groups.

¹ All hospitals reporting at least one of the measures in the Overall Star Ratings are included in the analyses.

² The five groups are: Mortality, Safety of Care, Readmission, Patient Experience, and Timely and Effective Care.

Hospitals' measure group scores are generated using a simple average of measure scores, the measure group scores are then summed and multiplied by policy-based weights to arrive at each hospitals' summary score. Star Ratings are then derived using *k*-means clustering on these summary scores.

The programs included in the SAS Pack are numbered to indicate the order in which the programs should be run. For example, the first program that should be executed is: "Program 0 – Data and Measure Standardization_2024Jul.sas".

Within the SAS code, "&year." refers to the year and "&quarter." refers to the month of the reporting period for the Star Rating input file. For example, if the user inputs the July 2024 input file, "&year.&quarter." represents "2024Jul". Please note that the Star Rating input file post-dates the quarter of measure-level data used; for example, the July 2024 Star Rating input file includes the measure-level results as published to the [Compare Tool on Medicare.gov](https://www.medicare.gov/compare) in January 2024.

The SAS Macro file is called within the three main programs, numbered 0-2. "CALL" is part of the SAS syntax and is synonymous with "execute." In other words, each of three main SAS programs calls or executes the string of macros at given stages when the programs are run. The components of the SAS Pack are as follows (with more detail provided in [Section 5](#) of this document):

- 0 – Data and Measure Standardization2024Jul.sas
- 1 – First Stage_Simple Average of Measure Scores_2024Jul.sas
- 2 – Second Stage Weighted Average and Categorize Star_2024Jul.sas
- Star_Macros.sas

[Section 4](#) of this document provides information on the required input file, and [Section 6](#) of this document provides examples of the output datasets that can be expected once the programs have run successfully.

3. System Requirements

The SAS Pack was tested in the following hardware and software environment:

- Operating System: Microsoft Windows 10 Professional
- Statistical Software: SAS 9.4
- System type: 64-bit operating system

Please note that any differences in the computer system environment may subsequently impact the Overall Star Rating calculation results.

4. Input Data Source

The Overall Star Rating SAS Pack utilizes one source of data to conduct analyses, titled "all_data_&year.&quarter".

The input dataset includes all measure results for all hospitals that are publicly reported. The variables and attributes of the input data used in the Overall Star Rating SAS Pack are presented in [Appendix A, Table 1](#). Please note that the [July 2024 QUS Report](#) lists the measures included for the July 2024 publication at www.qualitynet.org > Hospitals-Inpatient > Public Reporting > Overall Hospital Ratings > Resources > Preview > [July 2024 QUS Report](#).

5. SAS Pack Structure

There are four SAS programs that make up the Overall Star Rating SAS Pack, consisting of three main programs and one macro file (see [Figure 1](#)).

In the three main SAS programs, the first section is where the user can edit the SAS code in order to specify the quarterly reporting period for which the SAS program is to be run. The first section encompasses the first several lines of the SAS programs and contains information regarding the file directories and the %INCLUDE statement. The file directories containing the input dataset, as well as the directories for storing the resulting/output datasets, can be modified by the user in this section, per the notation commented within the SAS code. Also, the first section of each program calls the macro program when the user applies a %INCLUDE statement (see [Section 7](#)).

The details for each of these three main SAS programs are as follows:

Program 0 – “Data and Measure Standardization_2024Jul.sas”

Program 0 defines the hospital cohort and the list of measures for inclusion as following:

- Excludes measures for which the number of hospitals with non-missing measure scores are <= 100; and
- Excludes hospitals reporting none of the measures included in the Overall Star Rating.

Next, this program:

- Creates a list of measures by name for inclusion in the Overall Star Rating;
- Assigns the measures to groups;
- Standardizes measure scores to have a mean of 0 and standard deviation of 1; and
- Sets the direction of each measure to ensure that higher values reflect better performance.

Program 1 – “First Stage Simple Average of Measure Scores_2024Jul.sas”

Program 1 performs the calculations necessary to generate hospitals’ group scores. The five groups of the Overall Star Rating are Mortality, Safety of Care, Readmission, Patient Experience, and Timely and Effective Care. This program:

- Creates a count of the total number of measures available within the measure group for each hospital;
- Calculates a simple average of all available measure results for a hospital within the measure group; and
- Standardizes the simple average results to obtain measure group scores.

Program 2 – “Second Stage_Weighted Average and Categorize Star_2024Jul.sas”

Program 2 takes hospitals’ available measure group scores and performs the steps to ultimately identify hospitals that are eligible for public reporting of their star rating. This program:

- Calculates summary scores as a weighted average of hospitals’ measure group scores;
- Identifies which hospitals meet the set public reporting criteria³ of the Overall Star Rating methodology;

³ A hospital must report a minimum of three groups (one of which must be the Mortality or Safety of Care group), and they must report at least three measures within these three groups. However, once the threshold is met, other groups with fewer measures can be included in the Hospital Summary Score.

- Peer groups hospitals based on the number of measure groups (3, 4 or 5 measure groups); and
- Derives the star ratings using *k*-means clustering.

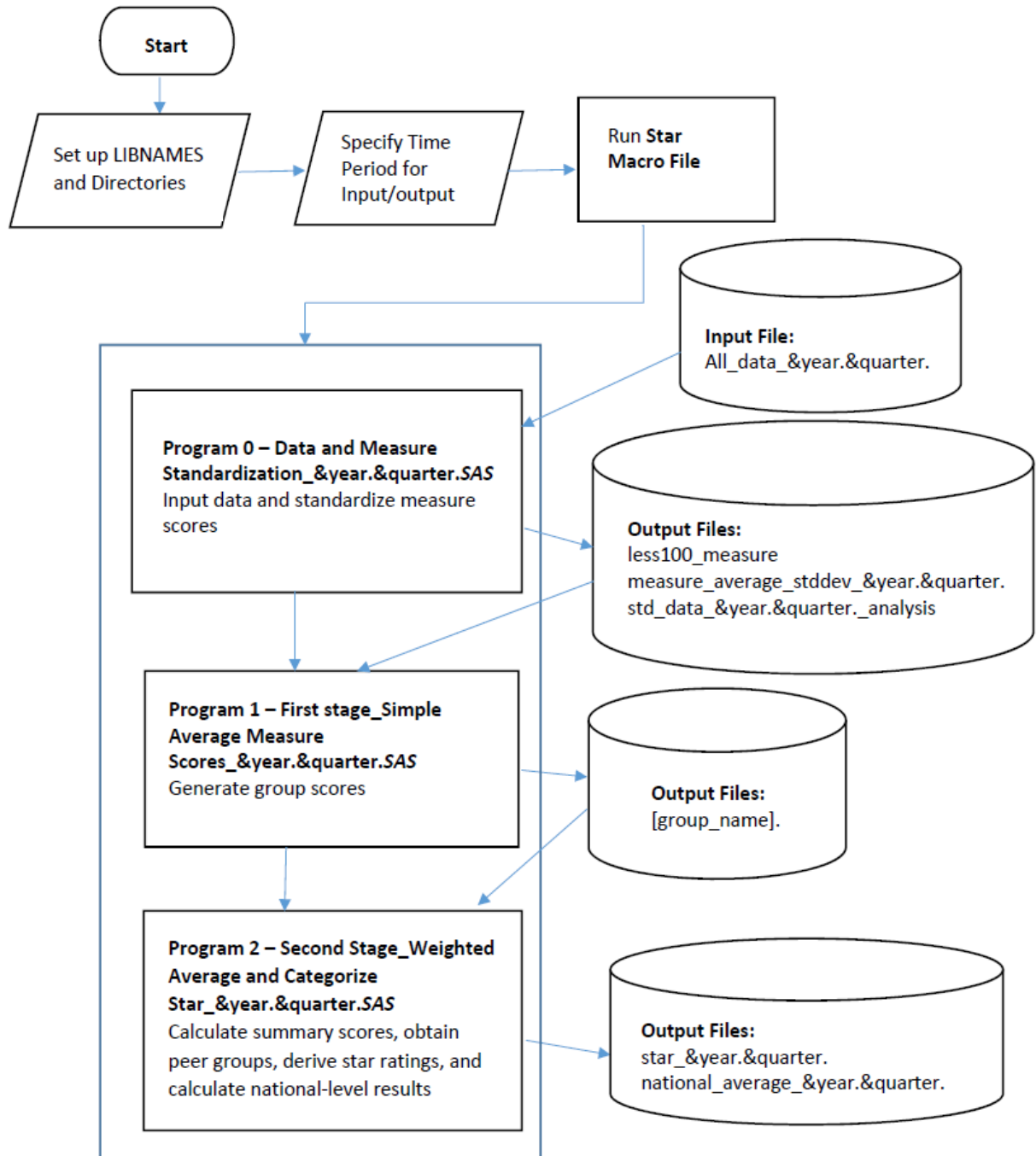
Program 2 also calculates the national average group scores for each measure group (using hospitals with at least three measures in that group), the national average summary score (using hospitals meeting the set public reporting criteria) and average summary score within each peer grouping.

Macro Program – “Star_Macros.sas”

The “Star_Macros.sas” file contains SAS macros that are “called” in the three main SAS programs described above. These macros provide a variety of functions that are described above, including:

- 1) Identification of hospitals included in the analyses;
- 2) Calculation of the number of measures in each measure group;
- 3) Calculation of each hospital’s measure group score;
- 4) Definition of the variable for reporting indicator;
- 5) Calculation of national averages for summary score and group scores.

Figure 1: Flowchart for SAS Program Process and Dataset Generations



6. Output Data

The Overall Star Rating SAS Pack creates ten output files in SAS dataset format from the three main SAS programs. The output files are:

- **less100_measure** (measures which have hospital counts ≤ 100);
- **measure_average_stddev_&year.&quarter.** (means and standard deviations of the original measure scores);
- **std_data_&year.&quarter._analysis** (measure-level results);
- **[group name]** (group scores for specified group);
- **star_&year.&quarter.** (group scores, standardized group scores, summary scores, and star ratings); and
- **national_average_&year.&quarter.** (national mean star rating and group scores).

Bracketed text in the file names above serves as a placeholder: “[&year.&quarter.]” refers to the month of the release of the input file (for example, “2024Jul”), while “[group name]” indicates the group to which the results correspond (such as “Mortality” or “Readmission”). In the unmodified SAS Pack, “&year.&quarter.” will indicate “2024Jul” by default.

These files are permanently saved for either use in a subsequent program or as final outputs (results). The user can customize how these files are saved by creating a new library using the LIBNAME statement and adding the new library to the prefix of the output file name (for example, libraryname.filename).

The text outlined below provides an example of how the SAS user can specify names for the output files prior to running the programs. Of note, these shorter, more intuitive file names have no impact on the calculation of results, but rather may be used at the discretion of the user to make the SAS code more readily comprehensible.

The user specifies the names of the output files in the following SAS code block (the user is not required to do this):

```
%LET MEASURE_ANALYSIS=; /* derived Data and Measure Standardization_&year.&quarter. file,
                           needs to be specified */
%LET RESULTS=; /* derived Second Stage_Weighted Average and Categorize Star_&year.&quarter.
                 file, needs to be specified */
%LET NATIONAL_MEAN=; /* derived Second Stage_Weighted Average and Categorize
                      Star_&year.&quarter.\ file, needs to be specified */
```

The following is an example of how to save the output files:

```
%LET PATH2= H:\Star Rating\&year.&quarter.\SAS output\";
LIBNAME R "&PATH2";
%LET MEASURE_MEAN=R.measure_average_stddev_&year.&quarter;
%LET MEASURE_ANALYSIS=R.Std_data_&year.&quarter._analysis;
%LET RESULTS=R.Star_&year.&quarter.;
%LET NATIONAL_MEAN=R.national_average_&year.&quarter.;
```

The remainder of this section provides a detailed description of the data contained in each output file. As an example, [Appendix B](#) provides portions of these output files for the Overall Star Rating.

Output Files of Program 0

Less100_measure Output File

The “Less100_measure” file ([Table 2](#)) includes names of measures with <= 100 hospitals reporting results.

Measure_average_stddev_&year.&quarter.] Output File

The “measure_average_stddev_&year.&quarter.” file ([Table 3](#)) includes the mean and standard deviations of the original measure scores.

Std_data_&year.&quarter.]_analysis Output File

The “std_data_&year.&quarter._analysis” file ([Table 4](#)) includes each hospital’s standardized measure score. The variables of this file are the hospital identifier (provider_ID), the standardized measure scores (“std_[measure name abbreviation]”), and the measure denominator (“[measure name abbreviation]_DEN”).

As an example, [Table 4](#) demonstrates how the data of the “std_data_&year.&quarter._analysis” file are outputted for two measures (std_READM_30_COPD and std_EDAC_30_AMI); all other measures in the Overall Star Rating reported by the hospital will be presented similarly.

This output file of “std_data_&year.&quarter._analysis” generated from Program 0 is the input file for Program 1.

Output Files of Program 1

The output files of Program 1 contain group scores for each of the five measure groups. The files containing standardized group scores are used as the input files for Program 2.

The approach to taking a simple average of measure scores to calculate measure group scores is outlined in the “Overall Hospital Quality Star Rating: July 2024 Updates and Specifications Report” available on *QualityNet* at www.qualitynet.org > Hospitals-Inpatient > Public Reporting > Overall Hospital Ratings > Resources > Preview > [July 2024 QUS Report](#).

[group name] Output File

The “[group name]” file includes the hospital identifier (provider_ID), weight of measure when calculating simple average (measure_wt) which is equal to reciprocal of number of non-missing measures in the group, simple average of measure scores or group score before standardization (score_before_std), mean and standard deviation of simple average used for standardizing (Mean, StdDev), group score after standardization (grp_score). An example of this datasheet is shown in [Table 5](#) for the Mortality group (“Outcome_mortality”).

Output Files of Program 2

The output files of Program 2 contain each hospital’s group scores, summary score, peer group, and star rating, as well as national average data.

Star_&year.&quarter.] Output File

The “star_&year.&quarter.” file includes the hospital identifier (provider_ID), overall star rating (star), estimate of the summary score (summary_score), the group score for each group (std_[group

name]_score), weight for each group (weight_[group name]), peer group (cnt_grp) and whether the hospital met the set public reporting criteria (report_indicator), where “1” = “yes”. A portion of this datasheet is shown in [Table 6](#); the information provided for the Mortality group in this example would be shown for each of the five groups.

National_average_[&year.&quarter.] Output File

The “national_average_&year.&quarter.” file provides the national average summary score (summary_score_nat) using hospitals meeting the set public reporting criteria, national average summary score for each peer group (summary_score_nat_peer3, summary_score_nat_peer4, summary_score_nat_peer5), and the national average group scores for each group ([group name]_grp_score_nat) using hospitals with at least 3 measures in the group as shown in [Table 7](#).

7. Steps for SAS Pack Usage

The following steps outline the process for running the Overall Star Rating SAS Pack:

1. Use the %LET and LIBNAME statements to specify the file directories for where the input resides and where the outputs will be placed in the user's system in the beginning of each of the three main, numbered SAS programs. For example:

```
%LET PATH1= your directory\input_data;  
%LET PATH2= your directory\output_data;  
%LET PATH3= your directory;
```

2. Use the %INCLUDE statement to incorporate the SAS Macro file;
3. Define macro variables "year" and "quarter" in each of the three SAS programs. For example:

```
%LET year = [&year.];  
%LET quarter = [&quarter.];
```

4. Run the programs in the specified order ([Figure 1](#));
 - Users may want to run the programs in the same SAS session to preserve work library datasets and macro variables compiled earlier in the process for use in later stages of running the codes;

5. The output will be in the output directory defined in Step 1:

```
%LET PATH2= your directory\output_data.
```

Appendix A. Example Input File: SAS Dataset of January 2024 Measure Input File (July 2024 Overall Star Ratings)

Table 1. Variables and Attributes of the Overall Hospital Quality Star Ratings Input File

Variable	Type	Length	Description	Measure ID
PROVIDER_ID	Char	8	The provider's CCN	-
COMP_HIP_KNEE	Num	8	THA/TKA Complication Risk-Standardized Complication Rate	COMP-HIP-KNEE
EDAC_30_AMI	Num	8	AMI 30-Excess Days in Acute Care Rate	EDAC-30-AMI
EDAC_30_HF	Num	8	HF 30-Excess Days in Acute Care Rate	EDAC-30-HF
EDAC_30_PN	Num	8	Excess Days in Acute Care (EDAC) after hospitalization for Pneumonia (PN)	EDAC-30-PN
H_COMP_1_STAR_RATING	Num	8	HCAHPS Composite 1-star rating (Q1 to Q3)	Composite 1 Q1 to Q3
H_COMP_2_STAR_RATING	Num	8	HCAHPS Composite 2-star rating (Q5 to Q7)	Composite 2 Q5 to Q7
H_COMP_3_STAR_RATING	Num	8	HCAHPS Composite 3-star rating (Q4 & Q11)	Composite 3 Q4 & Q11
H_COMP_5_STAR_RATING	Num	8	HCAHPS Composite 5-star rating (Q16 to Q17)	Composite 5 Q16 & Q17
H_COMP_6_STAR_RATING	Num	8	HCAHPS Composite 6-star rating (Q19 to Q20)	Composite 6 Q19 & Q20
H_COMP_7_STAR_RATING	Num	8	HCAHPS Composite 7-star rating (Q23 to Q25)	Composite 7 Q23 to Q25
H_GLOB_STAR_RATING	Num	8	(H-HSP-RATING Overall Rating of Hospital (Q21) + H-RECMND Willingness to Recommend Hospital (Q22)) / 2	Composite Q21 & Q22
H_INDI_STAR_RATING	Num	8	(H-CLEAN-HSP Cleanliness of Hospital Environment (Q8) + H-QUIET-HSP Quietness of Hospital Environment (Q9)) / 2	Composite Q8 & Q9
HAI_1	Num	8	CLABSI (ICU + Select Wards) SIR	HAI-1
HAI_2	Num	8	CAUTI (ICU + Select Wards) SIR	HAI-2
HAI_3	Num	8	SSI - Colon Surgery SIR	HAI-3
HAI_4	Num	8	SSI - Abdominal Hysterectomy SIR	HAI-4
HAI_5	Num	8	MRSA Bacteremia SIR	HAI-5
HAI_6	Num	8	C.Diff SIR	HAI-6
IMM_3	Num	8	IMM-3 measure rate (Fluvac adherence percentage). IMM-3 and OP-27 are the same data for a hospital just reported for both outpatient and inpatient separately.	IMM-3
MORT_30_AMI	Num	8	AMI 30-Day Mortality Risk-Standardized Mortality Rate	MORT-30-AMI
MORT_30_CABG	Num	8	CABG 30-Day Mortality Risk-Standardized Mortality Rate	MORT-30-CABG
MORT_30_COPD	Num	8	COPD 30-Day Mortality Risk-Standardized Mortality Rate	MORT-30-COPD
MORT_30_HF	Num	8	HF 30-Day Mortality Risk-Standardized Mortality Rate	MORT-30-HF

Variable	Type	Length	Description	Measure ID
MORT_30_PN	Num	8	Pneumonia 30-Day Mortality Risk-Standardized Mortality Rate	MORT-30-PN
MORT_30_STK	Num	8	Stroke 30-Day Mortality Risk-Standardized Mortality Rate	MORT-30-STK
OP_10	Num	8	OP-10 measure rate	OP-10
OP_13	Num	8	OP-13 measure rate	OP-13
OP_18B	Num	8	OP-18b: median time from ED arrival to ED departure for discharged ED patients	OP-18b
OP_2	Num	8	OP-2 Measure Rate	OP-2
OP_22	Num	8	OP-22 measure rate	OP-22
OP_23	Num	8	OP-23 measure rate	OP-23
OP_29	Num	8	OP-29 rate	OP-29
OP_32	Num	8	OP-32 measure rate	OP-32
OP_35_ADM	Num	8	Admissions for Patients Receiving Outpatient Chemotherapy	OP-35 ADM
OP_35_ED	Num	8	Visits for Patients Receiving Outpatient Chemotherapy	OP-35 ED
OP_36	Num	8	Hospital Visits after Hospital Outpatient	OP-36
HCP_COVID_19	Num	8	COVID-19 Vaccination Coverage Among HCP's	HCP_COVID_19
OP_3B	Num	8	OP-3b: Median time to transfer to another facility for acute coronary intervention	OP-3b
OP_8	Num	8	OP-8 measure rate	OP-8
PC_01	Num	8	PC-01 measure rate	PC-01
PSI_4_SURG_COMP	Num	8	PSI-4 smoothed measure rate per 1,000 eligible discharges	PSI-4
PSI_90_SAFETY	Num	8	PSI-90 composite value	PSI-90
READM_30_CABG	Num	8	CABG 30-Day Mortality Risk-Standardized Mortality Rate	READM-30-CABG
READM_30_COPD	Num	8	COPD 30-Day Readmission Risk-Standardized Readmission Rate	Readm-30-COPD
READM_30_HIP_KNEE	Num	8	THA/TKA 30-Day Readmission Risk-Standardized Readmission Rate	READM-30-HIP-KNEE
READM_30_HOSP_WIDE	Num	8	Hospital Wide Readmission Risk-Standardized Readmission Rate	READM-30-HOSPWIDE
SEP_1	Num	8	SEP-1 measure rate	SEP-1

Appendix B. Example Portions of Overall Star Rating Output Files

For the sample data tables shown, an empty row/cell indicates that the hospital did not report the data element(s) specified in the column heading(s).

Table 2. Sample Section of Less100_measure Output File (Jul 2024 Datasheet)

freq	measure_name
79	OP_2

Table 3. Sample Section of Measure_average_stddev_[&year.&quarter.] Output File (Jul 2024 Datasheet)

_TYPE	_FREQ	_STAT	MORT_30_A MI	MORT_30_CAB G	MORT_30_COP D	MORT_30_H F	MORT_30_P N	MORT_30_ST K	PSI_4_SURG_COM P	COMP_HIP_KNE E	HAI_1
0	4626	N	1943	883	2569	3055	3513	2123	1609	2090	2014
0	4626	MIN	0.09	0.016	0.05	0.06	0.09	0.08	86.68	0.02	0
0	4626	MAX	0.17	0.067	0.15	0.2	0.3	0.22	241.81	0.06	10.13
0	4626	MEAN	0.13	0.03	0.09	0.12	0.18	0.14	168.73	0.03	0.77
0	4626	STD	0.01	0.007	0.01	0.02	0.03	0.02	21.32	0.01	0.72

Table 4. Sample Section of Std_data_[&year.&quarter.]_analysis Output Files (Jul 2024 Datasheet)

provider_ID	std_READM_30_COPD	std_EDAC_30_AMI	READM_30_COPD_DEN	EDAC_30_AMI_DEN
-	0.2938	1.12323	117	274
-	2.3759	.	136	.
-	1.50836	-1.1189	158	273
-	-0.5737	.	34	.
-
-	-0.3135	0.79336	47	127
-

provider_ID	std_READM_30_COPD	std_EDAC_30_AMI	READM_30_COPD_DEN	EDAC_30_AMI_DEN
-	0.72758	-2.0415	62	72
-
-	1.42161	.	160	.
-	1.42161	.	34	.
-
-	0.1203	-0.0313	68	190
-	0.1203	-1.1704	72	117
-	-0.0532	-1.9229	141	113
-	-0.0532	-0.0983	134	251
-
-	-1.7015	-0.2323	113	50
-	1.68187	.	65	.

Table 5. Sample Section of Outcome_mortality Output File (Jul 2024 Datasheets)

provider_ID	total_cnt	measure_wt	score_before_std	Mean	StdDev	grp_score
-	7	0.14286	-0.0634	-0.0684	0.70437	0.00707
-	6	0.16667	-1.0831	-0.0684	0.70437	-1.4406
-	7	0.14286	-1.0987	-0.0684	0.70437	-1.4628
-	3	0.33333	-2.5531	-0.0684	0.70437	-3.5276
-	0	.	.	-0.0684	0.70437	.
-	7	0.14286	-0.4042	-0.0684	0.70437	-0.4767
-	3	0.33333	-1.1479	-0.0684	0.70437	-1.5326
-	7	0.14286	0.30947	-0.0684	0.70437	0.53645

provider_ID	total_cnt	measure_wt	score_before_std	Mean	StdDev	grp_score
-	0	.	.	-0.0684	0.70437	.
-	4	0.25	-1.6452	-0.0684	0.70437	-2.2385
-	3	0.33333	-0.3602	-0.0684	0.70437	-0.4143
-	1	1	0.71934	-0.0684	0.70437	1.11834
-	7	0.14286	-0.704	-0.0684	0.70437	-0.9024
-	7	0.14286	-0.6024	-0.0684	0.70437	-0.7581
-	7	0.14286	-0.8724	-0.0684	0.70437	-1.1415
-	7	0.14286	-0.0488	-0.0684	0.70437	0.02778
-	0	.	.	-0.0684	0.70437	.
-	6	0.16667	-0.3642	-0.0684	0.70437	-0.4199
-	4	0.25	-0.4842	-0.0684	0.70437	-0.5904

Table 6. Sample Section of Star_[&year.&quarter.] Output File (Jul 2024 Datasheet)

provider_ID	star	summary_score	Outcomes_Mortality_cnt	Std_Outcomes_Mortality_score	weight_Outcomes_Mortality	report_indicator
-	3	-0.031	7	0.00707	0.22	1
-	2	-0.2926	6	-1.4406	0.22	1
-	1	-0.7512	7	-1.4628	0.22	1
-	1	-0.9656	3	-3.5276	0.22	1
-	.	-0.1583	0	.	.	0
-	3	-0.2494	7	-0.4767	0.22	1
-	2	-0.3625	3	-1.5326	0.22	1
-	3	-0.2059	7	0.53645	0.22	1
-	.	0.66996	0	.	.	0

provider_ID	star	summary_score	Outcomes_Mortality_cnt	Std_Outcomes_Mortality_score	weight_Outcomes_Mortality	report_indicator
-	2	-0.5441	4	-2.2385	0.22	1
-	2	-0.1101	3	-0.4143	0.22	1
-	.	0.70391	1	1.11834	0.28205	0
-	2	-0.5006	7	-0.9024	0.22	1
-	2	-0.6301	7	-0.7581	0.22	1
-	2	-0.3455	7	-1.1415	0.22	1
-	3	-0.1342	7	0.02778	0.22	1
-	.	0.54643	0	.	.	0
-	3	0.0248	6	-0.4199	0.22	1
-	3	-0.2717	4	-0.5904	0.22	1

Table 7. Sample Section of National_average_[&year.&quarter.] File (Jul 2024 Datasheet)

Summary_Score_Nat	Summary_Score_Nat_peer3	Summary_Score_Nat_peer4	Summary_Score_Nat_peer5	Out_Mrt_Grp_Score_Nat	Out_Sft_Grp_Score_Nat	Out_Readm_grp_Score_Nat	Pt_Exp_Grp_Score_Nat	Prc_of_Care_Grp_Score_Nat
-0.0429	-0.1428	0.17254	-0.082	0.10442	0.02635	-0.0114	-8.797E-16	-0.0049