Project Title:

Mineral and Bone Disorder

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 mineral and bone disorder in ESRD patients. The contract name is ESRD Quality Measure Development, Maintenance, and Support. The contract number is HHSM-500-2013-130171.

Date:

Information included is current on September 25, 2015
**Measure Name**

**Descriptive Information**

**Measure Name (Measure Title De.2.)**
Measurement of Phosphorus Concentration

**Measure Type De.1.**
Process

**Brief Description of Measure De.3.**
Percentage of all peritoneal dialysis and hemodialysis patient months with serum or plasma phosphorus measured at least once within the month.

**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.**
This measure was last endorsed in 2011. For the 2015 update to the measure, we removed the restriction that excluded patients <18 years of age. Calculation of the measures includes both adult and pediatric patients. We have also removed the exclusion for kidney transplant recipients with a non-functioning graft. These changes were recommended by the 2013 MBD TEP.

These measure specifications also reflect the result of the NQF ad hoc review that concluded in February 2014. An ad hoc review of this measure was requested to determine
if it was appropriate to expand the measure to include reporting of either serum or plasma phosphorus values based on the argument that data from several lab based tests suggested equivalence in values. Based on the data provided to NQF demonstrating equivalence within CLIA established parameters, NQF recommended the measure be revised to include reporting of either serum or plasma phosphorous values. Those data are included in the appendix to this document.

The NQF committee determined that plasma was an acceptable alternative to serum phosphorus, and ruled that the measure include the reporting of plasma phosphorus in the specifications.

**Numerator Statement S.4.**
Number of dialysis patient months in the denominator with serum or plasma phosphorus measured at least once within the reporting month.

**Time Period for Data S.5.**
One month

**Numerator Details S.6.**
The numerator comprises all eligible patient months during the 1-month study period with a non-missing value for serum or plasma phosphorus.

**Denominator Statement S.7.**
Number of patient-months among in-center hemodialysis, home hemodialysis, or peritoneal dialysis patients under the care of the dialysis facility for the entire reporting month

**Target Population Category S.8.**
Populations at Risk

**Denominator Details S.9.**
The denominator comprises all patient months for patients during the 1 month study period, where patients have an "Admit Date" prior or equal to the first day of the month; whose "Discharge Date" is blank or greater than or equal to the last day of the month; whose "Primary Type of Treatment" = `Hemodialysis`, `CAPD` or `CCPD` on the last day of the study period; and whose "Primary Dialysis Setting" = `Dialysis Facility/Center` on the last 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 all patients who have not been in the facility the entire reporting 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.
1. Using CROWNWeb-reported data (data stored as SAS files), identify the number of HD and PD patients under the care of a facility.
2. From this group, remove patients who were not in the facility for the entirety of the month (i.e., transient patients).
4. To form the numerator, remove all denominator-eligible patients who do not have a serum or plasma phosphorus (variable name, "phosphorus") measurement for the study month.
5. Calculate the facility’s rate of phosphorus measurement by dividing the number calculated in Step 3 (the denominator) by the number calculated in Step 4 (the numerator).

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

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