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) to 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.)
Measurement of nPCR for Pediatric Hemodialysis Patients

Measure Type De.1.
Process

Brief Description of Measure De.3.
Percentage of patient months of pediatric (less than 18 years old) in-center hemodialysis patients (irrespective of frequency of dialysis) with documented monthly nPCR measurements.

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.
N/A

Numerator Statement S.4.
Number of patient months in the denominator with monthly nPCR measurements.

Time Period for Data S.5.
The entire calendar month.
**Numerator Details S.6.**
The numerator will be determined by counting the patients in the denominator who meet one of the following criteria during the study month: nPCR is populated AND “Date nPCR Collected” is populated, OR “Kt/V Hemodialysis Collection Date” is populated, AND “BUN Pre-Dialysis” is populated, AND “BUN Post-Dialysis” is populated, AND “Pre-Dialysis Weight” is populated, AND “Pre-Dialysis Weight Unit of Measure” is populated, AND “Post-Dialysis Weight” is populated, AND “Post-Dialysis Weight Unit of Measure” is populated, AND “Delivered Minutes of BUN Hemodialysis Session” is populated AND “Interdialytic Time” is populated.

**Denominator Statement S.7.**
Number of all patient months for pediatric (less than 18 years old) in-center hemodialysis patients (irrespective of frequency of dialysis).

**Target Population Category S.8.**
Children’s Health, Populations at Risk

**Denominator Details S.9.**
The duration of hemodialysis treatment will be calculated as the difference between the first “Kt/V Collection Date” and “Date Regular Chronic Dialysis Began”. The denominator will include all in-center hemodialysis patients <18 years old. The patient’s age will be determined by subtracting the patient’s date of birth from the first day of the reporting month. In-center hemodialysis patients are defined as follows: “Admit Date” to the specified facility is prior or equal to the first day of the study period, AND the patient has not been discharged (“Discharge Date” is null or blank), OR “Discharge Date” from the facility is greater than or equal to the last day of the study period AND “Treatment Dialysis Broad Start Date” is prior or equal to the first day of the study period, AND “Dialysis Broad Type of Treatment” = ‘HD’, AND “Primary Dialysis Setting” = ‘Dialysis Facility/Center’ on the last day of the study period, AND “Date Regular Chronic Dialysis Began” is prior to the first day of the study period.

**Denominator Exclusions (NQF Includes “Exceptions” in the “Exclusion” Field) S.10.**
Exclusions that are implicit in the denominator definition include pediatric patients (<18 years old), all patients who have not been in the facility for the entire reporting month, and all home hemodialysis patients. 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.
The duration of hemodialysis treatment will be calculated as the difference between the first “Kt/V Collection Date” and “Date Regular Chronic Dialysis Began”. The denominator will include all in-center hemodialysis patients <18 years old. The patient’s age will be determined by subtracting the patient’s date of birth from the first day of the reporting month. In-center hemodialysis patients are defined as follows: “Admit Date” to the specified facility is prior or equal to the first day of the study period, AND the patient has not been discharged (“Discharge Date” is null or blank), OR “Discharge Date” from the facility is greater than or equal to the last day of the study period AND “Treatment Dialysis Broad Start Date” is prior or equal to the first day of the study period, AND “Dialysis Broad Type of Treatment” = ‘HD’, AND “Primary Dialysis Setting” = ‘Dialysis Facility/Center’ on the last day of the study period, AND “Date Regular Chronic Dialysis Began” is prior to the first day of the study period.

The numerator will be determined by counting the patients in the denominator who meet one of the following criteria during the study month: npCR is populated AND “Date nPCR Collected” is populated, OR “Kt/V Hemodialysis Collection Date” is populated, AND “BUN Pre-Dialysis” is populated, AND “BUN Post-Dialysis” is populated, AND “Pre-Dialysis Weight” is populated, AND “Pre-Dialysis Weight Unit of Measure” is populated, AND “Post-Dialysis Weight” is populated, AND “Post-Dialysis Weight Unit of Measure” is populated, AND “Delivered Minutes of BUN Hemodialysis Session” is populated AND “Interdialytic Time” is populated.

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.
N/A

Data Source S.23.
Electronic Clinical Data

Data Source or Collection Instrument S.24.
CROWNWeb

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