



Last Revised: October 29, 2015

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

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

Lower rate desired

Safety subdomain

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	 Facilities that do not offer in-center hemodialysis Facilities with a CCN open date after January 1, 2017 Facilities that treat fewer than 11 in-center hemodialysis patients during the performance period Facilities with approved Extraordinary Circumstances Exception
Minimum Data	12 months
Reported to NHSN	
Data Source(s)	 NHSN (for Risk-Adjusted Standardized Infection Rates) REMIS, CROWNWeb, and other CMS ESRD administrative data (form 2744 to obtain facility type and certification date) Medicare claims and CROWNWeb (to determine patient-minimum exclusion)





SPECIFICATION	DETAIL
Additional	1. Facilities are required to meet enrollment and training requirements,
Information	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.
	 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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Patient Experience of Care: In-Center Hemodialysis Consumer Assessment of Healthcare Providers and Systems (ICH CAHPS) Survey Clinical Measure

Higher rate desired

Patient and Family Engagement/Care Coordination subdomain

SPECIFICATION	DETAIL
Description	Percentage of patient responses to multiple testing tools. Composite Score: The proportion of respondents answering each response option by item, summed across all items within a composite. Composites include: Nephrologists' Communication and Caring, Quality of Dialysis Center Care and Operations, and Providing Information to Patients Overall Rating: a summation of responses to the rating items grouped into 3 levels NQF #0258
Exclusions	 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 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 Facilities with a CCN open date after January 1, 2017 Facilities not offering In-Center Hemodialysis 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	1. ICH CAHPS
Source(s)	2. REMIS, CROWNWeb, and other CMS ESRD administrative data (form 2744 to obtain certification date and facility type)





SPECIFICATION	DETAIL
Additional	1. Facilities are required to register on the https://ichcahps.org website
Information	in order to authorize a CMS-approved vendor to administer the
	survey and submit data on their behalf.
	2. Facilities are required to administer the survey twice during the
	performance period, using a CMS-approved vendor.
	3. Facilities are required to ensure that vendors submit survey data to
	CMS by the date specified at https://ichcahps.org .
	4. Adult and pediatric facilities that treat fewer than 30 eligible patients
	during the eligibility period must attest to this in CROWNWeb in
	order to not receive a score on the measure; facilities that do not
	attest that they are ineligible will be considered eligible and will
	receive a score on the measure.
	5. Facilities that do not administer two surveys during the performance
	period will receive a score of 0 on the measure.
	6. Facilities that administer two surveys during the performance period
	but receive less than 30 completed surveys will not receive a score on
	the measure.
	7. Additional specifications may be found at https://ichcahps.org .





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Standardized Readmission Ratio (SRR) Clinical Measure

Lower rate desired

Patient and Family Engagement/Care Coordination subdomain

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 hospitals 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 a readmission occurring within the first three days following discharge from the acute care hospital
Minimum	Facilities with fewer than 11 index hospital discharges in the calendar year
Data Requirements	are not eligible for the measure.





SPECIFICATION	DETAIL
Data	Medicare Claims
Source(s)	2. REMIS, CROWNWeb, and other CMS ESRD administrative data
Additional Information	1. A hospitalization is counted as an event in the numerator if it (a) occurred within 4 to 30 days of an index hospital discharge; and (b) is not considered a "planned" readmission
	2. Additional information about the measure can be found in 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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Standardized Transfusion Ratio (STrR) Clinical Measure

Lower rate desired

Clinical Care subdomain

SPECIFICATION	DETAIL
Description	Risk adjusted facility level transfusion ratio (STrR) for all adult Medicare dialysis patients. STrR is a ratio of number of observed eligible red blood cell transfusion events occurring in patients dialyzing at a facility to the number of eligible transfusions that would be expected from a predictive model that accounts for patient characteristics within each facility.
Numerator	Number of observed red blood cell transfusion events (defined as transfer of one or more units of blood or blood products into recipient's blood stream) among patients dialyzing at the facility during the reporting period.
Denominator	Number of eligible red blood cell transfusion events (as defined in the numerator statement) that would be expected among patients at a facility during the reporting period, given the patient mix at the facility.
Exclusions	 Patients less than 18 years old Patients on ESRD treatment for fewer than 90 days Patients treated at the facility for fewer than 60 days Patients who receive a transplant Patients who have not been treated by any facility for a year or longer Patients with a Medicare claim for one of the following conditions in the past year: hemolytic and aplastic anemia, solid-organ cancer (breast, prostate, lung, digestive tract and others), lymphoma, carcinoma in situ, coagulation disorders, multiple myeloma, myelodysplastic syndrome and myelofibrosis, leukemia, head and neck cancer, other cancers (connective tissue, skin, and others), metastatic cancer, or sickle cell anemia
Minimum	Facilities with fewer than 10 patient-years at risk will not be eligible to
Data Requirements	receive a score on the measure.
Data Source(s)	 Medicare Claims REMIS, CROWNWeb, form 2728 to obtain the dialysis date of ESRD, and other CMS ESRD administrative data





SPECIFICATION	DETAIL
Additional Information	 Eligible transfusion events are those that do not have any claims pertaining to the comorbidities identified for exclusion, in the one year look back period prior to each observation window. When a patient transfers from one facility to another, the patient continues to be attributed to the original facility for 60 days, at which point the patient is attributed to the destination facility. A patient-month is considered eligible if it is within two months of a month in which a patient has \$900 of Medicare-paid dialysis claims or at least one Medicare-paid inpatient claim. Additional information about the measure can be found in the STrR Measure Methodology Report posted at http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-
	Instruments/ESRDQIP/061_TechnicalSpecifications.html.





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Kt/V Dialysis Adequacy Comprehensive Clinical Measure

Higher rate desired

Clinical Care subdomain

SPECIFICATION	DETAIL
Description	Percentage of all patient months for patients whose average delivered dose of dialysis (either hemodialysis or peritoneal dialysis) met the specified threshold during the reporting period.
Numerator	 Number of patient months in the denominator for patients whose delivered dose of dialysis met the specified ranges. The ranges are as follows: Hemodialysis (all ages): spKt/V ≥ 1.2 (calculated from the last measurement of the month) Peritoneal dialysis (pediatric <18 years): spKt/V ≥ 1.8 (dialytic + residual, measured within the past 6 months) Peritoneal dialysis (adult >= 18 years): spKt/V ≥ 1.7 (dialytic + residual, measured within the past 4 months)
Denominator	 All adult hemodialysis patients who received dialysis greater than two and less than four times a week (adults, ≥ 18 years), and all pediatric in –center hemodialysis patients who received dialysis greater than two and less than four times a week (pediatric, <18 years), and did not indicate frequent dialysis. All patients (both HD and PD) who are assigned to the facility for the entire month, and have had ESRD for 90 days or more
Denominator Exclusions	 For adult HD patients, those receiving dialysis less than or equal to 2 or greater than or equal to 4 times weekly For pediatric HD patients, those receiving dialysis less than or equal to 2 or greater than or equal to 4 times weekly or who are on home hemodialysis Patients on ESRD treatment for fewer than 90 days Patients who were not assigned to the facility for the entire month. 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





SPECIFICATION	DETAIL
Data	1. Medicare Claims
Source(s)	2. REMIS, CROWNWeb, and other CMS ESRD administrative data (form 2728 to obtain the diagnosis date of ESRD and date of birth)
Additional	1. Must be calculated using UKM or Daugirdas II method.
Information	 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 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. The reported spKt/V should not include residual renal function. Patients with missing spKt/V values or spKt/V=9.99 (not reported) are included in the denominator. For Peritoneal dialysis patients, 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 (adult) or 6 months (pediatric) is applied to the calculation for that month. For all in-center Hemodialysis patients, Kt/V must be reported during claim month. For all Home HD patients, Kt/V must be reported within 4 months of claim through date.





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

Higher rate desired

Clinical Care subdomain

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	 Patients younger than 18 Patients not on Hemodialysis Claims with both a fistula and graft reported Claims with fistula, graft, and catheter reported Claims with missing access type 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)	 Medicare Claims REMIS, CROWNWeb, and other CMS ESRD administrative data (form 2728 to obtain the diagnosis date of ESRD and date of birth)
Additional Information	 If claim indicates fistula and catheter, then only the fistula is counted. Last claim of the month used for calculation.





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

Lower rate desired

Clinical Care subdomain

DETAIL
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
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.
Number of Medicare patient-months at the facility during the measurement period.
 Patients younger than 18 years and 90 days Patients not on Hemodialysis Claims with both a fistula and graft reported Claims with fistula, graft, and catheter reported Claims with missing access type 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 4 consecutive months
 Medicare Claims REMIS, CROWNWeb, and other CMS ESRD administrative data (form 2728 to obtain the diagnosis date of ESRD and date of birth) If claim indicates fistula and catheter, then only the fistula is counted. If a claim indicates catheter and graft, then only the graft is counted. Measure uses claims data from October, November, and December of the year prior to the performance or comparison period (e.g., October – December 2016 for performance period) to determine catheter history





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Hypercalcemia Clinical Measure

Lower rate desired

Clinical Care subdomain

SPECIFICATION	DETAIL
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.
Denominator	1. Patients younger than 18
Exclusions	 Patients present at the facility for fewer than 30 days during the 3 month study period Patients on ESRD treatment for fewer than 90 days Patients without at least one uncorrected serum calcium value at the facility during the 3 month study period 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 Patients who have died or been discharged prior to the end of the reporting month.
Minimum	3 months
Data Reported to CROWNWeb	
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	 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. Includes all patients (i.e., not just those patients on Medicare). The last value reported in the month is used for calculation. Any value reported during the two months prior to the reporting month will be used to calculate the 3-month rolling average. No interpolation between uncorrected serum calcium values for peritoneal dialysis patients. The uncorrected serum calcium value reported by the facility is used. The facility may obtain this value from an external source. "Uncorrected" indicates albumin is not considered in the calculation.





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Mineral Metabolism Reporting Measure

SPECIFICATION	DETAIL
Description	Number of months for which facility reports serum or plasma phosphorus values for each Medicare patient.
Exclusions	 Facilities with a CCN open date on or after July 1, 2017 In-center hemodialysis patients treated at facility fewer than 7 times during claim month Home dialysis patients for whom a facility does not submit a claim during the claim month 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)	 Medicare Claims 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	 The serum or plasma phosphorus values reported by the facility are used. The facility may obtain these values from an external source. The measure will be scored according to the following formula: \[\begin{align*} \text{Number of Months Facility Successfully Reports} \\ \text{Number of Months in the Performance Period Facility has CCN}} \text{ x 12} \] - 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	 Facilities with a CCN open date on or after July 1, 2017 In-center hemodialysis patients treated at a facility fewer than 7 times during claim month Home dialysis patients for whom a facility does not submit a claim during the claim month 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 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) Additional Information	 Medicare Claims REMIS, CROWNWeb, and other CMS ESRD administrative data (form 2744 to obtain certification date, form 2728 to obtain the diagnosis date of ESRD) 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. The hemoglobin/hematocrit reported by the facility is used. The facility may obtain this value from an external source. No ESA dosage need be recorded if patient is not treated with ESAs. ESA dosage must be reported via HCPCS codes and corresponding units, as applicable. The measure will be scored according to the following formula:
	$\left(\frac{\textit{Number of Months Facility Successfully Reports}}{\textit{Number of Months in the Performance Period Facility has CCN}} \times 12\right) - 2$





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Pain Assessment and Follow-Up Reporting Measure

SPECIFICATION	DETAIL
Description	Facility reports in CROWNWeb one of the six conditions below for each qualifying patient once before August 1, 2017 and once before February 1, 2018. Based on NQF #0420
Exclusions	 Patients who are younger than 18 years Patients treated at the facility for fewer than 90 days Facilities with a CCN open date on or after July 1, 2017 Facilities treating fewer than 11 eligible patients during the performance period
Data Source(s)	REMIS, CROWNWeb, and other CMS ESRD administrative data
Additional Information	 Facilities must report one of the following conditions for each eligible patient: a) Pain assessment using a standardized tool is documented as positive and a follow-up plan is documented b) Pain assessment documented as positive, a follow-up plan is not documented, and the facility possesses documentation that the patient is not eligible c) Pain assessment documented as positive using a standardized tool, a follow-up plan is not documented, and no reason is given d) Pain assessment using a standardized tool is documented as negative, and no follow-up plan required e) No documentation of pain assessment, and the facility possesses documentation the patient is not eligible for a pain assessment using a standardized tool f) No documentation of pain assessment, and no reason is given Conditions covering the first six months of the performance period must be reported in CROWNWeb before August 1, 2017, and the conditions covering the second six months of the performance period must be reported in CROWNWeb before February 1, 2018.





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Clinical Depression Screening and Follow-Up Reporting Measure

SPECIFICATION	DETAIL
Description	Facility reports in CROWNWeb one of the six conditions below for each qualifying patient once before February 1, 2018. Based on NQF #0418
Exclusions	 Patients who are younger than 12 years Patients treated at the facility for fewer than 90 days Facilities with a CCN open date on or after July 1, 2017 Facilities treating fewer than 11 eligible patients during the performance period
Data Source(s)	REMIS, CROWNWeb, and other CMS ESRD administrative data
Additional Information	 Facilities must report one of the following conditions for each eligible patient before February 1, 2018: a) Screening for clinical depression is documented as being positive, and a follow-up plan is documented b) Screening for clinical depression documented as positive, and a follow-up plan not documented, and the facility possess documentation stating the patient is not eligible c) Screening for clinical depression documented as positive, the facility possesses no documentation of a follow-up plan, and no reason is given d) Screening for clinical depression is documented as negative, and a follow-up plan is not required e) Screening for clinical depression not documented, but the facility possesses documentation stating the patient is not eligible f) Clinical depression screening not documented, and no reason is given





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NHSN Healthcare Personnel Influenza Vaccination Reporting Measure

SPECIFICATION	DETAIL
Description	Facility submits Healthcare Personnel Influenza Vaccination Summary
	Report to CDC's NHSN system, according to the specifications of the
	Healthcare Personnel Safety Component Protocol, by May 15, 2017
	Based on NQF #0431
Exclusions	1. Facilities with a CCN open date after January 1, 2017
Data	1. NHSN
Source(s)	2. REMIS, CROWNWeb, and other CMS ESRD administrative data
	(form 2744 to obtain facility type and certification date)
Additional	1. A "qualifying healthcare personnel" is defined as an employee,
Information	licensed independent practitioner, or adult student/trainee/volunteer
	who works in a facility for at least one day between October 1, 2016
	and March 31, 2017 (designated as the "flu season")
	2. NHSN Summary Reports submitted by May 15, 2017 would
	document actions taken during the flu season that spans October
	2016 to April 2017, and would count toward facilities' PY 2019
	NHSN Healthcare Personnel Influenza Vaccination reporting
	measure scores
	3. Additional information about the Protocol and Summary Report can
	be found at: http://www.cdc.gov/nhsn/PDFs/HPS-
	manual/vaccination/HPS-flu-vaccine-protocol.pdf.