

Measure Information Form

Project Title:

Dialysis Adequacy

Project Overview:

The Centers for Medicare & Medicaid Services (CMS) has contracted with the University of Michigan Kidney Epidemiology and Cost Center (UM-KECC) develop measures of dialysis adequacy in ESRD patients. The contract name is ESRD Quality Measure Development, Maintenance, and Support. The contract number is HHSM-500-2013-13017I.

Date:

Information included is current on September 25, 2015

Measure Name

Descriptive Information

Measure Name (Measure Title De.2.)

Pediatric Peritoneal Dialysis Adequacy: Achievement of Target Kt/V

Measure Type De.1.

Intermediate Outcome

Brief Description of Measure De.3.

Percent of pediatric (< 18) peritoneal dialysis patient-months whose delivered peritoneal dialysis dose was a weekly Kt/Vurea ≥ 1.8 (dialytic + residual)

If Paired or Grouped De.4.

N/A

Subject/Topic Areas De.5.

Renal, Renal: End Stage Renal Disease (ESRD)

Crosscutting Areas De 6.

N/A

Measure Specifications

Measure-specific Web Page S.1.

N/A

If This Is an eMeasure S.2a.

N/A

Data Dictionary, Code Table, or Value Sets S.2b.

No data dictionary

For Endorsement Maintenance S.3.

N/A

Numerator Statement S.4.

Number of patient months in the denominator in which delivered peritoneal dialysis dose was a weekly Kt/Vurea ≥ 1.8 (dialytic + residual, measured in the last 6 months)

Time Period for Data S.5.

The entire calendar month

Numerator Details S.6.

Reporting months with weekly Kt/Vurea ≥ 1.8 (dialytic + residual) are counted in the numerator. If no weekly Kt/Vurea value is reported for a given patient in the reporting month, the most recent peritoneal dialysis weekly Kt/Vurea value in the prior 5 months is applied to the calculation for that month.

Missing, expired, and not performed are not counted as achieving the minimum weekly Kt/Vurea threshold.

If RRF is to be incorporated in the Kt/V calculation, this will be calculated using the urea clearance derived from 24 hour urine collection. Total body water (V) should be estimated by one of the following pediatric specific V approximation methods:

o Prediction equation based upon heavy water dilution

Males: $TBW = 0.10 (ht \times wt)^{0.68} - 0.37 (wt)$

Females: $TBW = 0.14 (ht \times wt)^{0.64} - 0.35 (wt)$

o Simplified V estimating equations derived from the above prediction equations:

Males: $TBW = 20.88 \times BSA - 4.29$

Females: $TBW = 16.92 \times BSA - 1.81$

o Sex specific normograms derived from the above prediction equations and published in KDOQI PD guidelines for the pediatric population update from 2006.

Denominator Statement S.7.

To be included in the denominator for a particular reporting month, the patient must be on peritoneal dialysis for the entire month, be < 18 years old at the beginning of the month, must have had ESRD for greater than 90 days at the beginning of the month, and must be assigned to that facility for the entire month.

Target Population Category S.8.

Children's Health, Populations at Risk

Denominator Details S.9.

A treatment history file is the data source for the denominator calculation used for the analyses supporting this submission. This file provides a complete history of the status, location, and dialysis treatment modality of an ESRD patient from the date of the first ESRD service until the patient dies or the data collection cutoff date is reached. For each patient, a new record is created each time he/she changes facility or treatment modality. Each record represents a time period associated with a specific modality and dialysis facility. CROWNWeb is the primary basis for placing patients at dialysis facilities and dialysis claims are used as an additional source. Information regarding first ESRD service date, death, and transplant is obtained from CROWNWeb (including the CMS Medical Evidence Form (Form CMS-2728) and the Death Notification Form (Form CMS-2746)) and Medicare claims, as well as the Organ Procurement and Transplant Network (OPTN) and the Social Security Death Master File.

To be included in the denominator for a particular reporting month the patient must be on peritoneal dialysis and assigned to that facility for the entire month, have had ESRD for greater than 90 days on the first day of the month, and be <18 years old at the beginning of the month.

Denominator Exclusions (NQF Includes “Exceptions” in the “Exclusion” Field) S.10.

Exclusions that are implicit in the denominator definition include

- 1) Patients not on peritoneal dialysis for the entire month
- 2) Adult patients (≥ 18 years old)
- 3) All patients who have had ESRD for <91 days, and
- 4) Patients not assigned to the facility for the entire month

There are no additional exclusions for this measure.

Denominator Exclusion Details (NQF Includes “Exceptions” in the “Exclusion” Field) S.11.

N/A

Stratification Details/Variables S.12.

N/A

Risk Adjustment Type S.13.

No risk adjustment or risk stratification

Statistical Risk Model and Variables S.14.

N/A

Detailed Risk Model Specifications S.15.

N/A

Type of Score S.16.

Rate/proportion

Interpretation of Score S.17.

Better quality = Higher score

Calculation Algorithm/Measure Logic S.18.

Denominator: For the reporting month, patients are included in the denominator if:

Patient modality is indicated as peritoneal dialysis during the entire month

Patient age as of the beginning of the reporting month is less than 18 years

Patient has had ESRD for greater than 90 days at the beginning of the month

Patient has been assigned to the facility for the entire month

Numerator:

For the reporting month, patients from the denominator are also included in the numerator if they have a weekly Kt/Vurea ≥ 1.8 .

If no weekly Kt/Vurea value is reported for a given patient in a month, the most recent peritoneal dialysis weekly Kt/Vurea value in the prior 5 months is applied to the calculation for that month.

Calculation Algorithm/Measure Logic Diagram URL or Attachment S.19.

No diagram provided

Sampling S.20.

N/A

Survey/Patient-Reported Data S.21.

N/A

Missing Data S.22.

Patients with missing Kt/V values are not excluded from the measure. Therefore, patients for whom a Kt/V value is missing for the month are still included in the denominator. This is designed to ensure that facilities will still be evaluated for the measure

Data Source S.23.

Administrative claims, Electronic Clinical Data

Data Source or Collection Instrument S.24.

For the analyses supporting this submission, the measure is calculated using CROWNWeb as the primary data source. If a patient's data are missing in CROWNWeb, Medicare claims are used

Data Source or Collection Instrument (Reference) S.25.

No data collection instrument provided

Level of Analysis S.26.

Facility

Care Setting S.27.

Dialysis Facility

Composite Performance Measure S.28.

N/A