



Centers for Medicare & Medicaid Services (CMS)  
 End-Stage Renal Disease Quality Incentive Program (ESRD QIP)  
 Calendar Year (CY) 2021 Measure Technical Specifications



Last Revised: June 5, 2020

**Rule of Record: Calendar Year (CY) 2021 ESRD Prospective Payment System (PPS)  
 Proposed Rule**

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**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 Exclusions***

1. Facilities that do not offer in-center hemodialysis as of December 31 of the performance period.
2. Facilities with a CCN open date on or after October 1 of the year prior to the performance year.
3. Facilities that treat fewer than 11 in-center hemodialysis patients during the performance period.
4. Facilities with approved Extraordinary Circumstances Exception (ECE).

***Patient 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.



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**Data Source(s)**

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

**Additional Information**

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/dialysis/enroll.html> and <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/>.



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## **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 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 certification date on or after October 1 of the year prior to the performance year.





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4. Facilities not offering In-Center Hemodialysis as of December 31 of the performance year.

***Patient Exclusions***

1. 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.

**Additional Information**

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>.



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**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 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**

***Facility Exclusions***

1. Facilities with less than 11 index hospital discharges during the calendar year of assessment.
2. Calculations of index discharges will exclude the months covered by a granted ECE.

**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. Occurred 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.



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

**Minimum Data Requirements**

1. Facilities with at least 11 index hospital discharges in the calendar year of assessment.

**Data Source(s)**

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

**Additional Information**

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/MeasureMethodologyReportfortheProposedSRRMeasure.pdf>.



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## **Standardized Transfusion Ratio (STrR) (Reporting Measure)**

Domain – *Clinical Care*

### **Measure Description**

Dialysis facility reporting of data on Medicare claims and in CROWNWeb that are used to determine the number of eligible patient years at risk for calculating the risk adjusted facility level transfusion ratio (STrR) for adult Medicare dialysis patients. (Based on NQF #2979)

### **Measure Type**

Reporting.

### **Exclusions**

#### ***Facility Exclusions***

1. Facilities with less than 10 patient-years at risk during the calendar year of assessment.
2. Calculations will exclude the months covered by a granted ECE.

#### ***Patient 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).
5. Patients who have not been treated by any facility for a year or longer.
6. Patients with a Medicare claim (Part A inpatient, home health, hospice, and skilled nursing facility claims or 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 myelofibrosis, leukemia, head and neck cancer, other cancers (connective tissue, skin, and others), metastatic cancer, or sickle cell anemia.
7. 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.
8. Patients are excluded beginning 60 days after they recover renal function or withdraw from dialysis.

### **Minimum Data Requirements**

1. Facilities with at least 10 patient-years at risk in the calendar year of assessment.

### **Data Source(s)**

1. Medicare Claims.



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

**Additional Information**

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 without 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 STrR Measure Methodology Report posted at: <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/ESRDQIP/Downloads/MeasureMethodologyReportfortheProposedSTrRMeasure.pdf>.



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**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 Exclusions***

1. Facilities with less than 5 patient-years at risk during the calendar year of assessment.
2. Calculations will exclude the months covered by a granted ECE.

***Patient 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 treated at the facility for fewer than 60 days.
4. Patients are excluded beginning 60 days after they recover renal function or withdraw from dialysis.
5. Patients who have not been treated by any facility for a year or longer.
6. 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 (hospital and skilled nursing facilities) claim.

**Minimum Data Requirements**

1. Facilities with at least 5 patient-years at risk during the calendar year of assessment.

**Data Source(s)**

1. Medicare Claims.



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

**Additional Information**

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. 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.
4. Patients are removed from facilities three days prior to transplant in order to exclude the transplant hospitalization.
5. 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>.



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## **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:

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

### **Denominator Statement**

1. All adult hemodialysis patient-months where a patient received dialysis greater than two and less than four times a week (adults,  $\geq 18$  years), and all pediatric in-center 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.
2. 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 Exclusion***

1. Facilities that treat fewer than 11 eligible patients during the calendar year of assessment.

#### ***Denominator Exclusions***

1. For adult HD patient-months, those not receiving dialysis greater than two and less than four times a week.





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2. For pediatric in-center HD patient-months, those not receiving dialysis greater than two and less than four times a week.
3. Pediatric home hemodialysis patients.
4. 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.
5. Patient-months where the patient is not assigned to the same facility for the entire month.
6. Patient-months where the patient is assigned to more than one facility.
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.
8. For new facilities only, the month in which the CCN becomes effective and the following three months.
9. Patient-months covered by a granted ECE.

### **Minimum Data Requirements**

1. Facilities with at least 11 eligible patients in the calendar year of assessment.

### **Data Sources**

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

### **Additional Information**

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  $Kt/V=8.88$  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 (if dialysis sessions per week is not reported in CROWNWeb).



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3. For hemodialysis patients, the reported spKt/V should not include residual renal function.
4. Patient-months 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, then it will be obtained from claims by the assigned facility (when available). If obtained from claims, the Kt/V must be reported within four months prior to the claim through date.
7. Lab values reported by facilities during granted ECE months will not be used in the calculations.



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**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 Exclusion***

1. Facilities treating fewer than 11 eligible patients during the calendar year of assessment.
2. For new facilities only, the month in which the CCN becomes effective and the following three months.
3. Calculations will exclude the months covered by a granted ECE.

***Patient 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 a limited life expectancy, defined as:
  - 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.
5. Patients not on ESRD treatment.



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**Minimum Data Requirements**

1. Facilities with at least 11 eligible patients during the calendar year of assessment.

**Data Source(s)**

1. CROWNWeb.
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.
2. If multiple access types are reported by the assigned facility in a reporting month, the last reported access type is used.
3. Vascular access type reported by facilities during ECE months will not be considered in calculations
4. The measure is a directly standardized percentage, in that each facility's percentage of AVF use is adjusted to the national distribution of covariates (risk factors).



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**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 Exclusion***

1. Facilities treating fewer than 11 eligible patients during the performance period.
2. For new facilities only, the month in which the CCN becomes effective and the following three months.
3. Calculations will exclude the months covered by a granted ECE.

***Patient 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 a limited life expectancy, defined as:
  - 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.
5. Patients not on ESRD treatment

**Minimum Data Requirements**

1. Facilities with at least 11 eligible patients during the calendar year of assessment.



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**Data Source(s)**

1. CROWNWeb
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.
2. If multiple access types are reported by the assigned facility in a reporting month, the last reported access type is used
3. Patients are considered to have long-term catheter use if they are assigned of the same facility for at least three consecutive complete months as of the last hemodialysis session of the reporting month.
4. Vascular access type reported by facilities during ECE months will not be considered in calculations.
5. Vascular access type reported in November and December of the previous year will be used in calculations for January and February of the baseline and performance period.



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Rule of Record: CY 2021 ESRD PPS Proposed 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 Exclusion***

1. Facilities treating fewer than 11 eligible patients during the calendar year of assessment.
2. Facilities with fewer than 3 months of data reported in CROWNWeb.
3. Calculations will exclude the months covered by a granted ECE.

#### ***Patient 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 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 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 calendar year of assessment.
2. Facilities with at least 3 months of data reported in CROWNWeb.



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**Data Source(s)**

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

**Additional Information**

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.
7. Calcium values reported by facilities during ECE months will not be used in the calculations.





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Rule of Record: CY 2021 ESRD PPS Proposed Rule

**Percentage of Prevalent Patients Waitlisted (PPPW) (Clinical Measure)**

Domain – *Care Coordination*

Higher rate desired

**Measure Description**

Percentage of patients at each dialysis facility who were on the kidney or kidney-pancreas transplant waitlist averaged across patients prevalent on the last day of each month during the performance period.

**Measure Type**

Process.

**Numerator Statement**

Number of patient-months in which the patient at the dialysis facility is on the kidney or kidney-pancreas waitlist as of the last day of each month during the performance period.

**Denominator Statement**

All patient-months for patients who are under the age of 75 on the last day of each month and are assigned to the dialysis facility according to each patient's treatment history as of the last day of each month during the reporting year.

**Exclusions**

***Facility Exclusions***

1. Facilities treating fewer than 11 eligible patients during the calendar year of assessment.
2. Calculations will exclude the months covered by a granted ECE.

***Patient Exclusions***

1. Patients 75 years old and older on the last day of each month during the performance period.
2. Patients admitted to a skilled nursing facility (SNF) or hospice during the evaluation month are excluded from that month.
3. Patients admitted to SNF at incidence or previously were excluded, according to Question 17u and 22 on the CMS Medical Evidence Form.

**Minimum Data Requirements**

1. Facilities with at least 11 eligible patients during the calendar year of assessment.

**Data Source(s)**

1. CROWNWeb, Organ Procurement and Transplant Network (OPTN), Nursing Home Minimum Dataset, CMS Medical Evidence Forms, and Medicare hospice claims data.



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**Additional Information**

1. For each patient, a new record is created each time he/she changes facility or treatment modality.
2. Each record represents a time period associated with a specific modality and dialysis facility.
3. This measure is currently age-adjusted, with age updated each month.
4. The measure is a directly standardized percentage in that each facility's percentage of prevalent patients waitlisted is adjusted to the national age distribution (all facilities combined).



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**Ultrafiltration Rate (Reporting Measure)**

Domain – *Clinical Care*

Higher rate desired

**Measure Description**

Percentage of patient-months for which a facility reports all required data elements for ultrafiltration rate (UFR) in CROWNWeb for all hemodialysis sessions during the week of the monthly Kt/V draw submitted for that clinical month for each eligible patient.  
(Based on NQF# 2701)

**Measure Type**

Process.

**Numerator Statement**

Number of patient-months for which a facility reports all required data elements for ultrafiltration rate in CROWNWeb for all hemodialysis sessions during the week of the monthly Kt/V draw submitted for that clinical month for all eligible patients. A facility is considered to have successfully reported for a patient-month if 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. In-Center Hemodialysis (ICHD) Kt/V Date.
2. Post-Dialysis Weight.
3. Pre-Dialysis Weight.
4. Delivered Minutes of BUN HD.
5. Number of sessions of dialysis delivered by the dialysis unit to the patient in the reporting month.

**Denominator Statement**

The number of eligible patient-months assigned to the facility in the performance period.

**Exclusions**

***Facility Exclusions***

1. Facilities with a CCN certification date on or after April 1 of the performance period.
2. Facilities treating fewer than 11 eligible patients during the performance period.
3. Calculations will exclude the months covered by a granted ECE.

***Patient Exclusions***

1. Patients less than 18 years of age at the beginning of the reporting month.
2. Patients not assigned to the facility for the entire reporting month.
3. Patients not on in-center hemodialysis during the reporting month.



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4. Patients 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) for less than 90 days at the beginning of the reporting month.

**Data Source(s)**

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

**Additional Information**

1. Includes all patients (i.e., not just those patients on Medicare).
2. Ultrafiltration rate is calculated using data elements for pre-dialysis weight, postdialysis 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. If the facility's certification date was between October 1 of the year prior to the performance year and March 31 of the performance year, the facility is required to report on the first day of the month that is 4 months after the month in which the facility is certified to participate in Medicare.
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:

$$\left[ \frac{\# \text{ patient-months facility reported required UFR data elements in CROWNWeb}}{\# \text{ eligible patient-months assigned to the facility in the performance period}} \times 12 \right] - 2$$

5. ECE months are not included in the scoring equation.



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Rule of Record: CY 2021 ESRD PPS Proposed Rule

## **Medication Reconciliation (MedRec) (Reporting Measure)**

Domain – *Safety*  
Higher rate desired

### **Measure Description**

The percentage of patient-months for which medication reconciliation was performed and documented by an eligible professional (based on NQF #2988).

### **Measure Type**

Process.

### **Numerator Statement**

Number of patient-months in the denominator for which the facility reported the following required data in CROWNWeb:

1. Date of the medication reconciliation.
2. Type of eligible professional who completed the medication reconciliation:
  - physician,
  - nurse,
  - ARNP,
  - PA,
  - pharmacist, or
  - pharmacy technician.
3. Name of eligible professional.

### **Denominator Statement**

Total number of eligible patient-months for all patients assigned to a dialysis facility during the performance period.

### **Exclusions**

#### ***Facility Exclusions***

1. Facilities with a CCN certification date on or after October 1 of the year prior to the performance period.
2. Calculations will exclude the months covered by a granted ECE.

#### ***Patient Exclusions***

1. In-center patients who receive < 7 hemodialysis treatments in the facility during the reporting month.
2. Patients who are not assigned to the facility for the entire reporting month.
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.



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**Data Source(s)**

1. CROWNWeb, facility medical records and other CMS ESRD administrative data.

**Additional Information**

1. Medication reconciliation is a measure that assesses whether a facility has appropriately evaluated a patient's medications.
2. For the purposes of this measure, "eligible professional" is defined as a physician, nurse, ARNP, PA, pharmacist, or pharmacy technician.
3. If the facility's certification date was between October 1 of the year prior to the performance year and March 31 of the performance year, the facility is required to report on the first day of the month that is 4 months after the month in which the facility is certified to participate in Medicare.
4. The measure will be scored using the following equation:

$$\left[ \frac{\text{\# patient-months facility reported required MedRec data in CROWNWeb}}{\text{\# eligible patient-months assigned to facility during performance period}} \times 12 \right] - 2$$

5. ECE months are excluded from the scoring calculation.



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Rule of Record: CY 2021 ESRD PPS Proposed 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 four conditions related to clinical depression screening and follow-up (as provided below in the “Additional Information” section) before the close of the December 2021 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 Exclusions***

1. Facilities with a CCN certification date on or after April 1 of the performance period.
2. Facilities treating fewer than 11 eligible patients during the performance period.
3. Calculations will exclude the months covered by a granted ECE.

#### ***Patient 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 can select one of six conditions in CROWNWeb:
  - 1) Screening for clinical depression is documented as being positive, and a follow-up plan is documented.



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- 2) 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.
  - 3) Screening for clinical depression documented as positive, the facility possesses no documentation of a follow-up plan, and no reason is given.
  - 4) Screening for clinical depression is documented as negative, and a follow-up plan is not required.
  - 5) Screening for clinical depression not documented, but the facility possesses documentation stating the patient is not eligible.
  - 6) Clinical depression screening not documented, and no reason is given.
2. Facilities are required to select condition 1, 2, 3, 4, 5 or 6 for all eligible patients in order to be counted in the numerator.
  3. Facilities will be scored using the following equation:

$$\left[ \frac{\text{Number of Eligible Patients for Whom a Facility Successfully Reports One of Six Conditions During the Performance Period}}{\text{Total number of Eligible Patients During the Performance Period}} \right] \times 10$$





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## **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 Exclusions***

1. Facilities that do not offer in-center hemodialysis as of December 31 of the performance period.
2. Facilities with a CCN open date on or after September 1 of the performance year.
3. Facilities that treat fewer than 11 in-center hemodialysis patients during the performance period.
4. Calculations will exclude the months covered by a granted ECE.

### **Data Source(s)**

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

### **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. If the facility's certification date was between October 1 of the year prior to the performance year and August 31 of the performance year, the facility is required to report on the first day of the month that is 4 months after the month in which the facility is certified to participate in Medicare.
4. Scoring Distribution for the NHSN Dialysis Event Reporting Measure:
  - a. 10 points for reporting 100% of eligible months.
  - b. 2 points for reporting less than 100% but no less than 50% of eligible months.
  - c. 0 points for reporting less than 50% of eligible months.
5. ECE months are not eligible, regardless of whether or not the facility reports dialysis events to NHSN.
6. Additional details on the specifications for the NHSN Dialysis Event Reporting measure can be found at the following website links:



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<http://www.cdc.gov/nhsn/Training/dialysis/index.html>  
<https://www.cdc.gov/nhsn/dialysis/event/index.html>