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.)
Delivered Dose of Hemodialysis Above Minimum

Measure Type De.1.
Outcome

Brief Description of Measure De.3.
Percentage of all patient months for adult patients (> = 18 years old) whose delivered dose of hemodialysis (calculated from the last measurement of the month using the UKM or Daugirdas II formula) was spKt/V >= 1.2.

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.
N/A

For Endorsement Maintenance S.3.
The following fields have been revised since initial submission in 2011:

• Measure description
Numerator Statement S.4.
Number of patient months in denominator in which the delivered dose of hemodialysis (calculated from the last measurement of the month using the UKM or Daugirdas II formula) was spKt/V >= 1.2

Time Period for Data S.5.
The entire calendar month.

Numerator Details S.6.
Months with spKt/V >=1.2 are counted in the numerator. Eligible spKt/V values are those >=1.2 during the reporting month. The last spKt/V value reported, not including missing, expired, and not performed, is selected when multiple values are reported in the month.

Missing, expired, and not performed will not be counted as achieving the minimum spKt/V threshold.

Denominator Statement S.7.
To be included in the denominator for a particular month, the patient must be on hemodialysis 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, must be dialyzing thrice weekly during the month, and must be assigned to that facility for the entire month.

Target Population Category S.8.
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 month the patient must be on hemodialysis and assigned to that facility for the entire month, have received dialysis 3 times weekly, 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) peritoneal dialysis patients 2) pediatric patients (<18 years old) 3) those patients not on thrice weekly dialysis 4) all patients who have had ESRD for <91 days, and 5) 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

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 HD during the entire month (in-center or home)
- Patient is on thrice weekly dialysis during the month
- Patient age as of the beginning of the reporting month is at least 18 years
- Patient has had ESRD for greater than 90 days at the beginning of the month
- 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 spKt/V >=1.2. The last spKt/V value reported, not including missing, expired, and not performed, is selected when multiple values are reported in the 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