Clinical Measures

Hemoglobin Greater than 12 g/dL

Hemoglobin Greater than 12 g/dL Lower rate desired	
Measure Description	Percentage of Medicare patients with a mean hemoglobin value greater than 12 g/dL.
Numerator	Number of Medicare patients at the facility during the measurement period included in the denominator with a mean hemoglobin greater than 12 g/dL.
Denominator	Number of Medicare patients at the facility during the measurement period. Exclusions: 1. Patients younger than 18 2. Patients on dialysis for less than 90 days 3. Patients who have not been treated with erythropoiesis stimulating agents (ESAs) during the claim month 4. Hemoglobin values less than 5 5. Hemoglobin values greater than 20 6. Patients not on chronic dialysis as defined by a completed 2728 form, a SIMS/CROWNWeb record, or a sufficient amount of dialysis reported on dialysis facility claims 7. Patients with missing data
Minimum Claims	4 months
Data Source(s)	1. Medicare claims 2. SIMS/CROWNWeb data (form 2728 to obtain the diagnosis date of ESRD and date of birth)
Additional Information	1. Last valid claim of the month is used for calculation. 2. When hematocrit is reported on a claim, it is changed to hemoglobin by dividing by 3 and rounding to 1 decimal place. 3. All hemoglobin levels should be rounded to 1 decimal place. 4. No interpolation between claims for peritoneal dialysis patients. 5. The value reported by the facility is used, but the facility may obtain this value from an external source.

Clinical Measures

Patient Informed Consent

Anemia of Chronic Kidney Disease: Patient Informed Consent for Anemia Treatment Higher rate desired	
Measure Description	Percentage of the facility's patients who were provided information regarding risks, potential benefits, and alternative treatment options for anemia and consented to the anemia treatment provided by the facility. Based on MAP #2774
Numerator	Number of patients in the denominator with attestation by the treating dialysis facility that they have provided information regarding risks, potential benefits, and alternative treatment options for anemia to the patient and informed consent was obtained from the patient, or a legally authorized representative, for the anemia treatment strategy used.
Denominator	All patients treated in the dialysis facility in the calendar year. Exclusions: 1. Patients treated at the facility for fewer than 30 days
Data Source(s)	1. SIMS/CROWNWeb

Clinical Measures

Kt/V Dialysis Adequacy Measure Topic: Hemodialysis

Hemodialysis Adequacy Clinical Performance Measure III: Hemodialysis Adequacy--HD Adequacy-- Minimum Delivered Hemodialysis Dose Higher rate desired	
Measure Description	Percent 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 patients-months at the facility during the measurement period. Exclusions: 1. Patients younger than 18 years 2. Peritoneal patients 3. Patients on dialysis for less than 90 days 4. Patients dialyzing 4 times or more per week 5. Patients dialyzing 2 times or fewer per week 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 less than twice during the claim month 9. Patients not on chronic dialysis as defined by a completed 2728 form, a SIMS/CROWNWeb record, or a sufficient amount of dialysis reported on dialysis facility claims
Minimum Claims	1
Data Source(s)	1. Medicare Claims 2. SIMS/CROWNWeb data (form 2728 to obtain the diagnosis date of ESRD and date of birth)
Additional Information	1. Calculated from the last measurement of the month. 2. Must be calculated using UKM or Daugirdas II method. 3. Dialyzing times per week is calculated by (i) number of dialysis sessions in the claim divided by the time period covered by the claim, with no rounding for number of sessions per week; and (ii) SIMS data indicating frequent hemodialysis. 4. The reported spKt/V should not include residual renal function. 5. Patients with missing spKt/V values or spKt/V=9.99 (not reported) are included in the denominator.

Clinical Measures

Hypercalcemia

Proportion of Patients with Hypercalcemia Lower rate desired	
Measure Description	Proportion 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. Exclusions: 1. Patients younger than 18 2. Patients present at facility for less than 30 days 3. Patients on dialysis for less than 90 days 4. Patients without an uncorrected serum calcium value at that facility in the reporting month 5. Patients not on chronic dialysis as defined by a completed 2728 form or a SIMS/CROWNWeb record
Minimum Claims	3 months
Data Source(s)	1. SIMS/CROWNWeb data (form 2728 to obtain the diagnosis date of ESRD, time at facility, and date of birth)
Additional Information	1. First measure calculation begins in March of the measurement year for PY 2016. For PYs going forward, November and December of the previous year will be used in calculating the three-month rolling average for January and February of the 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. A patient need only have an uncorrected serum calcium value for the reporting month to be included in the measure. 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.

Clinical Measures

Infection Monitoring: NHSN

NHSN Bloodstream Infection in Hemodialysis Outpatients Lower rate desired	
Measure 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, 2014
Data Source(s)	1. NHSN (for Risk-Adjusted Standardized Infection Rates) 2. SIMS/CROWNWeb data (form 2744 to obtain facility type and certification date)
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 previous positive blood culture in the same patient. 3. Patients receiving inpatient hemodialysis are excluded from the measure 4. Patients receiving home hemodialysis are excluded from the measure 5. Facilities who 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/.

Clinical Measures

Kt/V Dialysis Adequacy Measure Topic: Peritoneal Dialysis

Peritoneal Dialysis Adequacy Clinical Performance Measure III - Delivered Dose of Peritoneal Dialysis Above Minimum Higher rate desired	
Measure Description	Percent 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 measurement period.
Denominator	Number of Medicare patient-months at the facility during the measurement period. Exclusions: 1. Patients younger than 18 years 2. Hemodialysis patients 3. Patients on dialysis for less 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 chronic dialysis as defined by a completed 2728 form, a SIMS/CROWNWeb record, or a sufficient amount of dialysis reported on dialysis facility claims
Minimum Claims	1
Data Source(s)	1. Medicare Claims 2. SIMS/CROWNWeb 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.

Clinical Measures

Kt/V Dialysis Adequacy Measure Topic: Pediatric Dialysis

Minimum spKt/V for Pediatric Hemodialysis Patients Higher rate desired	
Measure Description	Percent 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. Exclusions: 1. Patients 18 years or older 2. Peritoneal patients 3. Home hemodialysis patients 4. Patients on dialysis for less than 90 days 5. Patients having a spKt/V value less than 0.5 6. Patients having a spKt/V value greater than 2.5 7. Patients dialyzing 5 times or more per week 8. Patients dialyzing 2 times or fewer per week 9. Patients treated at the facility less than twice during the claim month 10. Patients not on chronic dialysis as defined by a completed 2728 form, a SIMS/CROWNWeb record, or a sufficient amount of dialysis reported on dialysis facility claims
Minimum Claims	1
Data Source(s)	1. Medicare Claims 2. SIMS/CROWNWeb data (form 2728 to obtain the diagnosis date of ESRD and date of birth)
Additional Information	1. Calculated from the last measurement of the month. 2. Must be calculated using UKM or Daugirdas II method. 3. Dialyzing times per week is calculated by (i) number of dialysis sessions in the claim divided by the time period covered by the claim, with no rounding for number of sessions per week; and (ii) SIMS data indicating frequent hemodialysis. 4. The reported spKt/V should not include residual renal function. 5. Patients with missing spKt/V values or spKt/V=9.99 (not reported) are included in the denominator.

Clinical Measures

Vascular Access Type: Fistula

Hemodialysis Vascular Access – Maximizing Placement of Arterial Venous Fistula Higher rate desired	
Measure 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. Exclusions: 1. Patients younger than 18 2. Peritoneal patients 3. Claims with both a fistula and graft reported 4. Patients not on chronic dialysis as defined by a completed 2728 form, a SIMS/CROWNWeb record, or a sufficient amount of dialysis reported on dialysis facility claims
Minimum Claims	4 months
Data Source(s)	1. Medicare Claims 2. SIMS/CROWNWeb data (form 2728 to obtain the diagnosis date of ESRD and date of birth)
Additional Information	1. If claim indicates fistula and catheter, only the fistula is counted. 2. Last claim of the month used for calculation.

Clinical Measures

Vascular Access Type: Catheter

Hemodialysis Vascular Access – Minimizing Use of Catheters as Chronic Dialysis Access Lower rate desired	
Measure 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. Exclusions: 1. Patients younger than 18 years and 3 months 2. Peritoneal patients 3. Claims with both a fistula and graft reported 4. Patients not on chronic dialysis as defined by a completed 2728 form, a SIMS/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. SIMS/CROWNWeb data (form 2728 to obtain the diagnosis date of ESRD and date of birth)
Additional Information	1. If claim indicates fistula and catheter, only the fistula is counted. 2. Measure uses data prior to performance or comparison period (e.g., October – December 2013 for performance period) to determine catheter history. 3. Last claim of the month used for calculation.

Reporting Measures

Anemia Management

Anemia Management Reporting	
Measure 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 CMS certification on or after July 1, 2014 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 1 patient 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 chronic dialysis as defined by a completed 2728 form or a SIMS/CROWNWeb record
Data Sources	1. Medicare Claims 2. SIMS/CROWNWeb (form 2744 to obtain certification date)
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. Facilities treating fewer than 1 patient 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, must attest to this fact in CROWNWeb to not be scored on this measure.

Reporting Measures

Comorbidity

Comorbidity Reporting Measure	
Measure Description	Annual reporting in CROWNWeb of patients who have one or more of any of the 24 qualifying comorbidities, or “none of the above”
Exclusions	1. Facilities with a CMS certification on or after July 1, 2014
Data Sources	1. SIMS/CROWNWeb (form 2744 to obtain certification date)
Additional Information	Facilities are required to report data for all patients being treated on December 31, 2014, according to admit and discharge dates entered into CROWNWeb.

Reporting Measures

Patient Experience of Care

ICH CAHPS Administration	
Measure Description	Facility administers, using a third party CMS approved vendor, the In-Center Hemodialysis CAHPS survey (ICH CAHPS) in accordance with specifications available at https://ichcahps.org and submits (via CMS-approved vendor) survey results to CMS.
Facility Exclusions	1. Facilities treating 30 or fewer in-center hemodialysis adult (18 and over) patients 2. Facilities with a CMS certification on or after January 1, 2014
Data Sources	1. ICH CAHPS 2. SIMS/CROWNWeb (form 2744 to obtain certification date and facility type)
Additional Information	1. Facilities are required to arrange by July 2014 for a CMS-approved vendor to conduct the ICH CAHPS survey. 2. Facilities are required to register on the https://ichcahps.org website in order to authorize the CMS approved vendor to administer the survey and submit data on their behalf. 3. Facilities are required to ensure that vendors submit survey data to CMS before January 28, 2015 for PY2016 4. Facilities treating fewer than 30 adult in-center hemodialysis patients must attest to this fact in CROWNWeb to be exempted on this measure. 5. Additional specifications may be found at https://ichcahps.org

Reporting Measures
Mineral Metabolism

Mineral Metabolism Reporting	
Measure Description	Number of months for which facility reports serum phosphorus values for each Medicare patient.
Exclusions	1. Facilities with a CMS certification on or after July 1, 2014 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 1 patient during the performance period who is (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.
Data Sources	1. Medicare Claims 2. SIMS/CROWNWeb (form 2744 to obtain certification date)
Additional Information	1. The serum phosphorus values reported by the facility are used. The facility may obtain these values from an external source. 2. Facilities treating fewer than 1 patient 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, must attest to this fact in CROWNWeb to not be scored on this measure.

Reporting Measures

Pediatric Iron Therapy

Use of Iron Therapy for Pediatric Patients	
Measure Description	Number of quarters for which facility reports for each pediatric patient: 1) admit/discharge dates; 2) Hgb levels; 3) Serum ferritin levels; 4) TSAT percentages; 5) lab measurement dates; 6) IV/oral iron (if prescribed); and 7) dates when oral or IV iron were prescribed (if applicable)
Exclusions	1. Patients aged 18 years and older 2. Facilities with a CMS certification on or after July 1, 2014
Data Sources	1. SIMS/CROWNWeb (form 2744 to obtain certification date; form 2728 to obtain date of birth)
Additional Information	This measure consists of seven reporting requirements: 1. Patient admit/discharge date 2. Hemoglobin levels 3. Serum ferritin levels 4. TSAT percentages 5. The dates that the lab measurements were taken for items (ii) – (iv) 6. Intravenous IV iron prescribed or oral iron prescribed (if applicable) 7. The date that the IV iron or oral iron was prescribed (if applicable)