# Star Rating Measure Scoring Tables and Instructions

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## Purpose of this Guide and the Tables

The guide and tables below provide additional information to support Section X Facility Star Rating Calculation of the *Guide to the Quarterly Dialysis Facility Care Compare (QDFCC) Preview Report.* Follow the instructions below to calculate individual measure scores based on measure values and review where your facility lies within each measure score. A facility's measure scores are first averaged within each of the four domains to calculate domain scores. Facilities are then given a final score by taking a weighted average of the four domain scores. Domains 1, 2, 3, and 4 will constitute 2/7, 2/7, 1/7, and 2/7 of a facility's final score, respectively. Facilities are eligible to receive a final score if they have at least one measure value in each domain. Note that facilities providing only peritoneal dialysis do not have measure values for Domain 2. These facilities are rated based on a weighted average of the other domain scores, where Domains 1, 3, and 4 constitute 2/5, 1/5, and 2/5 of their final scores, respectively. Lastly, final scores are assigned a star rating based on the cut points from the baseline period shown in Part 2 below. These calculations can be used to identify areas for improvement for future Star Ratings.

## Part 1: Guide to Using the Measure Scoring Tables

#### **Standardized Measures:**

Note, the standardized measures using this method are Standardized Mortality Ratio (SMR), Standardized Hospitalization Ratio (SHR), Standardized Transfusion Ratio (STrR), Standardized Readmission Ratio (SRR), and Standardized First Kidney Transplant Waitlist Ratio for Incident Dialysis Patients (SWR).

#### <u>Step 1:</u>

Multiply your facility's measure value by the appropriate adjustment factor (as provided in Part 2 of this document).

[facility measure] x [adjustment factor] = adjusted measure value

#### Example:

Your facility's STrR is 0.72,

apply adjustment factor:  $0.72 \times 0.93 = 0.72$ 

Your facility's *adjusted* STrR is 0.700.

#### <u>Step 2:</u>

Use the value calculated in Step 1 (adjusted measure value) to find the corresponding range of measures scores on the Measure Scoring Tables in Part 3 of this document.

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#### Example:

Use the adjusted measure value calculated in step 1 (0.700) to find the corresponding range of measure scores on the Measure Scoring Table, an example of which is found in the table below.

The adjusted measure value of 0.700 is between 0.723 and 0.608; therefore, it corresponds to a measure score between 0.26 and 0.52.

Measure Value	Measure Score (-2.58, 2.58)
10.00 - 3.113	-2.58 included -< -2.32
3.112 - 2.840	-2.32 included -< -2.06
2.839 - 2.255	-2.06 included -< -1.81
2.254 - 1.997	-1.81 included -< -1.55
1.996 - 1.762	-1.55 included -< -1.29
1.761 - 1.507	-1.29 included -< -1.03
1.506 - 1.310	-1.03 included -< -0.77
1.309 - 1.154	-0.77 included -< -0.52
1.153 - 0.991	-0.52 included -< -0.26
0.990 - 0.847	-0.26 included -< 0.00
0.846 - 0.724	0.00 included -< 0.26
<mark>0.723 - 0.608</mark>	<mark>0.26 included -&lt; 0.52</mark>
0.607 - 0.504	0.52 included -< 0.77
0.503 - 0.408	0.77 included -< 1.03
0.407 - 0.301	1.03 included -< 1.29
0.300 - 0.237	1.29 included -< 1.55
0.236 - 0.170	1.55 included -< 1.81
0.169 - 0.075	1.81 included -< 2.06
0.075 - 0.000	2.06 included -< 2.58

Measure Scoring Table of STrR (from Part 3 below)

#### **Percentage Measures:**

Note, the percentage measures using this method are Standardized Fistula Rate (SFR), Long-Term Catheter Rate (LTC), Kt/V, Hypercalcemia, and Percentage of Prevalent Patients Waitlisted (PPPW).

Determine your facility's measure value and then find the corresponding range of measure scores on the Measure Scoring Tables in Part 3 of this document, an example of which is below.

#### Example:

If a facility's Standardized Fistula Rate (SFR) is 54% then the measure value is between 51.75% and 54.54%; therefore, it corresponds to a measure score between -0.77 and - 0.52.

#### Measure Scoring Table of SFR (from Part 3 below)

Measure Value (%)	Measure Score (-2.58, 2.58)
0.00 - 34.35	-2.58 to < -2.32
34.36 - 37.27	-2.32 to < -2.06
37.28 - 40.07	-2.06 to < -1.81
40.08 - 42.99	-1.81 to < -1.55
43.00 - 45.91	-1.55 to < -1.29
45.92 - 48.82	-1.29 to < -1.03
48.83 - 51.74	-1.03 to < -0.77
<mark>51.75 - 54.54</mark>	<mark>-0.77 to &lt; -0.52</mark>
54.55 - 57.46	-0.52 to < -0.26
57.47 - 60.38	-0.26 to < 0.00
60.39 - 63.29	0.00 to < 0.26
63.30 - 66.21	0.26 to < 0.52
66.22 - 69.01	0.52 to < 0.77
69.02 - 71.93	0.77 to < 1.03
71.94 - 74.85	1.03 to < 1.29
74.86 - 77.76	1.29 to < 1.55
77.77 - 80.68	1.55 to < 1.81
80.69 - 83.48	1.81 to < 2.06
83.49 - 86.40	2.06 to < 2.32
86.41 - 100.0	2.32 to < 2.58

## Part 2: Tables to Assist with Understanding the Star Rating Measure Scoring Methods

Measure	Adjustment Factor*
SMR	1.03
SHR	0.98
STrR	0.93
SRR	0.99
SFR	N/A**
LTC	N/A**
Overall Kt/V	N/A**
Hypercalcemia	N/A**
SWR	1.00
PPPW	N/A**

\* The adjustment factor is subject to change annually based on ratio of event rates in the evaluation period versus the baseline period. The values listed are rounded.

\*\* N/A: This measure does not have an adjustment factor.

## Table 2: The Final Score Cutoffs Derived from the Baseline Period and Applied to theEvaluation Period

Final Score*	Star Rating
Final score less than -0.5569	1 star
Final score greater than or equal to -0.5569 and less than -0.2024	2 stars
Final score greater than or equal to -0.2024 and less than 0.2493	3 stars
Final score greater than or equal to 0.2493 and less than 0.5519	4 stars
Final score greater than or equal to 0.5519	5 stars

\* For display purposes, the cutoff values have been truncated at four places after the decimal point.

### Part 3: Measure Scoring Tables

These tables provide a range of values and scores so that facilities are able to match their measure value to a set of corresponding measure scores. These scores are derived from the baseline period and applied to the evaluation period when applicable. Measure values in the tables have been truncated for display purposes. Measure values between truncation points may fall in either row. All measure value ranges are inclusive.

Measure: SMR <sup>1,2,3</sup>	
Measure Value	Measure Score (-2.58, 2.58)
10.00 - 1.834	-2.58 included -< -2.32
1.833 - 1.709	-2.32 included -< -2.06
1.708 - 1.541	-2.06 included -< -1.81
1.540 - 1.430	-1.81 included -< -1.55
1.429 - 1.337	-1.55 included -< -1.29
1.336 - 1.249	-1.29 included -< -1.03
1.248 - 1.172	-1.03 included -< -0.77
1.171 - 1.104	-0.77 included -< -0.52
1.103 - 1.040	-0.52 included -< -0.26
1.039 - 0.975	-0.26 included -< 0.00
0.974 - 0.915	0.00 included -< 0.26
0.914 - 0.862	0.26 included -< 0.52
0.861 - 0.810	0.52 included -< 0.77
0.809 - 0.754	0.77 included -< 1.03
0.753 - 0.691	1.03 included -< 1.29
0.690 - 0.640	1.29 included -< 1.55
0.639 - 0.577	1.55 included -< 1.81
0.576 - 0.482	1.81 included -< 2.06
0.481 - 0.441	2.06 included -< 2.32
0.440 - 0.000	2.32 included -< 2.58

Measure: SHR <sup>1,2,3</sup>	
Measure Value	Measure Score (-2.58, 2.58)
10.00 - 1.781	-2.58 included -< -2.32
1.780 - 1.703	-2.32 included -< -2.06
1.702 - 1.523	-2.06 included -< -1.81
1.522 - 1.429	-1.81 included -< -1.55
1.428 - 1.340	1.55 included -< -1.29
1.339 - 1.256	-1.29 included -< -1.03
1.255 - 1.176	-1.03 included -< -0.77
1.175 - 1.107	-0.77 included -< -0.52
1.106 - 1.036	-0.52 included -< -0.26
1.035 - 0.965	-0.26 included -< 0.00
0.964 - 0.907	0.00 included -< 0.26
0.906 - 0.844	0.26 included -< 0.52
0.843 - 0.783	0.52 included -< 0.77
0.782 - 0.722	0.77 included -< 1.03
0.721 - 0.660	1.03 included -< 1.29
0.659 - 0.600	1.29 included -< 1.55
0.599 - 0.545	1.55 included -< 1.81
0.544 - 0.460	1.81 included -< 2.06
0.459 - 0.424	2.06 included -< 2.32
0.423 - 0.000	2.32 included -< 2.58

#### Measure: SRR<sup>1,2,3</sup>

Measure Value	Measure Score (-2.58, 2.58)
10.00 - 1.744	-2.58 included -< -2.32
1.743 - 1.681	-2.32 included -< -2.06
1.680 - 1.546	-2.06 included -< -1.81
1.545 - 1.441	-1.81 included -< -1.55
1.440 - 1.361	1.55 included -< -1.29
1.360 - 1.285	-1.29 included -< -1.03
1.284 - 1.210	-1.03 included -< -0.77
1.209 - 1.146	-0.77 included -< -0.52
1.145 - 1.077	-0.52 included -< -0.26
1.076 - 1.001	-0.26 included -< 0.00
1.000 - 0.930	0.00 included -< 0.26
0.929 - 0.856	0.26 included -< 0.52
0.855 - 0.782	0.52 included -< 0.77
0.781 - 0.700	0.77 included -< 1.03
0.699 - 0.613	1.03 included -< 1.29
0.612 - 0.522	1.29 included -< 1.55
0.521 - 0.436	1.55 included -< 1.81
0.435 - 0.312	1.81 included -< 2.06
0.311 - 0.246	2.06 included -< 2.32
0.245 - 0.000	2.32 included -< 2.58

Measure Value	Measure Score (-2.58, 2.58)
10.00 - 3.113	-2.58 included -< -2.32
3.112 - 2.840	-2.32 included -< -2.06
2.839 - 2.255	-2.06 included -< -1.81
2.254 - 1.997	-1.81 included -< -1.55
1.996 - 1.762	-1.55 included -< -1.29
1.761 - 1.507	-1.29 included -< -1.03
1.506 - 1.310	-1.03 included -< -0.77
1.309 - 1.154	-0.77 included -< -0.52
1.153 - 0.991	-0.52 included -< -0.26
0.990 - 0.847	-0.26 included -< 0.00
0.846 - 0.724	0.00 included -< 0.26
0.723 - 0.608	0.26 included -< 0.52
0.607 - 0.504	0.52 included -< 0.77
0.503 - 0.408	0.77 included -< 1.03
0.407 - 0.301	1.03 included -< 1.29
0.300 - 0.237	1.29 included -< 1.55
0.236 - 0.170	1.55 included -< 1.81
0.169 - 0.075	1.81 included -< 2.06
0.075 - 0.000	2.06 included -< 2.58

Measure: STrR<sup>1,2,3</sup>

Measure: SFR<sup>1,2</sup>

Measure Value (%)	Measure Score (-2.58, 2.58)
0.00 - 34.35	-2.58 to < -2.32
34.36 - 37.27	-2.32 to < -2.06
37.28 - 40.07	-2.06 to < -1.81
40.08 - 42.99	-1.81 to < -1.55
43.00 - 45.91	-1.55 to < -1.29
45.92 - 48.82	-1.29 to < -1.03
48.83 - 51.74	-1.03 to < -0.77
51.75 - 54.54	-0.77 to < -0.52
54.55 - 57.46	-0.52 to < -0.26
57.47 - 60.38	-0.26 to < 0.00
60.39 - 63.29	0.00 to < 0.26
63.30 - 66.21	0.26 to < 0.52
66.22 - 69.01	0.52 to < 0.77
69.02 - 71.93	0.77 to < 1.03
71.94 - 74.85	1.03 to < 1.29
74.86 - 77.76	1.29 to < 1.55
77.77 - 80.68	1.55 to < 1.81
80.69 - 83.48	1.81 to < 2.06
83.49 - 86.40	2.06 to < 2.32
86.41 - 100.0	2.32 to < 2.58

Measure: Long Term Catheter <sup>1,2</sup>	
Measure Value (%)	Measure Score (-2.58, 2.0)
100.0 - 32.81	-2.58 included -< -2.32
32.80 - 30.84	-2.32 included -< -2.06
30.83 - 28.94	-2.06 included -< -1.81

#### Measure: Long Term Catheter<sup>1,2</sup>

100.0 - 32.81	-2.58 included -< -2.32
32.80 - 30.84	-2.32 included -< -2.06
30.83 - 28.94	-2.06 included -< -1.81
28.93 - 26.97	-1.81 included -< -1.55
26.96 - 24.99	-1.55 included -< -1.29
24.98 - 23.02	-1.29 included -< -1.03
23.01 - 21.05	-1.03 included -< -0.77
21.04 - 19.15	-0.77 included -< -0.52
19.14 - 17.18	-0.52 included -< -0.26
17.17 - 15.20	-0.26 included -< 0.00
15.19 - 13.23	0.00 included -< 0.26
13.22 - 11.25	0.26 included -< 0.52
11.24 - 9.36	0.52 included -< 0.77
9.35 - 7.38	0.77 included -< 1.03
7.37 - 5.41	1.03 included -< 1.29
5.40 - 3.44	1.29 included -< 1.55
3.43 - 1.46	1.55 included -< 1.81
1.45 – 0.00	1.81 included -< 2.00

## Measure: Overall Kt/V<sup>1,2</sup>

Measure Value (%)	Measure Score (-2.58, 1.15)
0.00 - 90.10	-2.58 to < -2.32
90.11 - 90.85	-2.32 to < -2.06
90.86 - 91.56	-2.06 to < -1.81
91.57 - 92.30	-1.81 to < -1.55
92.31 - 93.04	-1.55 to < -1.29
93.05 - 93.78	-1.29 to < -1.03
93.79 - 94.52	-1.03 to < -0.77
94.53 - 95.24	-0.77 to < -0.52
95.25 - 95.98	-0.52 to < -0.26
95.99 - 96.72	-0.26 to < 0.00
96.73 - 97.46	0.00 to < 0.26
97.47 - 98.20	0.26 to < 0.52
98.21 - 98.91	0.52 to < 0.77
98.92 - 99.65	0.77 to < 1.03
99.66 - 100.00	1.03 to < 1.15

Measure Value (%)	Measure Score (-2.58, 0.99)
100.0 - 4.64	-2.58 included -< -2.32
4.63 - 4.27	-2.32 included -< -2.06
4.26 - 3.92	-2.06 included -< -1.81
3.91 - 3.56	-1.81 included -< -1.55
3.55 - 3.20	-1.55 included -< -1.29
3.19 - 2.83	-1.29 included -< -1.03
2.82 - 2.47	-1.03 included -< -0.77
2.46 - 2.12	- 0.77 included -< -0.52
2.11 - 1.75	- 0.52 included -< -0.26
1.74 - 1.39	- 0.26 included -< 0.00
1.38 - 1.03	0.00 included -< 0.26
1.02 - 0.66	0.26 included -< 0.52
0.65 - 0.31	0.52 included -< 0.77
0.30 - 0.00	0.77 included -< 0.99

#### Measure: Hypercalcemia<sup>1,2</sup>

#### Measure: SWR<sup>1,2,3</sup>

Measure Value	Measure Score (-2.58, 2.58)
0.00 - 0.073	-2.58 included -< -1.29
0.074 - 0.251	-1.29 included -< -1.03
0.252 - 0.357	-1.03 included -< -0.77
0.358 - 0.455	-0.77 included -< -0.52
0.456 - 0.615	-0.52 included -< -0.26
0.616 - 0.808	-0.26 included -< 0.00
0.809 - 0.990	0.00 included -< 0.26
0.991 - 1.239	0.26 included -< 0.52
1.240 - 1.448	0.52 included -< 0.77
1.449 - 1.738	0.77 included -< 1.03
1.739 - 2.088	1.03 included -< 1.29
2.089 - 2.393	1.29 included -< 1.55
2.394 - 2.733	1.55 included -< 1.81
2.734 - 3.283	1.81 included -< 2.06
3.284 - 3.560	2.06 included -< 2.32
3.561 – 10.00	2.32 included -< 2.58

Measure: PPPW <sup>1,2</sup>	
Measure Value (%)	Measure Score (-1.70, 2.58)
0.00 - 1.46	-1.70 to < -1.55
1.47 - 4.05	-1.55 to < -1.29
4.06 - 6.65	-1.29 to < -1.03
6.66 - 9.25	-1.03 to < -0.77
9.26 - 11.74	-0.77 to < -0.52
11.75 - 14.34	-0.52 to < -0.26
14.35 - 16.94	-0.26 to < 0.00
16.95 - 19.53	0.00 to < 0.26
19.54 - 22.13	0.26 to < 0.52
22.14 - 24.62	0.52 to < 0.77
24.63 - 27.22	0.77 to < 1.03
27.23 - 29.82	1.03 to < 1.29
29.83 - 32.41	1.29 to < 1.55
32.42 - 35.01	1.55 to < 1.81
35.02 - 37.51	1.81 to < 2.06
37.52 - 40.10	2.06 to < 2.32
40.11 - 100.0	2.32 to < 2.58

Footnote 2: Score ranges are cut off at -2.58 and 2.58. However, if the mean in the baseline period is too close to the upper or lower measure bound, a z-score cannot realize a value this

extreme and the lower or upper bound may not reach to -2.58 or 2.58, respectively.

Footnote 1: All scores derived from measure values based on analysis of the baseline period.

Footnote 3: When using the table for evaluation period values of a standardized ratio measure, when applicable, the evaluation period measure specific adjustment factor needs to be multiplied to the measure values before using this table (see Part I of this document).