

# Topped-out Analysis of Clinical Measures Proposed for the PY 2021 ESRD QIP

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The distributions of the PY 2021 clinical measures were assessed in order to determine if any measures were “topped out”. In order for a measure to be considered topped out, two conditions had to be met. First, a measure was considered topped out if the 75<sup>th</sup> percentile, or 25<sup>th</sup> for measures where lower percentiles indicate better performance, was *statistically indistinguishable* from the 90<sup>th</sup> (or 10<sup>th</sup>) percentile **and** second, the truncated coefficient of variation (TCV) was *less than or equal to 10%, or 0.10*. We note that the percentiles were considered statistically indistinguishable if the 75<sup>th</sup>/25<sup>th</sup> percentile was within two standard errors of the 90<sup>th</sup>/10<sup>th</sup> percentile. Additionally, for each measure the TCV was calculated by first removing the lower and upper 5<sup>th</sup> percentiles, then dividing the standard deviation by the mean of this truncated distribution ( $SD_{\text{truncated}}/\text{Mean}_{\text{truncated}}$ ). The TCV was then converted to a decimal by dividing the TCV by 100.

Measures evaluated included the Kt/V Comprehensive measure, Standardized Fistula Ratio measure (SFR), Catheter, Hypercalcemia, NHSN Standardized Infection Ratio (SRI), Standardized Readmission Ratio (SRR), Standardized Transfusion Ratio (STrR), Standardized Hospitalization Ratio (SHR), and the six individual CAHPS clinical measures. Table 1 presents the data sources used in the analysis for each measure.

Table 2 presents the percentiles, standard error, and TCV for each measure. In this analysis, all facilities with the minimum eligible patient requirement per measure were included. Results indicate none of the PY 2021 clinical measures met both of the “topped out” conditions.

**Table 1. Data used for PY 2021 Topped-Out analysis**

Measure	Data Source
<b>Kt/V delivered dose above minimum</b>	CY 2015 CROWNWeb data and CY 2015 Medicare claims data
<b>SFR</b>	CY 2015 CROWNWeb data and CY 2015 Medicare claims data
<b>Catheter Use</b>	CY 2015 CROWNWeb data and CY 2015 Medicare claims data
<b>Serum Calcium&gt;10.2</b>	CY 2015 CROWNWeb data
<b>ICH-CAHPS</b>	CY 2015 ICH-CAHPS data from AHRQ
<b>NHSN- SIR</b>	CY 2015 NHSN data from CDC
<b>SRR</b>	CY 2015 CROWNWeb data and 2015 Medicare claims data
<b>STrR</b>	CY 2015 CROWNWeb data and 2015 Medicare claims data
<b>SHR</b>	CY 2015 CROWNWeb data and CY 2015 Medicare claims data

**Table 2. PY 2021 Clinical Measure including facilities with minimum eligible patient requirement per measure**

Measure	N	75th/25th percentile	90th/10th percentile	Std Error	Statistically Indistinguishable	Truncated Mean	Truncated SD	TCV	TCV ≤ 0.10
Kt/V delivered dose above minimum (%)	6101	96.0	97.7	0.084	No	92.55	3.88	0.04	Yes
SFR	6111	0.72	0.78	0.001	No	0.65	0.08	0.12	No
Catheter Use (%)	6111	7.14	4.62	0.083	No	88.73 <sup>a</sup>	4.78	<0.01	Yes
Serum Calcium>10.2	6258	0.91	0.32	0.050	No	97.82 <sup>a</sup>	1.49	<0.01	Yes
ICH-CAHPS: Nephrologists Communication and Caring (%)	3349	71.8	77.1	0.159	No	65.7	7.11	0.11	No
ICH-CAHPS: Quality of Dialysis Center Care and Operations (%)	3349	66.2	71.2	0.134	No	60.9	6.20	0.10	No
ICH-CAHPS: Providing Information to Patients (%)	3349	82.4	85.6	0.101	No	78.4	4.61	0.06	Yes
ICH-CAHPS: Percent, Rating of Nephrologist	3349	69.9	76.6	0.204	No	62.0	9.29	0.15	No
ICH-CAHPS: Percent, Rating of Dialysis Facility Staff	3349	70.9	77.4	0.215	No	62.0	9.92	0.16	No
ICH-CAHPS: Percent, Rating of Dialysis Center	3349	73.8	80.6	0.221	No	64.8	10.18	0.16	No
NHSN- SIR	5805	0.40	0.00	0.011	No	0.964	0.57	<0.01	Yes
SRR	6178	0.78	0.63	0.003	No	0.969	0.21	<0.01	Yes
STrR	5651	0.56	0.29	0.010	No	0.948	0.46	<0.01	Yes
SHR	6298	0.81	0.67	0.004	No	0.978	0.20	<0.01	Yes

<sup>a</sup>Truncated mean for percentage is reversed (100% - truncated mean) for measures where lower score = better performance.