



Centers for Medicare & Medicaid Services (CMS)
 End-Stage Renal Disease Quality Incentive Program (ESRD QIP)
 Calendar Year (CY) 2022 Measure Technical Specifications



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**Rule of Record: Calendar Year (CY) 2022 ESRD Prospective Payment System (PPS)
 Final Rule**

Table of Contents

Bloodstream Infection in Hemodialysis Patients (Clinical Measure)..... 6

 Measure Description 6

 Measure Type..... 6

 Numerator Statement 6

 Denominator Statement..... 6

 Exclusions 6

 Facility Exclusions 6

 Patient Exclusions 6

 Minimum Data Requirements 6

 Data Source(s)..... 7

 Additional Information 7

Healthcare Providers and Systems (ICH CAHPS) Survey (Clinical Measure) 8

 Measure Description 8

 Measure Type..... 8

 Numerator Statement 8

 Denominator Statement..... 8

 Exclusions 8

 Facility Exclusions 8

 Patient Exclusions 9

 Minimum Data Requirements 9

 Data Source(s)..... 9

 Additional Information 9

Standardized Readmission Ratio (SRR) (Clinical Measure) 10

 Measure Description 10

 Measure Type..... 10

 Numerator Statement 10



Centers for Medicare & Medicaid Services (CMS)
End-Stage Renal Disease Quality Incentive Program (ESRD QIP)
Calendar Year (CY) 2022 Measure Technical Specifications



Denominator Statement.....	10
Exclusions	10
Facility Exclusions	10
Minimum Data Requirements	11
Data Source(s).....	11
Additional Information	11
Standardized Transfusion Ratio (STrR) (Reporting Measure)	12
Measure Description	12
Measure Type.....	12
Exclusions	12
Facility Exclusions	12
Patient Exclusions	12
Minimum Data Requirements	12
Data Source(s).....	13
Additional Information	13
Standardized Hospitalization Ratio (SHR) (Clinical Measure)	14
Measure Description	14
Measure Type.....	14
Numerator Statement	14
Denominator Statement.....	14
Exclusions	14
Facility Exclusions	14
Patient Exclusions	14
Minimum Data Requirements	15
Data Source(s).....	15
Additional Information	15
Kt/V Dialysis Adequacy - Comprehensive (Clinical Measure).....	16
Measure Description	16
Measure Type.....	16
Numerator Statement	16
Denominator Statement.....	16
Exclusions	16
Facility Exclusion	16



Centers for Medicare & Medicaid Services (CMS)
End-Stage Renal Disease Quality Incentive Program (ESRD QIP)
Calendar Year (CY) 2022 Measure Technical Specifications



Denominator Exclusions	17
Minimum Data Requirements	17
Data Sources	17
Additional Information	17
Hemodialysis Vascular Access: Standardized Fistula Rate (SFR) (Clinical Measure)	19
Measure Description	19
Measure Type	19
Numerator Statement	19
Denominator Statement	19
Exclusions	19
Facility Exclusion	19
Patient Exclusions	19
Minimum Data Requirements	20
Additional Information	20
Hemodialysis Vascular Access: Long-term Catheter Rate (Clinical Measure)	21
Measure Description	21
Measure Type	21
Numerator Statement	21
Denominator Statement	21
Exclusions	21
Facility Exclusion	21
Patient Exclusions	21
Minimum Data Requirements	21
Data Source(s)	22
Additional Information	22
Hypercalcemia (Clinical Measure)	23
Measure Description	23
Measure Type	23
Numerator Statement	23
Denominator Statement	23
Exclusions	23
Facility Exclusion	23
Patient Exclusions	23



Centers for Medicare & Medicaid Services (CMS)
End-Stage Renal Disease Quality Incentive Program (ESRD QIP)
Calendar Year (CY) 2022 Measure Technical Specifications



Minimum Data Requirements	23
Data Source(s).....	24
Additional Information	24
Percentage of Prevalent Patients Waitlisted (PPPW) (Clinical Measure)	25
Measure Description	25
Measure Type.....	25
Numerator Statement	25
Denominator Statement.....	25
Exclusions	25
Facility Exclusions	25
Patient Exclusions	25
Minimum Data Requirements	25
Data Source(s).....	25
Additional Information	26
Ultrafiltration Rate (Reporting Measure).....	27
Measure Description	27
Measure Type.....	27
Numerator Statement	27
Denominator Statement.....	27
Exclusions	27
Facility Exclusions	27
Patient Exclusions	27
Data Source(s).....	28
Additional Information	28
Medication Reconciliation (MedRec) (Reporting Measure)	29
Measure Description	29
Measure Type.....	29
Numerator Statement	29
Denominator Statement.....	29
Exclusions	29
Facility Exclusions	29
Patient Exclusions	29
Additional Information	30



Centers for Medicare & Medicaid Services (CMS)
End-Stage Renal Disease Quality Incentive Program (ESRD QIP)
Calendar Year (CY) 2022 Measure Technical Specifications



Clinical Depression Screening and Follow-Up (Reporting Measure)	31
Measure Description	31
Measure Type.....	31
Numerator Statement	31
Denominator Statement.....	31
Exclusions	31
Facility Exclusions	31
Patient Exclusions	31
Data Source(s).....	31
Additional Information	31
NHSN Dialysis Event Reporting Measure.....	33
Measure Description	33
Measure Type.....	33
Exclusions	33
Facility Exclusions	33
Data Source(s).....	33
Additional Information	33



Rule of Record: CY 2022 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 (HD) at outpatient HD 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 one calendar day after a hospital admission. A positive blood culture is considered a new event and counted only if it occurred 21 days or more after a previous blood culture in the same patient.

Denominator Statement

Number of maintenance HD patients treated in the outpatient HD center on the first two working days of the month.

Exclusions

Facility Exclusions

1. Facilities that do not offer in-center HD 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 HD patients during the performance period.
4. Facilities with approved Extraordinary Circumstances Exception (ECE).

Patient Exclusions

1. Patients receiving only inpatient HD during the reporting month.
2. Patients receiving only home HD or peritoneal dialysis during the reporting month.
3. Patients not on ESRD treatment as defined by a completed 2728 form, an EQRS record, or a sufficient amount of dialysis reported on dialysis facility claims.

Minimum Data Requirements

1. 12 months of data reported to NHSN.



Centers for Medicare & Medicaid Services (CMS)
End-Stage Renal Disease Quality Incentive Program (ESRD QIP)
Calendar Year (CY) 2022 Measure Technical Specifications



Data Source(s)

1. NHSN (for Risk-Adjusted Standardized Infection Rates).
2. ESRD Quality Reporting System (EQRS¹), Enrollment Data Base (EDB), and other CMS ESRD administrative data.
3. Medicare claims and EQRS (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. Facilities are required to follow the NHSN Dialysis Event Protocol and submit data to NHSN by the quarterly deadlines specified by the CDC's NHSN and ESRD QIP website: <https://www.cdc.gov/nhsn/faqs/dialysis/faq-esrd-qip.html>. Once the quarterly reporting deadline has passed, a frozen data file is created for calculating final ESRD QIP scores. Although the NHSN Dialysis Event Protocol includes an expectation that users report any additional information retrospectively in order to ensure NHSN data are complete and accurate, only data reported prior to the ESRD QIP quarterly reporting deadline will be used to calculate ESRD QIP scores.
5. Additional details on the specifications for the NHSN BSI measure can be found at the following website: <http://www.cdc.gov/nhsn/pdfs/dialysis/understanding-the-de-bsi-sir.pdf>.

¹ All references to CROWNWeb and REMIS have been replaced with EQRS.



Rule of Record: CY 2022 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 (HD) 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 EQRS¹ that it treated fewer than 30 eligible in-center HD 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 HD adult patients during the “eligibility period,” but are unable to obtain at least 30 completed surveys during the performance period.

¹ All references to CROWNWeb and REMIS have been replaced with EQRS.



Centers for Medicare & Medicaid Services (CMS)
End-Stage Renal Disease Quality Incentive Program (ESRD QIP)
Calendar Year (CY) 2022 Measure Technical Specifications



3. Facilities with a CCN certification date on or after October 1 of the year prior to the performance year.
4. Facilities not offering In-Center HD 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 HD 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. EQRS 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 EQRS 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 excluded from the measure.
7. Additional specifications may be found at <https://ichcahps.org>.



Centers for Medicare & Medicaid Services (CMS)
End-Stage Renal Disease Quality Incentive Program (ESRD QIP)
Calendar Year (CY) 2022 Measure Technical Specifications



Rule of Record: CY 2022 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.

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.



Centers for Medicare & Medicaid Services (CMS)
End-Stage Renal Disease Quality Incentive Program (ESRD QIP)
Calendar Year (CY) 2022 Measure Technical Specifications



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. EQRS¹, 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>.

¹ All references to CROWNWeb and REMIS have been replaced with EQRS.



Rule of Record: CY 2022 ESRD PPS Final Rule

Standardized Transfusion Ratio (STrR) (Reporting Measure)

Domain – *Clinical Care*

Measure Description

Dialysis facility reporting of data on Medicare claims and in EQRS¹ 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 a patient is enrolled in Medicare Advantage according to Medicare Enrollment Database
5. Time during which patient has a functioning kidney transplant (exclusion begins 3 days prior to the date of transplant).
6. Patients who have not been treated by any facility for a year or longer.
7. Patients with a Medicare claim (Part A inpatient, home health, hospice, and SNF claims; Part B outpatient and physician supplier) for one of the following conditions in one-year look back period: 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, and sickle cell anemia.
8. Patient-months that are not within two months of a month in which a patient has \$1200 of Medicare-paid dialysis claims or at least one Medicare inpatient claim.
9. 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.

¹ All references to CROWNWeb and REMIS have been replaced with EQRS.



Centers for Medicare & Medicaid Services (CMS)
End-Stage Renal Disease Quality Incentive Program (ESRD QIP)
Calendar Year (CY) 2022 Measure Technical Specifications



Data Source(s)

1. Medicare Claims.
2. EQRS, 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 \$1200 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 EQRS 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.



Centers for Medicare & Medicaid Services (CMS)
End-Stage Renal Disease Quality Incentive Program (ESRD QIP)
Calendar Year (CY) 2022 Measure Technical Specifications



Rule of Record: CY 2022 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 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 89 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 do not fulfill at least one of these criteria:
 - a. Month is within or in the two months following a month in which the patient has \$1,200 of Medicare-paid dialysis claims
 - b. There is at least one Medicare inpatient (hospital and skilled nursing facilities) claim submitted during the month
 - c. Patient is enrolled in Medicare Advantage during the month according to the Medicare Enrollment Database.



Centers for Medicare & Medicaid Services (CMS)
End-Stage Renal Disease Quality Incentive Program (ESRD QIP)
Calendar Year (CY) 2022 Measure Technical Specifications



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.
2. EQRS¹, 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 EQRS 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>.

¹ All references to CROWNWeb and REMIS have been replaced with EQRS.



Rule of Record: CY 2022 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 [HD] 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 HD: $\text{spKt/V} \geq 1.2$ (calculated from the last measurement of the month using UKM or Daugirdas II).
2. Pediatric In-center HD: $\text{spKt/V} \geq 1.2$ (calculated from the last measurement of the month using UKM or Daugirdas II).
3. Adult Peritoneal dialysis: $\text{Kt/V} \geq 1.7$ (dialytic + residual, measured within the past 4 months).
4. Pediatric Peritoneal dialysis $\text{Kt/V} \geq 1.8$ (dialytic + residual, measured within the past 6 months).

Denominator Statement

1. All adult HD patient-months where a patient received dialysis greater than two and less than four times a week (adults, ≥ 18 years), and all pediatric in-center HD patient-months where a patient received dialysis greater than two and less than four times a week (pediatric, <18 years), and the claim or EQRS¹ did not indicate frequent dialysis.
2. All patient-months (both HD and peritoneal dialysis) 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.

¹ All references to CROWNWeb and REMIS have been replaced with EQRS.



Centers for Medicare & Medicaid Services (CMS)
End-Stage Renal Disease Quality Incentive Program (ESRD QIP)
Calendar Year (CY) 2022 Measure Technical Specifications



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 patient-months, those not receiving dialysis greater than two and less than four times a week.
3. Pediatric home HD 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 EQRS 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. EQRS.
2. Enrollment Data Base (EDB) and other CMS ESRD administrative data.
3. Medicare Claims.

Additional Information

1. HD 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 EQRS by the assigned facility. If sessions per week is missing from EQRS by the assigned facility, then sessions per week reported in EQRS by any facility is selected. If sessions per week is missing in EQRS, 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



Centers for Medicare & Medicaid Services (CMS)
End-Stage Renal Disease Quality Incentive Program (ESRD QIP)
Calendar Year (CY) 2022 Measure Technical Specifications



submitted during the month indicates frequent or infrequent dialysis (if dialysis sessions per week is not reported in EQRS).

3. For HD patients, the reported spKt/V should not include residual renal function.
4. Patient-months with missing Kt/V values in both EQRS and claims, or with missing values in EQRS 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 EQRS 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 HD patients, Kt/V must be reported during the reporting month; if a Kt/V value is not found in EQRS 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 EQRS 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.
8. Lab values reported by new facilities during the month in which the CCN becomes effective and the following three months will not be used in the calculations.



Rule of Record: CY 2022 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 (HD) patient-months using an autogenous arteriovenous fistula (AVF) as the sole means of vascular access.

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 HD 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 HD 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 HD.
3. Patient-months with in-center or home HD 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.



Centers for Medicare & Medicaid Services (CMS)
End-Stage Renal Disease Quality Incentive Program (ESRD QIP)
Calendar Year (CY) 2022 Measure Technical Specifications



Minimum Data Requirements

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

Data Source(s)

1. EQRS¹.
2. Medicare Claims.
3. Enrollment Data Base (EDB) and other CMS ESRD administrative data.

Additional Information

1. Vascular access type is determined solely using EQRS data.
2. If multiple vascular access types for a patient were reported during a reporting month, the last vascular access type reported by the assigned facility is used in the calculation. If the vascular access type is missing from the assigned facility, we will substitute with the last vascular access type reported by other facilities.
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).

¹ All references to CROWNWeb and REMIS have been replaced with EQRS.



Rule of Record: CY 2022 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 (HD) 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 HD using a catheter continuously for three months or longer as of the last HD 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 HD 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 HD.
3. Patient-months with in-center or home HD 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.



Centers for Medicare & Medicaid Services (CMS)
End-Stage Renal Disease Quality Incentive Program (ESRD QIP)
Calendar Year (CY) 2022 Measure Technical Specifications



Data Source(s)

1. EQRS¹
2. Medicare Claims
3. Enrollment Data Base (EDB) and other CMS ESRD administrative data

Additional Information

1. Vascular access type is determined solely using EQRS data.
2. If multiple vascular access types for a patient were reported during a reporting month, the last vascular access type reported by the assigned facility is used in the calculation. If the vascular access type is missing from the assigned facility, we will substitute with the last vascular access type reported by other facilities.
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 HD 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.

¹ All references to CROWNWeb and REMIS have been replaced with EQRS.



Centers for Medicare & Medicaid Services (CMS)
End-Stage Renal Disease Quality Incentive Program (ESRD QIP)
Calendar Year (CY) 2022 Measure Technical Specifications



Rule of Record: CY 2022 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 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 EQRS¹.
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 an EQRS 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 EQRS 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.

¹ All references to CROWNWeb and REMIS have been replaced with EQRS.



Centers for Medicare & Medicaid Services (CMS)
End-Stage Renal Disease Quality Incentive Program (ESRD QIP)
Calendar Year (CY) 2022 Measure Technical Specifications



2. Facilities with at least 3 months of data reported in EQRS.

Data Source(s)

1. EQRS
2. Medicare Claims
3. Enrollment Data Base (EDB)
4. Other CMS ESRD administrative data.

Additional Information

1. This measure includes in-center HD, home HD, 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.



Centers for Medicare & Medicaid Services (CMS)
End-Stage Renal Disease Quality Incentive Program (ESRD QIP)
Calendar Year (CY) 2022 Measure Technical Specifications



Rule of Record: CY 2022 ESRD PPS Final 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 16u and 21 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. EQRS¹, Organ Procurement and Transplant Network (OPTN), Nursing Home Minimum Dataset, CMS Medical Evidence Forms, and Medicare hospice claims data.

¹ All references to CROWNWeb and REMIS have been replaced with EQRS.



Centers for Medicare & Medicaid Services (CMS)
End-Stage Renal Disease Quality Incentive Program (ESRD QIP)
Calendar Year (CY) 2022 Measure Technical Specifications



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).



Centers for Medicare & Medicaid Services (CMS)
End-Stage Renal Disease Quality Incentive Program (ESRD QIP)
Calendar Year (CY) 2022 Measure Technical Specifications



Rule of Record: CY 2022 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 all required data elements for ultrafiltration rate (UFR) in EQRS¹ for all hemodialysis (HD) 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 EQRS for all HD 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 EQRS for all HD 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 HD 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 HD during the reporting month.

¹ All references to CROWNWeb and REMIS have been replaced with EQRS.



Centers for Medicare & Medicaid Services (CMS)
 End-Stage Renal Disease Quality Incentive Program (ESRD QIP)
 Calendar Year (CY) 2022 Measure Technical Specifications



4. Patients on ESRD Treatment (as defined by a completed 2728 form or an EQRS 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. 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, 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. 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:

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

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



Centers for Medicare & Medicaid Services (CMS)
End-Stage Renal Disease Quality Incentive Program (ESRD QIP)
Calendar Year (CY) 2022 Measure Technical Specifications



Rule of Record: CY 2022 ESRD PPS Final 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 EQRS¹:

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

Patient Exclusions

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

¹ All references to CROWNWeb and REMIS have been replaced with EQRS.



Centers for Medicare & Medicaid Services (CMS)
End-Stage Renal Disease Quality Incentive Program (ESRD QIP)
Calendar Year (CY) 2022 Measure Technical Specifications



3. Patients not on ESRD treatment as defined by a completed 2728 form, an EQRS record, or a sufficient amount of dialysis reported on dialysis facility claims.

Data Source(s)

1. EQRS, 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. The measure will be scored using the following equation:

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

4. ECE months are excluded from the scoring calculation.



Rule of Record: CY 2022 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 EQRS¹ 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 EQRS. (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, an EQRS record, or a sufficient amount of dialysis reported on dialysis facility claims.

Data Source(s)

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

Additional Information

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

¹ All references to CROWNWeb and REMIS have been replaced with EQRS.



Centers for Medicare & Medicaid Services (CMS)
 End-Stage Renal Disease Quality Incentive Program (ESRD QIP)
 Calendar Year (CY) 2022 Measure Technical Specifications



- 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:

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



Centers for Medicare & Medicaid Services (CMS)
End-Stage Renal Disease Quality Incentive Program (ESRD QIP)
Calendar Year (CY) 2022 Measure Technical Specifications



Rule of Record: CY 2022 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 Exclusions

1. Facilities that do not offer in-center hemodialysis (HD) 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 HD 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. EQRS¹, 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. 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.
3. 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.
4. ECE months are not eligible, regardless of whether or not the facility reports dialysis events to NHSN.
5. Facilities are required to follow the NHSN Dialysis Event Protocol and submit data to NHSN by the quarterly deadlines specified by the CDC's NHSN and ESRD QIP website: <https://www.cdc.gov/nhsn/faqs/dialysis/faq-esrd-qip.html>. Once the

¹ All references to CROWNWeb and REMIS have been replaced with EQRS.



Centers for Medicare & Medicaid Services (CMS)
End-Stage Renal Disease Quality Incentive Program (ESRD QIP)
Calendar Year (CY) 2022 Measure Technical Specifications



quarterly reporting deadline has passed, a frozen data file is created for calculating final ESRD QIP scores. Although the NHSN Dialysis Event Protocol includes an expectation that users report any additional information retrospectively in order to ensure NHSN data are complete and accurate, only data reported prior to the ESRD QIP quarterly reporting deadline will be used to calculate ESRD QIP scores.

6. 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>