



Last Revised: October 26, 2018

Rule of Record: Calendar Year (CY) 2019 ESRD Prospective Payment System (PPS) Final Rule

Table of Contents

Bloodstream Infection in Hemodialysis Patients (Clinical Measure)	4
Measure Description	4
Numerator Statement	4
Denominator Statement	4
Exclusions	4
Facility-Level Exclusions	4
Data Source(s)	4
Measure Description	6
Numerator Statement	6
Denominator Statement	6
Exclusions	6
Facility-Level Exclusions	6
Patient-Level Exclusions	7
Minimum Data Requirements	7
Standardized Readmission Ratio (SRR) (Clinical Measure)	8
Measure Description	8
Numerator Statement	8
Denominator Statement	8
Exclusions	8
Facility-Level Exclusions	8
Minimum Data Requirements	9
Standardized Transfusion Ratio (STrR) (Clinical Measure)	10
Measure Description	10
Numerator Statement	10
Denominator Statement	10
Exclusions	10





Last Revised: October 26, 2018

Facility-Level Exclusions	10
Patient-Level Exclusions	10
Minimum Data Requirements	11
Standardized Hospitalization Ratio (SHR) (Clinical Measure)	12
Measure Description	12
Numerator Statement	12
Denominator Statement	12
Exclusions	12
Facility-Level Exclusions	12
Minimum Claims/Data Requirements	12
Kt/V Dialysis Adequacy - Comprehensive (Clinical Measure)	14
Measure Description	14
Numerator Statement	14
Denominator Statement	14
Facility-Level Exclusions	14
Denominator Exclusions	15
Minimum Data Requirements	15
Additional Information	15
Hemodialysis Vascular Access: Standardized Fistula Rate (SFR) (Clinical Measure)	17
Measure Description	17
Numerator Statement	17
Denominator Statement	17
Exclusions	17
Facility-Level Exclusion	17
Patient-Level Exclusions	17
Minimum Data Requirements	17
Additional Information	18
Hemodialysis Vascular Access: Long-term Catheter Rate (Clinical Measure)	19
Measure Description	19
Numerator Statement	19
Denominator Statement	19





Last Revised: October 26, 2018

Exclusions	19
Facility-Level Exclusion	19
Patient-Level Exclusions	19
Additional Information	20
Hypercalcemia (Clinical Measure)	21
Measure Description	21
Numerator Statement	21
Denominator Statement	21
Exclusions	21
Facility-Level Exclusion	21
Patient-Level Exclusions	21
Minimum Data Requirements	22
Data Source(s)	22
Ultrafiltration Rate (Reporting Measure)	23
Measure Description	23
Numerator Statement	23
Exclusions	23
Facility-Level Exclusions	23
Data Source(s)	24
Clinical Depression Screening and Follow-Up (Reporting Measure)	25
Measure Description	25
Numerator Statement	25
Exclusions	25
Facility-Level Exclusions	25
NHSN Dialysis Event Reporting Measure	27
Measure Description	27
Exclusions	27
Facility-Level Exclusions	27





Last Revised: October 26, 2018

Rule of Record: CY 2019 ESRD PPS Final Rule

Infection Monitoring: National Healthcare Safety Network (NHSN) Bloodstream Infection in Hemodialysis Patients (Clinical Measure)

Domain – *Safety* Lower rate desired

Measure Description

The Standardized Infection Ratio (SIR) of Bloodstream Infections (BSI) will be calculated among patients receiving hemodialysis at outpatient hemodialysis centers. (Based on NQF #1460)

Measure Type

Outcome.

Numerator Statement

The number of new positive blood culture events based on blood cultures drawn as an outpatient or within 1 calendar day after a hospital admission.

Denominator Statement

Expected number of positive blood culture events in maintenance in-center hemodialysis patients treated in the outpatient hemodialysis unit on the first 2 working days of the month.

Exclusions

Facility-Level Exclusions

- 1. Facilities that do not offer in-center hemodialysis.
- 2. Facilities with a CCN certification date on or after October 1, 2018.
- 3. Facilities that treat fewer than 11 in-center hemodialysis patients during the performance period.
- 4. Facilities with approved Extraordinary Circumstances Exception (ECE).

Patient-Level Exclusions

- 1. Patients receiving only inpatient hemodialysis during the reporting month.
- 2. Patients receiving only home hemodialysis or peritoneal dialysis during the reporting month.

Minimum Data Requirements

1. 12 months of data reported to NHSN.

Data Source(s)

1. NHSN (for Risk-Adjusted Standardized Infection Rates).





Last Revised: October 26, 2018

- 2. REMIS, CROWNWeb, ESRD Quality Reporting System (EQRS), Enrollment Data Base (EDB), and other CMS ESRD administrative data.
- 3. Medicare claims and CROWNWeb (to determine patient-minimum exclusion).

- 1. Facilities are required to meet enrollment and training requirements, as specified at the Centers for Disease Prevention and Control's (CDC's) National Healthcare Safety Network (NHSN) website at: http://www.cdc.gov/nhsn/Training/dialysis/index.html.

 http://www.cdc.gov/nhsn/Training/dialysis/index.html.
- 2. A positive blood culture is considered a new event and counted only if it occurred 21 days or more after a previously reported positive blood culture in the same patient.
- 3. Facilities that do not submit 12 months of data in accordance with the Dialysis Event Protocol receive zero points for the measure.
- 4. For more information about the methodology used to calculate risk-adjusted standardized infection rates, please see http://www.cdc.gov/nhsn/dialysis/.





Last Revised: October 26, 2018

Rule of Record: CY 2019 ESRD PPS Final Rule

Patient Experience of Care: In-Center Hemodialysis Consumer Assessment of Healthcare Providers and Systems (ICH CAHPS) Survey (Clinical Measure)

Domain – *Patient and Family Engagement* Higher rate desired

Measure Description

Percentage of patient responses to multiple survey measures to assess their dialysis providers, the quality of dialysis care they receive, and information sharing about their disease. (Survey is administered twice a year).

Three Composite Measure Scores: The proportion of respondents answering each response option by item, created from six or more questions from the survey that are reported as one measure score. Composites include: Nephrologists' Communication and Caring, Quality of Dialysis Center Care and Operations, and Providing Information to Patients.

Three Global Items: A scale of 0 to 10 to measure the respondent's assessment of the following: Rating of the nephrologist, Rating of dialysis center staff, and Rating of the dialysis facility. (NQF #0258)

Measure Type

Outcome – Patient Reported Outcome (PRO).

Numerator Statement

The measures score averages the proportion of those responding to each answer choice in all questions. Each global rating will be scored based on the number of respondents in the distribution of top responses; e.g., the percentage of patients rating the facility a "9" or "10" on a 0 to 10 scale (with 10 being the best).

Denominator Statement

Patients with ESRD receiving in-center hemodialysis at the facility for the past 3 months or longer are included in the initial population. The denominator for each question is the number of patients that responded to the particular question.

Exclusions

Facility-Level Exclusions

1. Facility attests in CROWNWeb that it treated fewer than 30 eligible in-center hemodialysis adult patients during the "eligibility period," which is defined as the year prior to the performance period.





Last Revised: October 26, 2018

- 2. Facilities that treat 30 or more eligible in-center hemodialysis adult patients during the "eligibility period," but are unable to obtain at least 30 completed surveys during the performance period.
- 3. Facilities with a CCN certification date on or after October 1, 2018.
- 4. Facilities not offering In-Center Hemodialysis as of December 31 of the performance year.

Patient-Level Exclusions

The following patients are excluded in the count of 30 eligible patients:

- a. Patients less than 18 years on the last day of the sampling window for the semiannual survey.
- b. Patients receiving hemodialysis from their current facility for less than 90 days.
- c. Patients receiving hospice care.
- d. Patients currently residing in an institution, such as a residential nursing home or other long-term care facility, or a jail or prison.

Minimum Data Requirements

Facilities are required to have the survey administered twice a year and data to be submitted to CMS twice a year for each performance period.

Data Source(s)

- 1. ICH CAHPS Survey.
- 2. CROWNWeb and other CMS ESRD administrative data.

- 1. Facilities are required to register on the https://ichcahps.org website in order to authorize a CMS-approved vendor to administer the survey and submit data on their behalf.
- 2. Facilities are required to administer the survey twice during the performance period, using a CMS-approved vendor.
- 3. Facilities are required to ensure that vendors submit survey data to CMS by the date specified at https://ichcahps.org.
- 4. Adult and pediatric facilities that treat fewer than 30 eligible patients during the eligibility period must attest to this in CROWNWeb in order to not receive a score on the measure; facilities that do not attest that they are ineligible will be considered eligible and will receive a score on the measure.
- 5. Facilities that do not administer two surveys during the performance period will receive a score of 0 on the measure.
- 6. Additional specifications may be found at https://ichcahps.org.





Last Revised: October 26, 2018

Rule of Record: CY 2019 ESRD PPS Final Rule

Standardized Readmission Ratio (SRR) (Clinical Measure)

Domain – Care Coordination Lower rate desired

Measure Description

Ratio of the number of observed unplanned 30-day hospital readmissions to the number of expected unplanned 30-day hospital readmissions. (NQF #2496)

Measure Type

Outcome.

Numerator Statement

The observed number of index hospital discharges that are followed by an unplanned hospital readmission within 4–30 days of discharge.

Denominator Statement

The expected number of index discharges followed by an unplanned readmission within 4–30-days in each facility, which is derived from a statistical model that accounts for patient characteristics, the dialysis facility to which the patient is discharged, and the discharging acute care or critical access hospital involved.

Exclusions

Facility-Level Exclusions

1. Facilities with fewer than 11 index hospital discharges in the performance period.

An admission following an index discharge is not considered a potential readmission if it:

- 1. Occurred more than 30 days after the index discharge.
- 2. Is considered "planned."
- 3. Occur within the first three days following discharge from the acute care hospital.

Index hospital discharges exclude discharges that:

- 1. End in death.
- 2. Result in a patient dying within 30 days with no readmission.
- 3. Are against medical advice.
- 4. Include a primary diagnosis for certain types of cancer, mental health conditions or rehabilitation.
- 5. Occur after a patient's 12th admission in the calendar year.
- 6. Are from a PPS-exempt cancer hospital.
- 7. Result in a transfer to another acute care or critical access hospital on the same day, or the day after the discharge date.





Last Revised: October 26, 2018

- 8. Result in an unplanned readmission occurring within the first three days following discharge from the acute care hospital.
- 9. Where the patient was not on dialysis at discharge.

Minimum Data Requirements

1. Facilities with at least 11 index hospital discharges in the performance period.

Data Source(s)

- 1. Medicare Claims.
- 2. REMIS, CROWNWeb, Enrollment Data Base (EDB), and other CMS ESRD administrative data.

- 1. An index discharge is considered to have been followed by a readmission if there was a hospital admission that (a) occurred within 4 to 30 days of the index hospital discharge; and (b) is not considered a "planned" readmission.
- 2. Additional information about the measure can be found in the SRR Measure Methodology Report posted at: https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/ESRDQIP/Downloads/MeasureMethodologyReportfortheProposedSRR Measure.pdf.





Last Revised: October 26, 2018

Rule of Record: CY 2019 ESRD PPS Final Rule

Standardized Transfusion Ratio (STrR) (Clinical Measure)

Domain – *Clinical Care*Lower rate desired

Measure Description

Risk adjusted facility level transfusion ratio (STrR) for all adult Medicare dialysis patients. STrR is a ratio of number of observed eligible red blood cell transfusion events occurring in patients dialyzing at a facility to the number of eligible transfusion events that would be expected under a national norm, after accounting for patient characteristics within each facility. (Based on NQF #2979)

Measure Type

Outcome.

Numerator Statement

Number of eligible observed red blood cell transfusion events (defined as transfer of one or more units of blood or blood products into recipient's blood stream) among patients dialyzing at the facility during the reporting period.

Denominator Statement

Number of eligible red blood cell transfusion events (as defined in the numerator statement) that would be expected among patients at a facility during the reporting period, given the patient mix at the facility.

Exclusions

Facility-Level Exclusions

1. Facilities with less than 10 patient-years at risk during the performance period.

Patient-Level Exclusions

- 1. Patients less than 18 years old.
- 2. Patients on ESRD treatment for fewer than 90 days.
- 3. Patients on dialysis at the facility for fewer than 60 days.
- 4. Time during which patient has a functioning kidney transplant (exclusion begins 3 days prior to the date of transplant). Patients who have not been treated by any facility for a year or longer.
- 5. Patients with a Medicare claim (Part A inpatient, home health, hospice, and skilled nursing facility claims; Part B outpatient and physician supplier) for one of the following conditions in the past year: hemolytic and aplastic anemia, solid-organ cancer (breast, prostate, lung, digestive tract and others), lymphoma, carcinoma in situ, coagulation disorders, multiple myeloma, myelodysplastic syndrome and





Last Revised: October 26, 2018

myelofibrosis, leukemia, head and neck cancer, other cancers (connective tissue, skin, and others), metastatic cancer, or sickle cell anemia.

6. Patient-months not within two months of a month in which a patient has \$900 of Medicare-paid dialysis claims or at least one Medicare inpatient claim.

Minimum Data Requirements

Facilities with at least 10 patient-years at risk.

Data Source(s)

- 1. Medicare Claims.
- 2. REMIS, CROWNWeb, Enrollment Data Base (EDB), Long Term Care Minimum Data Set, and other CMS ESRD administrative data.

- 1. Eligible transfusion events are those that do not have any claims pertaining to the comorbidities identified for exclusion, in the one year look back period prior to each observation window.
- 2. Patients are assigned to a facility only after they have been on dialysis there for the past 60 days.
- 3. When a patient transfers from one facility to another, the patient continues to be attributed to the original facility for 60 days, and then is attributed to the destination facility.
- 4. A patient-month is considered eligible if it is within two months of a month in which a patient has \$900 of Medicare-paid dialysis claims or at least one Medicare inpatient (hospital and skilled nursing facilities) claim.
- 5. If a period of one year passes with neither paid dialysis claims nor CROWNWeb information to indicate that a patient was receiving dialysis treatment, that patient is considered lost to follow-up and is not included in the analysis. If dialysis claims or other evidence of dialysis reappears, the patient is entered into analysis after 60 days of continuous therapy at a single facility.
- 6. Patients are removed from facilities three days prior to transplant in order to exclude the transplant hospitalization.
- 7. Additional information about the measure can be found in the STrR Measure Methodology Report posted at: at. https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/ESRDQIP/Downloads/MeasureMethodologyReportfortheProposedSTrRMeasure.pdf.





Last Revised: October 26, 2018

Rule of Record: CY 2019 ESRD PPS Final Rule

Standardized Hospitalization Ratio (SHR) (Clinical Measure)

Domain – *Care Coordination*Lower rate desired

Measure Description

Risk-adjusted standardized hospitalization ratio of the number of observed hospitalizations to the number of expected hospitalizations (NQF# 1463)

Measure Type

Outcome.

Numerator Statement

Number of inpatient hospital admissions among eligible patients at the facility during the reporting period.

Denominator Statement

Number of hospital admissions that would be expected among eligible patients at the facility during the reporting period, given the patient mix at the facility.

Exclusions

Facility-Level Exclusions

1. Facilities with less than 5 patient-years at risk during the performance period.

Patient-Level Exclusions

- 1. First 90 days of ESRD treatment.
- 2. Time during which patient has a functioning kidney transplant (exclusion begins 3 days prior to the date of transplant).
- 3. Patients less than 18 years old.
- 4. Patients treated at the facility for fewer than 60 days.
- 5. Patients are excluded beginning 60 days after they recover renal function or withdraw from dialysis.

Minimum Claims/Data Requirements

Facilities with at least 5 patient-years at risk during the performance period.

Data Source(s)

- 1. Medicare Claims.
- 2. REMIS, CROWNWeb, Enrollment Data Base (EDB), and other CMS ESRD administrative data.





Last Revised: October 26, 2018

- 1. Patients are assigned to a facility only after they have been on dialysis there for the past 60 days.
- 2. When a patient transfers from one facility to another, the patient continues to be attributed to the original facility for 60 days and then is attributed to the destination facility.
- 3. A patient-month is considered eligible if it is within two months of a month in which a patient has \$900 of Medicare-paid dialysis claims or at least one Medicare inpatient (hospital and skilled nursing facilities) claim.
- 4. If a period of one year passes with neither paid dialysis claims nor CROWNWeb information to indicate that a patient was receiving dialysis treatment, that patient is considered lost to follow-up and is not included in the analysis. If dialysis claims or other evidence of dialysis reappears, the patient is entered into analysis after 60 days of continuous therapy at a single facility.
- 5. Patients are removed from facilities three days prior to transplant in order to exclude the transplant hospitalization.
 - 6. Additional information about the measure can be found in the SHR Measure Methodology Report posted at: https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/ESRDQIP/Downloads/SHR-Methodology-Report.pdf





Last Revised: October 26, 2018

Rule of Record: CY 2019 ESRD PPS Final Rule

Kt/V Dialysis Adequacy - Comprehensive (Clinical Measure)

Domain – *Clinical Care* Higher rate desired

Measure Description

Percentage of all patient-months for patients whose delivered dose of dialysis (either hemodialysis or peritoneal dialysis) met the specified threshold during the reporting period.

Measure Type

Intermediate Outcome.

Numerator Statement

Number of patient-months in the denominator for patients whose delivered dose of dialysis met the specified thresholds.

The thresholds are as follows:

- Adult Hemodialysis: $spKt/V \ge 1.2$ (calculated from the last measurement of the month using UKM or Daugirdas II).
- Pediatric In-center Hemodialysis: $spKt/V \ge 1.2$ (calculated from the last measurement of the month using UKM or Daugirdas II).
- Peritoneal dialysis (pediatric <18 years): $Kt/V \ge 1.8$ (dialytic + residual, measured within the past 6 months).
- Peritoneal dialysis (adult \geq 18 years): Kt/V \geq 1.7 (dialytic + residual, measured within the past 4 months).

Denominator Statement

- All adult hemodialysis patient-months where a patient received dialysis greater than two and less than four times a week (adults, ≥ 18 years), and all pediatric incenter hemodialysis patient-months where a patient received dialysis greater than two and less than four times a week (pediatric, <18 years), and the claim or CROWNWeb did not indicate frequent dialysis.
- All patient-months (both HD and PD) where a patient was assigned to the same facility for the entire month and had ESRD for 90 days or more.

Exclusions

Facility-Level Exclusions

1. Facilities treating fewer than 11 eligible patients during the performance period.





Last Revised: October 26, 2018

Denominator Exclusions

- 1. For adult HD patient-months, those not receiving dialysis greater than two and less than four times a week.
- 2. For pediatric in-center HD patients-month, those not receiving dialysis greater than two and less than four times a week.
- 3. Pediatric home hemodialysis patients.
- 4. All patient-months where the patient is indicated as a frequent dialyzer for the reporting month (see additional information below).
- 5. Patient-months where the patient is on ESRD treatment for fewer than 90 days as of the first day of the reporting month when using CROWNWeb as the data source. If claims are used as the data source, the 90 days on ESRD treatment is determined based on the claim-from date, representing the start of when care was provided.
- 6. Patient-months where the patient is not assigned to the same facility for the entire month.
- 7. Patient-months where the patient is assigned to more than one facility.
- 8. Patient-months where there is more than one treatment modality. Note: For adult HD patients, a change from in-center to home HD (or vice versa) is not considered a modality change.

Minimum Data Requirements

Facilities with at least 11 eligible patients in the performance period.

Data Sources

- 1. CROWNWeb.
- 2. REMIS, Enrollment Data Base (EDB), and other CMS ESRD administrative data.
- 3. Medicare Claims.

- 1. Hemodialysis Kt/V (all ages) must be calculated from the last measurement of the month (submitted by any facility) using UKM or Daugirdas II method, or the last valid value of the month from the assigned facility when using claims.
- 2. The number of dialysis sessions per week should be determined using the prescribed sessions per week in CROWNWeb by the assigned facility. If sessions per week is missing from CROWNWeb by the assigned facility, then sessions per week reported in CROWNWeb by any facility is selected. If sessions per week is missing in CROWNWeb, then dialysis sessions per week is calculated using claims submitted by the assigned facility, as the number of dialysis sessions in the claim divided by the time period covered by the claim, with no rounding for the number of sessions per week. The calculated sessions per week must be 4 or more for claims greater than 7 days, and total sessions is 4 or more for claims with 7 days or fewer. Frequent dialysis is also defined when Kt/V=8.88





Last Revised: October 26, 2018

on any claim submitted during the reporting month. A patient-month is excluded if any claim submitted during the month indicates frequent or infrequent dialysis.

- 3. For hemodialysis patients, the reported spKt/V should not include residual renal function.
- 4. Patients with missing Kt/V values in both CROWNWeb and claims, or with missing values in CROWNWeb and Kt/V values in claims=9.99 (Not Reported) are included in the denominator, but not the numerator.
- 5. For peritoneal dialysis patients, if a Kt/V value was not found in CROWNWeb for the patient by any facility during the four-month look back period (adults) or six-month study period (pediatric), then the last reported non-missing and non-expired value reported on the eligible Medicare claim for the patient from the assigned facility during the four-month or six-month study period respectively is selected (when available).
- 6. For all in-center hemodialysis patients, Kt/V must be reported during the reporting month; if a Kt/V value is not found in CROWNWeb from any facility, it will be obtained from the last reported non-missing and non-expired value from eligible Medicare claims from the assigned facility (when available). For all home HD patients, if a Kt/V value is not found in CROWNWeb during the reporting month from any facility, then it will be obtained from claims by the assigned facility (when available). If obtained through claims, the Kt/V must be reported within four months prior to the claim through date.





Last Revised: October 26, 2018

Rule of Record: CY 2019 ESRD PPS Final Rule

Hemodialysis Vascular Access: Standardized Fistula Rate (SFR) (Clinical Measure)

Domain – *Clinical Care* Higher rate desired

Measure Description

Adjusted percentage of adult hemodialysis patient-months using an autogenous arteriovenous fistula (AVF) as the sole means of vascular access. (NQF#2977)

Measure Type

Intermediate Outcome.

Numerator Statement

Adjusted count of adult patient-months using an AVF as the sole means of vascular access as of the last hemodialysis treatment session of the month.

Denominator Statement

All patient-months where the patient is at least 18 years old as of the first day of the reporting month who are determined to be maintenance hemodialysis patients (in-center and home HD) for the entire reporting month at the same facility.

Exclusions

Facility-Level Exclusion

1. Facilities with fewer than 11 eligible patients during the performance period.

Patient-Level Exclusions

- 1. Pediatric patients (<18 years old).
- 2. Patient-months not on hemodialysis.
- 3. Patient-months with in-center or home hemodialysis for less than a complete reporting month at the same facility.
- 4. Patient-months where a patient with a catheter has limited life expectancy:
 - a. Patients under hospice care in the current reporting month.
 - b. Patients with metastatic cancer in the past 12 months.
 - c. Patients with end stage liver disease in the past 12 months.
 - d. Patients with coma or anoxic brain injury in the past 12 months.

Minimum Data Requirements

Facilities with at least 11 eligible patients during the performance period.

Data Source(s)

1. CROWNWeb.





Last Revised: October 26, 2018

- 2. Medicare Claims.
- 3. REMIS, Enrollment Data Base (EDB), and other CMS ESRD administrative data.

Additional Information

1. Vascular access type is determined using solely CROWNWeb data.





Last Revised: October 26, 2018

Rule of Record: CY 2019 ESRD PPS Final Rule

Hemodialysis Vascular Access: Long-term Catheter Rate (Clinical Measure)

Domain – Clinical Care
Lower rate desired

Measure Description

Percentage of adult hemodialysis patient-months using a catheter continuously for three months or longer for vascular access. (NQF#2978)

Measure Type

Intermediate Outcome.

Numerator Statement

Number of adult patient-months in the denominator where the patient is on maintenance hemodialysis using a catheter continuously for three months or longer as of the last hemodialysis session of the reporting month.

Denominator Statement

All patient-months where the patient is at least 18 years old as of the first day of the reporting month and is determined to be a maintenance hemodialysis patient (in-center and home HD) for the complete reporting month at the same facility.

Exclusions

Facility-Level Exclusion

1. Facilities with fewer than 11 eligible patients during the performance period.

Patient-Level Exclusions

- 1. Pediatric patients (<18 years old).
- 2. Patient-months not on hemodialysis.
- 3. Patient-months with in-center or home hemodialysis for less than a complete reporting month at the same facility.
- 4. Patient-months where a patient with a catheter has limited life expectancy:
 - a. Patients under hospice care in the current reporting month.
 - b. Patients with metastatic cancer in the past 12 months.
 - c. Patients with end stage liver disease in the past 12 months.
 - d. Patients with coma or anoxic brain injury in the past 12 months.

Minimum Data Requirements

Facilities with at least 11 eligible patients in the performance period.

Data Source(s)

1. CROWNWeb.





Last Revised: October 26, 2018

- 2. Medicare Claims.
- 3. REMIS, Enrollment Data Base (EDB), and other CMS ESRD administrative data.

Additional Information

1. Vascular access type is determined solely using CROWNWeb data.





Last Revised: October 26, 2018

Rule of Record: CY 2019 ESRD PPS Final Rule

Hypercalcemia (Clinical Measure)

Domain – Clinical Care
Lower rate desired

Measure Description

Proportion of all adult patient-months with 3-month rolling average of total uncorrected serum or plasma calcium greater than 10.2 mg/dL or missing. (Based on NQF #1454)

Measure Type

Intermediate Outcome.

Numerator Statement

Number of patient-months in the denominator with 3-month rolling average of total uncorrected serum or plasma calcium greater than 10.2 mg/dL or missing.

Denominator Statement

Number of patient-months at the facility during the measurement period. Includes both Medicare and non-Medicare patients.

Exclusions

Facility-Level Exclusion

- 1. Facilities with fewer than 11 eligible patients during the performance period.
- 2. Facilities with fewer than 3 months of data reported in CROWNWeb.

Patient-Level Exclusions

- 1. Patient younger than 18 years.
- 2. Patients present at the facility for fewer than 30 days during the 3-month study period.
- 3. Patients on ESRD treatment for fewer than 90 days as of the first day of the reporting month.
- 4. Patients not on ESRD treatment as defined by a completed 2728 form or a REMIS/CROWNWeb record, or a sufficient amount of dialysis ¹ reported on dialysis facility claims.
- 5. Patients who have died or been discharged prior to the last day of the reporting month.
- 6. Patients for whom the facility reported fewer than 3 months of calcium values in CROWNWeb during the measurement period, plus the two months prior (i.e. November

¹ Sufficient amount of dialysis: use the claim's start date from the earliest claim where the average number of sessions per day across all claims for the patient for the next 60 days is > 0.2.





Last Revised: October 26, 2018

and December of the previous year will be used in calculating the three-month rolling average for January and February of the baseline and performance period)

Minimum Data Requirements

- 1. Facilities with at least 11 eligible patients during the performance period.
- 2. Facilities with at least 3 months of data reported in CROWNWeb.

Data Source(s)

1. REMIS, CROWNWeb, Medicare Claims, Enrollment Data Base (EDB), and other CMS ESRD administrative.

- 1. This measure includes in-center hemodialysis, home hemodialysis, and peritoneal dialysis patients.
- 2. The last non-missing value reported in the month is used for calculation.
- 3. The last non-missing value reported during each of the two months prior to the reporting month will be used to calculate the 3-month rolling average.
- 4. The uncorrected serum or plasma calcium value reported by the facility is used. The facility may obtain this value from an external source (such as an external laboratory or a hospital) to reduce patient burden or inconvenience.
- 5. "Uncorrected" indicates albumin is not considered in the calculation.
- 6. Patient-months with missing values in the reporting month and the two months prior are counted in the denominator and the numerator to minimize any incentive favoring non-measurement of serum or plasma calcium in the preceding three months.





Last Revised: October 26, 2018

Rule of Record: CY 2019 ESRD PPS Final Rule

Ultrafiltration Rate (Reporting Measure)

Domain - *Clinical Care*Higher rate desired

Measure Description

Percentage of patient-months for which a facility reports required data elements for ultrafiltration rate (UFR) for each eligible patient. (Based on NQF# 2701)

Measure Type

Process.

Numerator Statement

Number of patient-months in the denominator for which the facility reported the following required data in CROWNWeb for all hemodialysis sessions during the week of the monthly Kt/V draw submitted for that clinical month for each eligible patient:

(Note: Not all UFR values need necessarily be from the same clinical month)

- 1. HD Kt/V Date.
- 2. Post-Dialysis Weight.
- 3. Pre-Dialysis Weight.
- 4. Delivered Minutes of BUN Hemodialysis.
- 5. Number of sessions of dialysis delivered by the dialysis unit to the patient in the reporting month.

Denominator Statement

Number of patient-months among Medicare and non-Medicare dialysis patients under the care of the dialysis facility for the entire reporting month.

Exclusions

Facility-Level Exclusions

- 1. Facilities with a CCN certification date on or after April 1, 2019.
- 2. Facilities treating fewer than 11 eligible patients during the performance period.

Patient-Level Exclusions

- 1. Patients less than 18 years of age at the beginning of the reporting month.
- 2. Patients not assigned to the same facility for the entire reporting month.
- 3. Patients not on in-center hemodialysis during the reporting month.
- 4. Patients on ESRD Treatment (as defined by a completed 2728 form or a REMIS/CROWNWeb record) for less than 90 days at the beginning of the reporting month.





Last Revised: October 26, 2018

Data Source(s)

1. REMIS, CROWNWeb, EQRS, Enrollment Data Base (EDB), and other CMS ESRD administrative data.

- 1. Includes all patients (i.e., not just those patients on Medicare).
- 2. Ultrafiltration rate is calculated using data elements for pre-dialysis weight, post-dialysis weight, and delivered minutes of dialysis. The formula for UFR is: UFR = $[((\Delta \text{ wt kg}) *1000)/(\text{delivered time/60}))/\text{post wt kg}].$
- 3. As this is a reporting measure, it will not be scored using the UFR formula above, but will be scored according to the following formula:

$$\left[\frac{\text{(\# months successfully reporting data)}}{\text{(\# eligible months)}} \times 12\right] - 2$$





Last Revised: October 26, 2018

Rule of Record: CY 2019 ESRD PPS Final Rule

Clinical Depression Screening and Follow-Up (Reporting Measure)

Domain – *Care Coordination*Higher rate desired

Measure Description

The percentage of eligible patients for which a facility reports in CROWNWeb one of six conditions related to clinical depression screening and follow-up (as provided below in the "Additional Information" section) before the close of the December 2019 clinical month in CROWNWeb. (Based on NQF #0418)

Measure Type

Process.

Numerator Statement

Number of eligible patients in the performance period for whom a facility successfully reports one of six conditions related to clinical depression screening and follow-up.

Denominator Statement

Number of eligible patients in the performance period.

Exclusions

Facility-Level Exclusions

- 1. Facilities with a CCN certification date on or after April 1, 2019.
- 2. Facilities treating fewer than 11 eligible patients during the performance period.

Patient-Level Exclusions

- 1. Patients who are younger than 12 years.
- 2. Patients treated at the facility for fewer than 90 days.
- 3. Patients not on ESRD treatment as defined by a completed 2728 form, a REMIS/CROWNWeb record, or a sufficient amount of dialysis reported on dialysis facility claims.

Data Source(s)

1. REMIS, CROWNWeb, Enrollment Data Base (EDB), and other CMS ESRD administrative data.

Additional Information

1. Facilities must report one of the following conditions for each eligible patient:





Last Revised: October 26, 2018

- a. Screening for clinical depression is documented as being positive, and a follow-up plan is documented.
- b. Screening for clinical depression documented as positive, and a follow-up plan not documented, and the facility possess documentation stating the patient is not eligible.
- c. Screening for clinical depression documented as positive, the facility possesses no documentation of a follow-up plan, and no reason is given.
- d. Screening for clinical depression is documented as negative, and a follow-up plan is not required.
- e. Screening for clinical depression not documented, but the facility possesses documentation stating the patient is not eligible.
- f. Clinical depression screening not documented, and no reason is given.





Last Revised: October 26, 2018

Rule of Record: CY 2019 ESRD PPS Final Rule

NHSN Dialysis Event Reporting Measure

Domain - *Safety* Higher rate desired

Measure Description

Number of months for which facility reports National Healthcare Safety Network (NHSN) Dialysis Event data to the CDC's NHSN system.

Measure Type

Process.

Exclusions

Facility-Level Exclusions

- 1. Facilities that treat fewer than 11 in-center hemodialysis patients.
- 2. Facilities with a CCN certification date on or after October 1, 2018.
- 3. Facilities with approved Extraordinary Circumstances Exception (ECE).

Data Source(s)

- 1. CDC's NHSN system.
- 2. REMIS, CROWNWeb, Enrollment Data Base (EDB), and other CMS ESRD administrative data.

- 1. Three types of dialysis events are reported by facilities: IV antimicrobial start; positive blood culture; and pus, redness, or increased swelling at the vascular access site.
- 2. Dialysis Event data are due quarterly; please refer to the following CDC NHSN website link for further details: https://www.cdc.gov/nhsn/dialysis/event/index.html
- 3. Scoring Distribution for the NHSN Dialysis Event Reporting Measure:
 - a. 10 points for reporting 12 months.
 - b. 2 points for reporting 6 11 months.
 - c. 0 points for reporting 0-5 months.
- 4. Additional details on the specifications for the NHSN Dialysis Event Reporting measure can be found at the following website links:

 http://www.cdc.gov/nhsn/Training/dialysis/index.html

 https://www.cdc.gov/nhsn/dialysis/event/index.html