Project Title:

Vascular Access

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 vascular access 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.) Maximizing Placement of Arterial Venous Fistula (AVF)

Measure Type De.1. Intermediate Outcome

Brief Description of Measure De.3.

Percentage of patient months for patients on maintenance hemodialysis during the last HD treatment of month using an autogenous AV fistula.

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. This is not an eMeasure

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

No data dictionary

For Endorsement Maintenance S.3.

Minor revisions have been made to the specifications for this measure. We have included calculation details for using both Medicare claims and CROWNWeb as the data source.

Numerator Statement S.4.

Number of patient months in the denominator who were using an autogenous AV fistula at the last HD treatment of month.

Time Period for Data S.5.

One month

Numerator Details S.6.

The numerator will be determined by counting the patient months in the denominator who were using an AV fistula as the means of access.

Denominator Statement S.7.

For both CROWNWeb and Claims data, the denominator will include all hemodialysis patients who are at least 18 years old and have had ESRD for greater than 90 days as of the first day of the reporting month.

Target Population Category S.8.

Populations at Risk

Denominator Details S.9.

For both CROWNWeb and Claims data, the denominator will include all hemodialysis patients who are at least 18 years old and have had ESRD for at least 90 days as of the first day of the reporting month.

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) and acute hemodialysis patients (hemodialysis patients who have had ESRDS for less than 91 days). 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.

For this measure calculation, the numerator will be divided by the denominator. Calculation of the numerator and denominator is described below.

The denominator will include all patients at least 18 years old who are determined to be maintenance hemodialysis patients.

The patient's age will be determined by subtracting the patient's date of birth from the first day of the reporting month.

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' or 'Home' 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 denominator will include all patients greater than or equal to 18 years old who are determined to be in-center hemodialysis, or home hemodialysis patients.

The numerator will be determined by counting the patient months in the denominator who were on maintenance hemodialysis using an AV fistula as the means of access.

In CROWNWeb, a patient is counted in the numerator if "Access_type_id" in (14,16) at the last treatment of the month where "14" represents AV fistula only (with 2 needles) and "16" represents AV Fistula combined with a Catheter; while in Medical Claims data, a patient is included if (vas_cat=´ and art_graft=´ and art_fistula=´Y´) OR (vas_cat=`Y´ and art_graft=´ and art_fistula=`Y`) at the last treatment of 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.

N/A

Data Source S.23.

Administrative claims, Electronic Clinical Data

Data Source or Collection Instrument S.24.

This measure is primarily designed for collection in CROWNWeb but can also be calculated from Fistula First and Medicare claims data. The measure has been publically reported using Medicare claims data since 2013.

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