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 open date on or after January 1, 2019.
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 inpatient hemodialysis are excluded from the measure.
2. Patients receiving only home hemodialysis or peritoneal dialysis are excluded from the measure.

Minimum Data Requirements
12 months (reported to NHSN)

Data Source(s)
1. NHSN (for Risk-Adjusted Standardized Infection Rates)
2. REMIS, CROWNWeb, Enrollment Data Base (EDB), and other CMS ESRD administrative data (form 2744 to obtain facility type and certification date)
3. Medicare claims and CROWNWeb (to determine patient-minimum exclusion)

**Additional Information**

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/](http://www.cdc.gov/nhsn/dialysis/).
Patient Experience of Care: In-Center Hemodialysis Consumer Assessment of Healthcare Providers and Systems (ICH CAHPS) Survey (Clinical Measure)

Domain – Clinical
Subdomain – Patient and Family Engagement/Care Coordination
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.
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 open date on or after January 1, 2019
4. Facilities not offering In-Center Hemodialysis

**Patient-Level Exclusions**
5. 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
6. 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 (form 2744 to obtain certification date and facility type)

**Additional Information**
1. Facilities are required to register on the [https://ichcahps.org](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](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. Facilities that administer two surveys during the performance period but receive less than 30 completed surveys will be automatically excluded from the measure.
7. Each measure encompasses the responses for all questions included in that particular measure. Missing data for individual survey questions are not included in the calculations. Only data from a "completed survey" is used in the calculations.
8. Additional specifications may be found at [https://ichcahps.org](https://ichcahps.org).
Standardized Readmission Ratio (SRR) (Clinical Measure)

Domain – Clinical
Subdomain – Patient and Family Engagement/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 hospital discharges that are followed by an unplanned hospital readmission within 4–30 days of discharge.

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

Exclusions
Readmissions that:
1. Occurred more than 30 days after the index discharge
2. Are considered “planned”
3. Occur within the first three days following discharge from the acute care hospital

Index hospital 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
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
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

Additional Information
1. A hospitalization is counted as an event in the numerator if it (a) occurred within 4 to 30 days of an index hospital discharge; and (b) is not considered a “planned” readmission
2. Additional information about the measure can be found in:
   a. The SRR Measure Methodology Report posted at: https://dialysisdata.org/content/methodology.
   b. The SRR Measure Information Form (MIF) at: https://dialysisdata.org/content/methodology.
Standardized Transfusion Ratio (STrR) (Clinical Measure)

Domain – Clinical
Subdomain – 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

Patient-Level Exclusions
1. Patients less than 18 years old
2. Patients on dialysis for fewer than 90 days
3. Patients treated at the facility for fewer than 60 days
4. Patients who receive a transplant
5. Patients who have not been treated by any facility for a year or longer
6. Patients with a Medicare claim 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 myelofibrosis, leukemia, head and neck cancer, other cancers (connective tissue, skin, and others), metastatic cancer, or sickle cell anemia within one year of their patient time at risk

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, form 2728 to obtain the dialysis date of ESRD, and other CMS ESRD administrative data

Additional Information
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. When a patient transfers from one facility to another, the patient continues to be attributed to the original facility for 60 days, at which point the patient 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 claim.
4. Additional information about the measure can be found in:
   a. The STrR Measure Methodology Report posted at [https://dialysisdata.org/content/methodology](https://dialysisdata.org/content/methodology).
   b. The STrR MIF at: [https://dialysisdata.org/content/methodology](https://dialysisdata.org/content/methodology).
Standardized Hospitalization Ratio (SHR) (Clinical Measure)

Domain – Clinical
Subdomain – Clinical Care
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

Patient Time at Risk Exclusions
1. First 90 days of ESRD treatment
2. Time during which patient has a kidney transplant (Exclusion begins 3 days prior to the date of transplant)
3. Time at risk once a patient has not been treated by any facility for a year or longer.
4. Months which are not within or in the two months following a month in which the patient has $900 of Medicare-paid dialysis claims or at least one Medicare inpatient claim.

Minimum 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

Additional Information
1. Hospitalizations during the first 90 days of ESRD are not included in the calculations.
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. 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. A patient-month is considered eligible if it is within or in the two months following a month in which a patient has $900 of Medicare-paid dialysis claims or at least one Medicare inpatient claim.

7. Additional information about the measure can be found in:
   a. The SHR Measure Methodology Report posted at https://dialysisdata.org/content/methodology.
   b. The SHR Measure Justification Form at: https://dialysisdata.org/content/methodology.
Kt/V Dialysis Adequacy - Comprehensive (Clinical Measure)

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

Denominator Statement
- All adult hemodialysis patients who received dialysis greater than two and less than four times a week (adults, ≥ 18 years), and all pediatric in-center hemodialysis patients who received dialysis greater than two and less than four times a week (pediatric, <18 years), and did not indicate frequent dialysis.
- All patients (both HD and PD) who are assigned to the facility for the entire month, and have had ESRD for 90 days or more.

Exclusions

Patient-Level Exclusions
1. For adult HD patients, those not receiving dialysis greater than two and less than four times a week
2. For pediatric in-center HD patients, those not receiving dialysis greater than two and less than four times a week
3. Pediatric patients who are not on in-center Hemodialysis for the entire reporting month
4. All patients indicated as a frequent dialyzer for the reporting month (see additional information below)
5. Patients on ESRD treatment for fewer than 90 days as of the first day of the reporting month
6. Patient-months where the patient is not assigned to the facility for the entire month.
7. 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

**Additional Information**
1. Hemodialysis (all ages) must be calculated from the last measurement of the month using UKM or Daugirdas II method, or the last valid value of the month when using claims.
2. Weekly dialysis should be determined using the Prescribed Sessions per Week in CROWNWeb. If Kt/V is missing from CROWNWeb, then dialysis sessions per week is calculated using claims, 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 on the claim.
3. For hemodialysis patients, the reported spKt/V should not include residual renal function.
4. Patients with missing 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 value was not found in CROWNWeb for the patient during the four-month study 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 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, it will be obtained from the last
reported non-missing and non-expired value from eligible Medicare claims (when available). For all home HD patients, if a Kt/V value is not found in CROWNWeb for the four-month study period, then Kt/V must be reported within four months prior to the claim through date.
Hemodialysis Vascular Access: Standardized Fistula Rate (Clinical Measure)
Domain – Clinical
Subdomain – 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 patients 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
Patient-Level Exclusions
1. Pediatric patients (<18 years old)
2. Patients not on hemodialysis
3. Patient-months with in-center or home hemodialysis for less than a complete reporting month at the same facility
4. Patients with a catheter that have 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
12 months data from CROWNWeb and 24 months data from Medicare Claims

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

1. If claim indicates fistula and catheter, then only the fistula is counted.
2. Last claim of the month is used for calculation.
Hemodialysis Vascular Access: Long-term Catheter Rate (Clinical Measure)

Domain – Clinical
Subdomain – 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 who were 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 patients 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 complete reporting month at the same facility.

Exclusions

Patient-Level Exclusions
1. Pediatric patients (<18 years old)
2. Patients not on hemodialysis
3. Patient-months with in-center or home hemodialysis for less than a complete reporting month at the same facility
4. Patients with a catheter that have 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
6 months data of CROWNWeb and 15 months data from Medicare Claims

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

1. If claim indicates fistula and catheter, then only the fistula is counted.
2. If a claim indicates catheter and graft, then only the graft is counted.
3. Measure uses claims data from October, November, and December of the year prior to the performance or comparison period (e.g., October – December 2017 for performance period) to determine catheter history
4. Last claim of the month is used for calculation.
Hypercalcemia (Clinical Measure)
Domain – Clinical
Subdomain – Clinical Care
Lower rate desired

Measure Description
Proportion of all adult patient-months (Medicare and non-Medicare patients) with 3-month rolling average of total uncorrected serum or plasma calcium greater than 10.2 mg/dL. (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.

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

Exclusions

Patient-Level Exclusions
1. Patients 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.

Minimum Data Requirements
3 months (reported in CROWNWeb)

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\(^1\) 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.
Data Source(s)
1. REMIS, CROWNWeb, Enrollment Data Base (EDB), and other CMS ESRD administrative data (to obtain the diagnosis date of ESRD, time at facility, and date of birth)

Additional Information
1. November 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.
2. This measure includes in-center hemodialysis, home hemodialysis, and peritoneal dialysis patients
3. The last value reported in the month is used for calculation.
4. Any value reported during the two months prior to the reporting month will be used to calculate the 3-month rolling average.
5. 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.
6. “Uncorrected” indicates albumin is not considered in the calculation.
7. 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.
Serum Phosphorus (Reporting Measure)

Domain - Reporting
Higher rate desired

Measure Description
Percentage of all adult (≥18 years of age) peritoneal dialysis and hemodialysis (including in-center hemodialysis and home dialysis) patient-months with serum or plasma phosphorus reported at least once within each patient-month during the performance period. (Based on NQF # 0255)

Measure Type
Process.

Numerator Statement
Number of adult (≥ 18 years of age) dialysis patient-months in the denominator with serum or plasma phosphorus reported at least once within each patient-month.

Denominator Statement
Number of adult (≥ 18 years of age) dialysis patient-months among in-center hemodialysis, home hemodialysis, or peritoneal dialysis patients under the care of the dialysis facility during the performance period.

Exclusions

Facility-Level Exclusions
1. Facilities with a CCN open date on or after July 1, 2019
2. Facilities treating fewer than 11 eligible patients during the performance period

Patient-Level Exclusions
1. Patients not at the facility for the entire month ("Admit Date" greater than the first day of the month and "Discharge Date" is less than the last day of the month)
2. Home dialysis patients for whom a facility does not submit a claim during the claim month
3. Patients not on ESRD treatment as defined by a completed 2728 form or a REMIS/CROWNWeb record, or a sufficient amount of dialysis reported on dialysis facility claims
4. Patients whose age is less than 18 years

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2 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.
Data Source(s)
1. CROWNWeb
2. Medicare Claims
3. REMIS, CROWNWeb, Enrollment Data Base (EDB), and other CMS ESRD administrative data (form 2744 to obtain certification date)

Additional Information
1. The serum or plasma phosphorus values reported by the facility are used. The facility may obtain these values from an external source (such as an external laboratory or a hospital) to reduce patient burden or inconvenience.
2. A facility is excluded from a reporting month if its certification date falls on or after the 1st day of the reporting month (the scenario can only occur during January, 2019 – June, 2019).
3. The measure will be scored according to the following formula, where the “# eligible months” in the denominator represents the number of months in the performance period the facility has a CCN.

\[
\left( \frac{\text{# months successfully reporting data}}{\text{# eligible months}} \right) \times 12 - 2
\]
Anemia Management (Reporting Measure)
Domain - Reporting
Higher rate desired

Measure Description
Percentage of patient-months for which facility reports erythropoiesis stimulating agent (ESA) dosage (as applicable) and hemoglobin/hematocrit for each Medicare patient at least once within each patient-month during the performance period.

Measure Type
Process.

Numerator Statement
Number of patient-months in the denominator with a hemoglobin or hematocrit value reported at least once within each patient-month.

Denominator Statement
Number of eligible patient-months among Medicare dialysis patients under the care of the dialysis facility during the performance period.

Exclusions
Facility-Level Exclusions
1. Facilities with a CCN open date on or after July 1, 2019
2. Facilities treating fewer than 11 patients during the performance period who are (i) in-center Medicare patients who have been treated at least 7 times by the facility during the reporting month; or (ii) home dialysis Medicare patients for whom the facility submits a claim during the reporting month

Patient-Level Exclusions
1. In-center hemodialysis patients treated at a facility fewer than 7 times during claim month
2. Home dialysis patients for whom a facility does not submit a claim during the claim month
3. Patients not on ESRD treatment as defined by a completed 2728 form or a REMIS/CROWNWeb record, or a sufficient amount of dialysis\(^3\) reported on dialysis facility claims

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\(^3\) 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.
Data Source(s)
1. Medicare Claims
2. REMIS, CROWNWeb, Enrollment Data Base (EDB), and other CMS ESRD administrative data (form 2744 to obtain certification date, form 2728 to obtain the diagnosis date of ESRD)

Additional Information
1. Hemoglobin value of 99.99 is considered a valid value only for the first month of treatment at the facility and constitutes successful reporting.
2. A patient may be considered to be in his or her first month of treatment at a facility multiple times during the performance period.
3. A facility is excluded from a reporting month if its certification date falls on or after the 1st day of the reporting month (the scenario can only occur during January, 2019 – June, 2019).
4. The hemoglobin/hematocrit reported by the facility is used. The facility may obtain this value from an external source.
5. No ESA dosage need be recorded if patient is not treated with ESAs.
6. ESA dosage must be reported via HCPCS codes and corresponding units, as applicable.
7. The measure will be scored according to the following formula, where the “# eligible months” in the denominator represents the number of month in the performance period the facility has a CCN.

\[
\left( \frac{\text{# months successfully reporting data}}{\text{# eligible months}} \times 12 \right) - 2
\]
Centers for Medicare & Medicaid Services (CMS)
End-Stage Renal Disease (ESRD) Quality Incentive Program (QIP)
Payment Year (PY) 2021 Proposed Measure Technical Specifications

Last Revised: June 29, 2017

Ultrafiltration Rate (Reporting Measure)
Domain - Reporting
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:

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

(Note: The first four listed data elements are reported 3 times during the week of the monthly Kt/V draw (4 x 3 = 12) and the final element is reported once per month, for a total of 13 data elements per patient per 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 open date on or after July 1, 2019
2. Facilities treating fewer than 11 eligible patients during the performance period

Patient-Level Exclusions
3. Patients less than 18 years of age at the beginning of the reporting month
4. Patients not assigned to the facility for the entire reporting month
5. Patients not on in-center hemodialysis during the reporting month
6. Patients on chronic dialysis (as defined by a completed 2728 form or a REMIS/CROWNWeb record) for less than 90 days at the beginning of the reporting month
Data Source(s)
1. REMIS, CROWNWeb, Enrollment Data Base (EDB), and other CMS ESRD administrative data (form 2744 to obtain certification date)

Additional Information
1. Includes all patients (i.e., not just those patients on Medicare).
2. A facility is excluded from a reporting month if its certification date falls on or after the 1st day of the reporting month (the scenario can only occur during January, 2019 – June, 2019).
3. Ultrafiltration rate is calculated for a single session per month (CROWNWeb generally records data from the last session) using data elements for pre-dialysis weight, post-dialysis weight, and delivered minutes of dialysis. The formula for UFR is: \[ UFR = \frac{(((\Delta \text{ wt kg}) \times 1000)/ (\text{delivered time}/60))/\text{post wt kg}}{}} \]
4. 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:

\[
\left( \frac{\# \text{ months successfully reporting data}}{\# \text{ eligible months}} \right) \times 12 - 2
\]
Pain Assessment and Follow-Up (Reporting Measure)

Domain - Reporting
Higher rate desired

Measure Description
The percentage of eligible patients for which a facility reports in CROWNWeb one of six conditions related to pain assessment and follow-up (as provided below in the “Additional Information” section), twice for the performance period, once by July 31, 2019 (for the first 6 months of the performance period) and once by January 31, 2020 (for the last six months of the performance period). (Based on NQF #0420)

Measure Type
Process.

Numerator Statement
Number of eligible patients in each of the two reporting periods for whom a facility successfully reports one of six conditions related to pain assessment and follow-up.

Denominator Statement
Number of eligible patients in each of the two reporting periods of the performance period.

Exclusions

Facility-Level Exclusions
1. Facilities with a CCN open date on or after July 1, 2019
2. Facilities treating fewer than 11 eligible patients during the performance period

Patient-Level Exclusions
1. Patients who are younger than 18 years
2. Patients treated at the facility for fewer than 90 days

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:
   a. Pain assessment using a standardized tool is documented as positive and a follow-up plan is documented
   b. Pain assessment documented as positive, a follow-up plan is not documented, and the facility possesses documentation that the patient is not eligible
   c. Pain assessment documented as positive using a standardized tool, a follow-up plan is not documented, and no reason is given
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d. Pain assessment using a standardized tool is documented as negative, and no follow-up plan required
e. No documentation of pain assessment, and the facility possesses documentation the patient is not eligible for a pain assessment using a standardized tool
f. No documentation of pain assessment, and no reason is given

2. A facility is excluded from a reporting month if its certification date falls on or after the 1st day of the reporting month (the scenario can only occur during January, 2019 – June, 2019).
Clinical Depression Screening and Follow-Up (Reporting Measure)

Domain - Reporting
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) by January 31, 2020. (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 open date on or after July 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

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 by January 31, 2020:
   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

2. A facility is excluded from a reporting month if its certification date falls on or after the 1st day of the reporting month (the scenario can only occur during January, 2019 – June, 2019).
NHSN Healthcare Personnel Influenza Vaccination (Reporting Measure)

Domain - Reporting
Higher rate desired

Measure Description
This measure assesses whether a facility submits the Healthcare Personnel (HCP) Influenza Vaccination Summary Report to CDC’s NHSN system, in accordance with the specifications of the Healthcare Personnel Safety Component Protocol, by May 15, 2019. (Based on NQF #0431)

Measure Type
Process.

Exclusions
Facility-Level Exclusions
1. Facilities with a CCN open date on or after January 1, 2019

Data Source(s)
1. NHSN
2. REMIS, CROWNWeb, Enrollment Data Base (EDB), and other CMS ESRD administrative data (form 2744 to obtain facility type and certification date)

Additional Information
1. All outpatient dialysis facilities, including those that offer only home hemodialysis and/or peritoneal dialysis services must report data on this measure.
2. A “qualifying healthcare personnel” is defined as an employee, licensed independent practitioner, or adult student/trainee/volunteer who works in a facility for at least one day between October 1, 2018 and March 31, 2019 (designated as the “flu season”)
3. NHSN Summary Reports submitted by May 15, 2019 would document actions taken during the flu season that spans October 2018 through March 2019, and would count toward facilities’ PY 2021 NHSN Healthcare Personnel Influenza Vaccination reporting measure scores
5. Additional details on the specifications for the NHSN HCP Influenza Vaccination measure can be found at the following website: https://www.cdc.gov/nhsn/dialysis/hcp-vaccination/index.html.
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 which do not treat at least 11 in-center hemodialysis patients
2. Facilities with a CMS open date on or after January 1, 2019
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 (form 2744 to obtain certification date)

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