Last Revised: October 29, 2015

Rule of Record: Calendar Year (CY) 2016 ESRD Prospective Payment System (PPS) Final Rule (2015)

Vascular Access Type (VAT) Measure Topic –
Arteriovenous Fistula (AVF) Clinical Measure

Higher rate desired

SPECIFICATION	DETAIL
Description	Percentage of patient-months on hemodialysis during the last hemodialysis treatment of the month using an autogenous AV fistula with two needles. NQF#0257
Numerator	Patient-months in the denominator where an autogenous AV fistula with two needles was the means of access.
Denominator	Number of Medicare patient-months at the facility during the measurement period.
Denominator Exclusions	1. Patients younger than 18 2. Patients not on Hemodialysis 3. Claims with both a fistula and graft reported 4. Claims with fistula, graft, and catheter reported 5. Claims with missing access type 6. 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
Minimum Claims	4 months
Data Source(s)	1. Medicare Claims 2. REMIS, CROWNWeb, and other CMS ESRD administrative data (form 2728 to obtain the diagnosis date of ESRD and date of birth)
Additional Information	1. If claim indicates fistula and catheter, then only the fistula is counted. 2. Last claim of the month used for calculation.

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Rule of Record: CY 2016 ESRD PPS Final Rule (2015)

Vascular Access Type (VAT) Measure Topic –
Catheter ≥ 90 Days Clinical Measure

Lower rate desired

SPECIFICATION	DETAIL
Description	Percentage of patient-months for patients on hemodialysis during the last hemodialysis treatment of month with a catheter continuously for 90 days or longer prior to the last hemodialysis session. NQF#0256
Numerator	Patient-months in the denominator for patients continuously using a catheter for hemodialysis access for 90 days or longer prior to the last hemodialysis treatment during the month.
Denominator	Number of Medicare patient-months at the facility during the measurement period.
Denominator Exclusions	1. Patients younger than 18 years and 90 days 2. Patients not on Hemodialysis 3. Claims with both a fistula and graft reported 4. Claims with fistula, graft, and catheter reported 5. Claims with missing access type 6. 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
Minimum Claims	4 consecutive months
Data Source(s)	1. Medicare Claims 2. REMIS, CROWNWeb, and other CMS ESRD administrative data (form 2728 to obtain the diagnosis date of ESRD and date of birth)
Additional Information	1. If claim indicates fistula and catheter, then only the fistula is counted. 2. If a claim indicates catheter and graft, then only the graft is counted. 3. Measure uses claims data from October, November, and December of the year prior to the performance or comparison period (e.g., October – December 2014 for performance period) to determine catheter history 4. Last claim of the month used for calculation.

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Rule of Record: CY 2016 ESRD PPS Final Rule (2015)

Kt/V Dialysis Adequacy Measure Topic – Adult Hemodialysis Clinical Measure

Higher rate desired

SPECIFICATION	DETAIL
Description	Percentage of hemodialysis patient-months with spKt/V greater than or equal to 1.2. NQF#0249
Numerator	Patient-months in the denominator for patients whose delivered dose of hemodialysis (spKt/V) was greater than or equal to 1.2 during the measurement period.
Denominator	Number of Medicare patient-months at the facility during the measurement period.
Denominator Exclusions	1. Patients younger than 18 years 2. Patients not on Hemodialysis 3. Patients on ESRD treatment for fewer than 90 days 4. Patients dialyzing 4 times or more per week on average 5. Patients dialyzing 2 times or less per week on average 6. Patients having a spKt/V value less than 0.5 7. Patients having a spKt/V value greater than 2.5 8. Patients treated at the facility fewer than seven times during the claim month 9. 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
Minimum Claims	1
Data Source(s)	1. Medicare Claims 2. REMIS, CROWNWeb, and other CMS ESRD administrative data (form 2728 to obtain the diagnosis date of ESRD and date of birth)

SPECIFICATION	DETAIL
Additional Information	1. Must be calculated using UKM or Daugirdas II method. 2. Dialysis sessions per week is calculated 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. Frequent dialysis (4 or more sessions per week) is determined by (i) calculated sessions per week is 4 or more for claims greater than 7 days, and total sessions is 4 or more for claims with 7 days or fewer; (ii) Kt/V is 8.88 on claim; (iii) Other administrative data (e.g. CROWNWeb) indicates 4 or more sessions per week. 3. The reported spKt/V should not include residual renal function. 4. Patients with missing spKt/V values or spKt/V=9.99 (not reported) are included in the denominator. For in-center Hemodialysis patients, Kt/V must be reported during claim month. For Home HD patients, Kt/V must be reported within 4 months of claim through date.

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Rule of Record: CY 2016 ESRD PPS Final Rule (2015)

Kt/V Dialysis Adequacy Measure Topic – Adult Peritoneal Dialysis Clinical Measure

Higher rate desired

SPECIFICATION	DETAIL
Description	Percentage of peritoneal dialysis patient-months with Kt/V greater than or equal to 1.7 Kt/V (dialytic + residual) during the four month study period. NQF#0318
Numerator	Patient-months in the denominator for patients whose delivered dose of peritoneal dialysis was equal to or greater than 1.7 Kt/V (dialytic + residual) during the four month study period.
Denominator	Number of Medicare patient-months at the facility during the measurement period.
Denominator Exclusions	1. Patients younger than 18 years 2. Patients not on peritoneal dialysis 3. Patients on ESRD treatment for fewer than 90 days 4. Patients having a Kt/V value less than 0.5 5. Patients having a Kt/V value greater than 5.0 6. 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
Minimum Claims	1
Data Source(s)	1. Medicare Claims 2. REMIS, CROWNWeb, and other CMS ESRD administrative data (form 2728 to obtain the diagnosis date of ESRD and date of birth)
Additional Information	1. If no Kt/V value is reported for a given patient in a claim month, the most recent Kt/V value in the prior 4 months is applied to the calculation for that month. 2. Patients with missing Kt/V values or Kt/V=9.99 (not reported) are included in the denominator.

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Rule of Record: CY 2016 ESRD PPS Final Rule (2015)

Kt/V Dialysis Adequacy Measure Topic – Pediatric Hemodialysis Clinical Measure

Higher rate desired

SPECIFICATION	DETAIL
Description	Percentage of pediatric in-center hemodialysis patient-months with spKt/V greater than or equal to 1.2. NQF#1423
Numerator	Patient-months in the denominator for patients whose delivered dose of hemodialysis (spKt/V) was greater than or equal to 1.2 during the measurement period.
Denominator	Number of Medicare patient-months at the facility during the measurement period.
Denominator Exclusions	1. Patients 18 years or older 2. Patients not on in-center hemodialysis 3. Patients on ESRD treatment for fewer than 90 days 4. Patients having a spKt/V value less than 0.5 5. Patients having a spKt/V value greater than 2.5 6. Patients dialyzing 5 times or more per week on average 7. Patients dialyzing 2 times or less per week on average 8. Patients treated at the facility fewer than seven times during the claim month 9. 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
Minimum Claims	1
Data Source(s)	1. Medicare Claims 2. REMIS, CROWNWeb, and other CMS ESRD administrative data (form 2728 to obtain the diagnosis date of ESRD and date of birth)

SPECIFICATION	DETAIL
Additional Information	1. Must be calculated using UKM or Daugirdas II method. 2. Dialysis sessions per week is calculated 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. Frequent dialysis (5 or more sessions per week) is determined by (i) calculated sessions per week is 5 or more for claims greater than 7 days, and total sessions is 5 or more for claims with 7 days or fewer; (ii) Kt/V is 8.88 on claim; (iii) Other administrative data (e.g. CROWNWeb) indicates 5 or more sessions per week. The reported spKt/V should not include residual renal function. 3. Patients with missing spKt/V values or spKt/V=9.99 (not reported) are included in the denominator. 4. Kt/V must be reported during claim month.

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Rule of Record: CY 2016 ESRD PPS Final Rule (2015)

Hypercalcemia Clinical Measure

Lower rate desired

SPECIFICATION	DETAIL
Description	Percentage of patient-months with 3-month rolling average of total uncorrected serum calcium greater than 10.2 mg/dL. NQF #1454
Numerator	Number of patient-months in the denominator with 3-month rolling average of total uncorrected serum calcium greater than 10.2 mg/dL.
Denominator	Number of patient-months at the facility during the measurement period.
Denominator Exclusions	1. Patients younger than 18 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 4. Patients without at least one uncorrected serum calcium value at the facility during the 3 month study period 5. 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 6. Patients who have died or been discharged prior to the end of the reporting month.
Minimum Data Reported to CROWNWeb	3 months
Data Source(s)	1. REMIS, CROWNWeb, and other CMS ESRD administrative data (to obtain the diagnosis date of ESRD, time at facility, and date of birth)

SPECIFICATION	DETAIL
Additional Information	1. November and December of the previous year will be used in calculating the three-month rolling average for January and February of the baseline and performance period. 2. Includes all patients (i.e., not just those patients on Medicare). 3. The last value reported in the month is used for calculation. 4. Any value reported during the two months prior to the reporting month will be used to calculate the 3-month rolling average. 5. No interpolation between uncorrected serum calcium values for peritoneal dialysis patients. 6. The uncorrected serum calcium value reported by the facility is used. The facility may obtain this value from an external source. 7. "Uncorrected" indicates albumin is not considered in the calculation.

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Rule of Record: CY 2016 ESRD PPS Final Rule (2015)

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

Lower rate desired

SPECIFICATION	DETAIL
Description	Number of hemodialysis outpatients with positive blood cultures per 100 hemodialysis patient-months. Based on NQF #1460
Numerator	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	Number of maintenance in-center hemodialysis patients treated in the outpatient hemodialysis unit on the first 2 working days of the month.
Exclusions	1. Facilities that do not offer in-center hemodialysis 2. Facilities with a CCN open date after January 1, 2015 3. Facilities that treat fewer than 11 in-center hemodialysis patients during the performance period 4. Facilities with approved Extraordinary Circumstances Exception
Minimum Data Reported to NHSN	12 months
Data Source(s)	1. NHSN (Standardized Infection Rates) 2. REMIS, CROWNWeb, and other CMS ESRD administrative data (form 2744 to obtain facility type and certification date) 3. Medicare claims and CROWNWeb (to determine patient-minimum exclusion)

SPECIFICATION	DETAIL
Additional Information	1. Facilities are required to meet enrollment and training requirements, as specified 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. Patients receiving inpatient hemodialysis are excluded from the measure. 4. Patients receiving only home hemodialysis or peritoneal dialysis are excluded from the measure. 5. Facilities that do not submit 12 months of accurately reported data receive zero points for the measure. 6. 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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Rule of Record: CY 2016 ESRD PPS Final Rule (2015)

Standardized Readmission Ratio (SRR) Clinical Measure

Lower rate desired

SPECIFICATION	DETAIL
Description	Ratio of the number of observed unplanned 30-day hospital readmissions to the number of expected unplanned 30-day hospital readmissions.
Numerator	Number of unplanned 30-day hospital readmissions
Denominator	The expected number of unplanned 30-day hospital readmissions 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 hospital involved.
Exclusions	The measure excludes readmissions in the numerator that: 1. Occurred more than 30 days after the index discharge 2. Are considered "planned" 3. Occur within the first three days following discharge from the acute care hospital The measure excludes index hospital discharges from the denominator that: 1. End in death 2. Result in a patient dying within 30 days with no readmission 3. Are against medical advice 4. Include a primary diagnosis for certain types of cancer, mental health conditions or rehabilitation 5. Occur after a patient's 12th admission in the calendar year 6. Are from a PPS-exempt cancer hospital 7. Result in a transfer to another acute care or critical access hospital on the same day, or the day after the discharge date 8. Result in readmissions occurring within the first three days following discharge from the acute care or critical access hospital
Minimum Data Requirements	Facilities with fewer than 11 index hospital discharges in the calendar year are not eligible for the measure.
Data Source(s)	1. Medicare Claims 2. REMIS, CROWNWeb, and other CMS ESRD administrative data

SPECIFICATION	DETAIL
Additional Information	1. A hospitalization is counted as an event in the numerator if it (a) occurred within 4 to 30 days of an index hospital discharge; and (b) is not considered a "planned" readmission. 2. Additional information about the measure can be found in the SRR Measure Methodology Report posted at [http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/ESRDQIP/061_TechnicalSpecifications.html].

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Rule of Record: CY 2016 ESRD PPS Final Rule (2015)

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

SPECIFICATION	DETAIL
Description	Facility administers the In-Center Hemodialysis CAHPS survey (ICH CAHPS) on a twice-yearly basis, using a third-party CMS-approved vendor, in accordance with specifications available at https://ichcahps.org and submits (via CMS-approved vendor) survey results to CMS.
Exclusions	1. Facilities treating fewer than 30 eligible in-center hemodialysis adult patients during the "eligibility period," which is defined as the year prior to the performance period 2. Facilities that treat 30 or more eligible in-center hemodialysis adult patients during the "eligibility period," but are unable to obtain at least 30 completed surveys during the performance period 3. Facilities with a CCN open date after January 1, 2015 4. Facilities not offering In-Center Hemodialysis 5. The following patients are excluded in the count of 30 eligible patients: a) Patients less than 18 years on the last day of the sampling window for the semiannual survey b) Patients receiving hemodialysis from their current facility for less than 90 days c) Patients receiving hospice care d) Patients currently residing in an institution, such as a residential nursing home or other long-term care facility, or a jail or prison
Data Source(s)	1. ICH CAHPS 2. REMIS, CROWNWeb, and other CMS ESRD administrative data (form 2744 to obtain certification date and facility type)

SPECIFICATION	DETAIL
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. Additional specifications may be found at https://ichcahps.org.

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Rule of Record: CY 2016 ESRD PPS Final Rule (2015)

Mineral Metabolism Reporting Measure

SPECIFICATION	DETAIL
Description	Number of months for which facility reports serum phosphorus values for each Medicare patient.
Exclusions	1. Facilities with a CCN open date on or after July 1, 2015 2. In-center hemodialysis patients treated at facility fewer than 7 times during claim month 3. Home dialysis patients for whom a facility does not submit a claim during the claim month 4. Facilities treating fewer than 11 patients during the performance period who are (i) in-center Medicare patients who have been treated at least 7 times by the facility during the reporting month; or (ii) home dialysis Medicare patients for whom the facility submits a claim during the reporting month. 5. 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
Data Source(s)	1. Medicare Claims 2. REMIS, CROWNWeb, and other CMS ESRD administrative data (form 2744 to obtain certification date, form 2728 to obtain the diagnosis date of ESRD)
Additional Information	1. The serum phosphorus values reported by the facility are used. The facility may obtain these values from an external source. 2. The measure will be scored according to the following formula: $\left(\frac{\text{Number of Months Facility Successfully Reports}}{\text{Number of Months in the Performance Period Facility has CCN}} \times 12\right) - 2$

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Anemia Management Reporting Measure

SPECIFICATION	DETAIL
Description	Number of months for which facility reports ESA dosage (as applicable) and hemoglobin/hematocrit for each Medicare patient at least once per month.
Exclusions	1. Facilities with a CCN open date on or after July 1, 2015 2. In-center hemodialysis patients treated at a facility fewer than 7 times during claim month 3. Home dialysis patients for whom a facility does not submit a claim during the claim month 4. Facilities treating fewer than 11 patients during the performance period who are (i) in-center Medicare patients who have been treated at least 7 times by the facility during the reporting month; or (ii) home dialysis Medicare patients for whom the facility submits a claim during the reporting month 5. 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
Data Source(s)	1. Medicare Claims 2. REMIS, CROWNWeb, and other CMS ESRD administrative data (form 2744 to obtain certification date, form 2728 to obtain the diagnosis date of ESRD)
Additional Information	1. Hemoglobin value of 99.99 is not considered valid for purposes of measure. Note: we will not penalize facilities for using the default 99.99 value for a patient in his/her first month of treatment at that facility. 2. The hemoglobin/hematocrit reported by the facility is used. The facility may obtain this value from an external source. 3. No ESA dosage need be recorded if patient is not treated with ESAs. 4. ESA dosage must be reported via HCPCS codes and corresponding units, as applicable. 5. The measure will be scored according to the following formula: $\left(\frac{\text{Number of Months Facility Successfully Reports}}{\text{Number of Months in the Performance Period Facility has CCN}} \times 12\right) - 2$