Measure #330: Adult Kidney Disease: Catheter Use for Greater Than or Equal to 90 Days – National Quality Strategy Domain: Patient Safety

2017 OPTIONS FOR INDIVIDUAL MEASURES:
REGISTRY ONLY

MEASURE TYPE:
Outcome

This is a two-part measure that is paired with Measure #329: Adult Kidney Disease: Catheter Use at Initiation of Hemodialysis. This measure *should* be reported if quality-data code G9240 "Documentation of patient with a catheter at the time maintenance hemodialysis is initiated" is submitted for measure #329.

DESCRIPTION:
Percentage of patients aged 18 years and older with a diagnosis of End Stage Renal Disease (ESRD) receiving maintenance hemodialysis for greater than or equal to 90 days whose mode of vascular access is a catheter

INSTRUCTIONS:
This measure is to be reported a minimum of once per performance period for patients with ESRD seen during the performance period. This measure may be reported by eligible clinicians who perform the quality actions described in the measure based on the services provided and the measure-specific denominator coding.

NOTE: *Include only patients that have catheters at the time of initiation of hemodialysis through September 30 of the performance period. This will allow the evaluation of at least 90 days of catheter use for hemodialysis within the reporting year.*

Measure Reporting:
The listed denominator criteria is used to identify the intended patient population. The numerator options included in this specification are used to submit the quality actions allowed by the measure. The quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data.

DENOMINATOR:
All patients aged 18 years and older with a diagnosis of ESRD receiving maintenance hemodialysis for greater than or equal to 90 days

Denominator Criteria (Eligible Cases):
Patients aged ≥ 18 years on date of encounter
AND
Diagnosis for ESRD (ICD-10-CM): N18.6, Z49.31
AND
Patient encounter during performance period (CPT): 90957, 90958, 90959, 90960, 90961, 90962, 90966, 90970
WITHOUT
Telehealth Modifier: GQ, GT
AND
All eligible instances of quality-data code G9240 (Documentation of patient with a catheter at the time maintenance hemodialysis is initiated as applied in the numerator for Measure #329 Adult Kidney Disease: Catheter Use at Initiation of Hemodialysis)
AND NOT
DENOMINATOR EXCLUSIONS:
Patient is undergoing palliative dialysis with a catheter: G9749
OR

Patient approved by a qualified transplant program and scheduled to receive a living donor kidney transplant: G9750

NUMERATOR:
Patients whose mode of vascular access is a catheter

Numerator Instructions: Of note, the performance tags indicating "Performance Met" and "Performance Not Met" are included to highlight what is being measured and reported and not to encourage extended use of catheters for vascular access.

INVERSE MEASURE - A lower calculated performance rate for this measure indicates better clinical care or control. The "Performance Not Met" numerator option for this measure is the representation of the better clinical quality or control. Reporting that numerator option will produce a performance rate that trends closer to 0%, as quality increases. For inverse measures, a rate of 100% means all of the denominator eligible patients did not receive the appropriate care or were not in proper control.

Numerator Options:

Performance Met:	Patient receiving maintenance hemodialysis for greater than or equal to 90 days with a catheter as the mode of vascular access (G9265)
OR	
Denominator Exception:	Documentation of patient receiving maintenance hemodialysis for greater than or equal to 90 days with a catheter for documented reasons (e.g. other medical reasons, patient declined AVF/AVG, other patient reasons) (G9264)
OR	
Performance Not Met:	Patient receiving maintenance hemodialysis for greater than or equal to 90 days without a catheter as the mode of vascular access (G9266)

RATIONALE:
Long-term catheter use without appropriate adjustments in treatment duration can compromise dialysis adequacy. Compromise of dialysis adequacy is associated with increased morbidity and mortality. Long-term catheter access is associated with a risk for central venous stenosis development, which can preclude the establishment of a permanent vascular access for HD.

Data suggest that a change from non-cuffed to long-term cuffed catheters, and the reduction in catheter placement rates, may reflect longer duration of catheter use and longer exposure to potential infections.

The infection rate for long-term cuffed catheters is one episode per 252 catheter days, and their use is associated with lower blood flows, less hemodialysis, and an increased risk of sepsis, endocarditis, and metastatic infections.

CLINICAL RECOMMENDATION STATEMENTS:
The following evidence statements are quoted verbatim from the referenced clinical guidelines. Only selected portions of the clinical guidelines are quoted here; for more details, please refer to the full guideline. A structured approach to the type and location of long-term HD accesses should help optimize access survival and minimize complications. The access should be placed distally and in the upper extremities whenever possible. Options for fistula placement should be considered first, followed by prosthetic grafts if fistula placement is not possible.

Catheters should be avoided for HD and used only when other options listed are not available. (KDOQI, 2006)

2.1. The order of preference for placement of fistulae in patients with kidney failure who choose HD as their initial mode of KRT should be (in descending order of preference):

2.1.1. Preferred: Fistulae (B)

2.1.1.1. A wrist (radiocephalic) primary fistula (A)

2.1.1.2. An elbow (brachiocephalic) primary fistula (a)

2.1.1.3. A transposed brachial basilic vein fistula (B)

2.1.2. Acceptable: AVG of synthetic or biological material, such as: (B)

2.1.2.1. A forearm loop graft, preferable to a straight configuration

2.1.2.2. Upper-arm graft

2.1.2.3. Chest wall or "necklace" prosthetic graft or lower-extremity fistula or graft; all upper-arm sites should be exhausted.

2.1.3. Avoid if possible: Long-term catheters. (B)

2.1.3.1. Short-term catheters should be used for acute dialysis and for a limited duration in hospitalized patients. Noncuffed femoral catheters should be used in bed-bound patients only. (B)

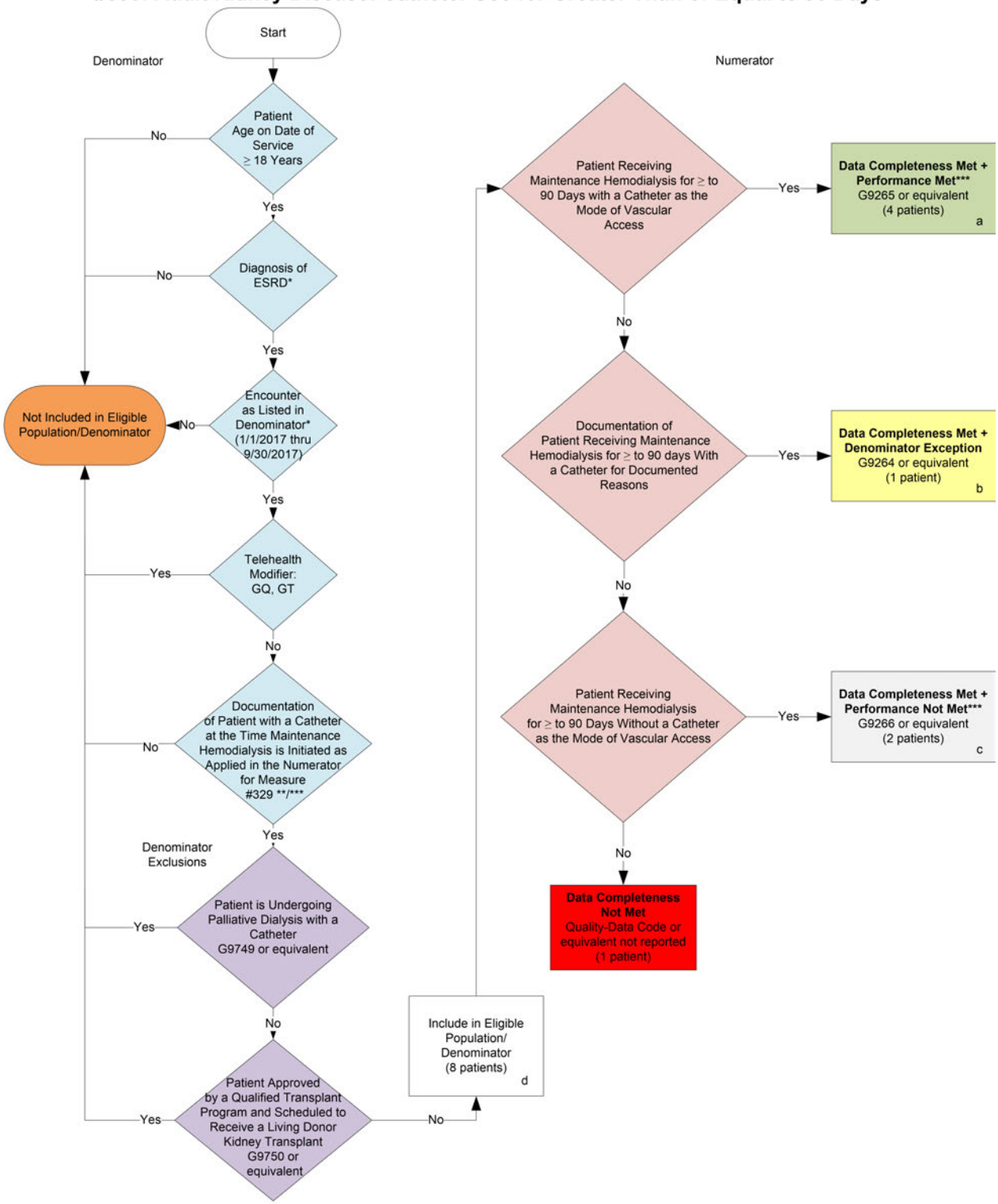
2.1.3.2. Long-term catheters or dialysis port catheter systems should be used in conjunction with a plan for permanent access. Catheters capable of rapid flow rates are preferred. Catheter choice should be based on local experience, goals for use, and cost. (B)

2.1.3.3. Long-term catheters should not be placed on the same side as a maturing AV access, if possible. (B)

Special attention should be paid to consideration of avoiding femoral catheter access in HD patients who are current or future kidney transplant candidates. MRA imaging of both arteries and veins is the diagnostic procedure of choice for evaluating central vessels for possible chest wall construction. (KDOQI, 2006)

Limited proprietary coding is contained in the Measure specifications for convenience. Users of the proprietary code sets should obtain all necessary licenses from the owners of these code sets. The AMA, RPA, the PCPI and its members disclaim all liability for use or accuracy of any Current Procedural Terminology (CPT®) or other coding contained in the specifications.

2017 Registry Individual Measure Flow
#330: Adult Kidney Disease: Catheter Use for Greater Than or Equal to 90 Days



* See the posted Measure Specification for specific coding and instructions to report this measure.
** Reporting measure #329 is a precursor for reporting this measure. Patients where G9240 or equivalent (documentation of patient with a catheter at the time maintenance hemodialysis is initiated) is reported in measure #329 are pulled into the denominator for measure #330.
***A lower calculated performance rate for this measure indicates better clinical care or control.
NOTE: Reporting Frequency: Patient-process

v1

2017 Registry Individual Measure Flow
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SAMPLE CALCULATIONS:

Data Completeness=

Performance Met (a=4 patients) + Denominator Exception (b=1 patient) + Performance Not Met (c=2 patients) = 7 patients = **87.50%**

Eligible Population / Denominator (d=8 patients) = 8 patients

Performance Rate=

Performance Met (a=4 patients) = 4 patients = **66.67%**

Data Completeness Numerator (7 patients) – Denominator Exception (b=1 patient) = 6 patients

* See the posted Measure Specification for specific coding and instructions to report this measure.
** Reporting measure #329 is a precursor for reporting this measure. Patients where G9240 or equivalent (documentation of patient with a catheter at the time maintenance hemodialysis is initiated) is reported in measure #329 are pulled into the denominator for measure #330.
***A lower calculated performance rate for this measure indicates better clinical care or control.
NOTE: Reporting Frequency: Patient-process

2017 Registry Individual Measure Flow
#330: Adult Kidney Disease: Catheter Use for Greater Than or Equal to 90 Days

Please refer to the specific section of the Measure Specification to identify the denominator and numerator information for use in reporting this Individual Measure. Reporting measure #329 is a precursor for reporting this measure. Patients where G9240 or equivalent (documentation of patient with a catheter at the time maintenance hemodialysis is initiated) is reported in measure #329 are pulled into the denominator for measure #330. A lower calculated performance rate for this measure indicates better clinical care or control.

1. Start with Denominator
2. Check Patient Age:
    a. If Age greater than or equal to 18 years of age on Date of Service equals No during the measurement period, do not include in Eligible Patient Population. Stop Processing.
    b. If the Age greater than or equal to 18 years of age on Date of Service equals Yes during the measurement period, proceed to check Patient Diagnosis.
3. Check Patient Diagnosis:
    a. If Diagnosis of ESRD as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.
    b. If Diagnosis of ESRD as Listed in the Denominator equals Yes, proceed to check Encounter Performed.
4. Check Encounter Performed:
    a. If Encounter as listed in the denominator equals No, do not include in Eligible Patient Population. Stop Processing.
    b. If Encounter as listed in the denominator equals Yes, proceed to check Telehealth Modifier.
5. Check Telehealth Modifier:
    a. If Telehealth Modifier equals Yes, do not include in Eligible Patient Population. Stop Processing.
    b. If Telehealth Modifier equals No, proceed to check Documentation of Patient with a Catheter at the Time Maintenance Hemodialysis is Initiated as Applied in the Numerator for Measure number 329.
6. Check Documentation of Patient with a Catheter at the Time Maintenance Hemodialysis is Initiated as Applied in the Numerator for Measure number 329:
    a. If Documentation of Patient with a Catheter at the Time Maintenance Hemodialysis is Initiated as Applied in the Numerator for Measure number 329 equals No, do not include in Eligible Patient Population. Stop Processing.
    b. If Documentation of Patient with a Catheter at the Time Maintenance Hemodialysis is Initiated as Applied in the Numerator for Measure number 329 equals Yes, proceed to check Palliative Dialysis.
7. Check Palliative Dialysis:
    a. If Patient is Undergoing Palliative Dialysis with a Catheter equals Yes, do not include in Eligible Patient Population. Stop Processing.
    b. If Patient is Undergoing Palliative Dialysis with a Catheter equals No, proceed to check Kidney Transplant.

8. Check Kidney Transplant:

    a. If Patient Approved by a Qualified Transplant Program and Scheduled to Receive a Living Donor Kidney Transplant equals Yes, do not include in Eligible Patient Population. Stop Processing.

    b. If Patient Approved by a Qualified Transplant Program and Scheduled to Receive a Living Donor Kidney Transplant equals No, include in the Eligible population.

9. Denominator Population

    a. Denominator population is all Eligible Patients in the denominator. Denominator is represented as Denominator in the Sample Calculation listed at the end of this document. Letter d equals 8 patients in the sample calculation.

10. Start Numerator

11. Check Patients Receiving Maintenance Hemodialysis for Greater Than or Equal to 90 Days With a Catheter as the Mode of Vascular Access

    a. If Patients Receiving Maintenance Hemodialysis for Greater Than or Equal to 90 Days With a Catheter as the Mode of Vascular Access equals Yes, include in Data Completeness Met and Performance Met.

    b. Data Completeness Met and Performance Met letter is represented in the Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter a equals 4 patients in Sample Calculation.

    c. If Patients Receiving Maintenance Hemodialysis for Greater Than or Equal to 90 Days With a Catheter as the Mode of Vascular Access equals No, proceed to Documentation Patients Receiving Maintenance Hemodialysis for Greater Than or Equal to 90 Days With a Catheter for Documented Reasons.

12. Check Documentation Patients Receiving Maintenance Hemodialysis for Greater Than or Equal to 90 Days With a Catheter for Documented Reasons:

    a. If Documentation Patients Receiving Maintenance Hemodialysis for Greater Than or Equal to 90 Days With a Catheter for Documented Reasons equals Yes, include in Data Completeness Met and Denominator Exception.

    b. Data Completeness Met and Denominator Exception letter is represented in the Data Completeness and Performance Rate the Sample Calculation listed at the end of this document. Letter b equals 1 patient in the Sample Calculation.

    c. If Documentation Patients Receiving Maintenance Hemodialysis for Greater Than or Equal to 90 Days With a Catheter for Documented Reasons equals No, proceed to Patient Receiving Maintenance Hemodialysis for Greater Than or Equal to 90 Days Without a Catheter as the Mode of Vascular Access.

13. Check Patient Receiving Maintenance Hemodialysis for Greater Than or Equal to 90 Days Without a Catheter as the Mode of Vascular Access:

    a. If Patient Receiving Maintenance Hemodialysis for Greater Than or Equal to 90 Days Without a Catheter as the Mode of Vascular Access equals Yes, include in the Data Completeness Met and Performance Not Met.

    b. Data Completeness Met and Performance Not Met letter is represented in the Data Completeness in the Sample Calculation listed at the end of this document. Letter c equals 2 patients in the Sample Calculation.

    c. If Patient Receiving Maintenance Hemodialysis for Greater Than or Equal to 90 Days Without a Catheter as the Mode of Vascular Access equals No, proceed to Data Completeness Not Met.

14. Check Data Completeness Not Met

    a. If Data Completeness Not Met equals No, Quality Data Code or equivalent not reported. 1 patient has been subtracted from data completeness numerator in the sample calculation.

SAMPLE CALCULATIONS:

Data Completeness=

Performance Met (a=4 patients) + Denominator Exception (b=1 patient) + Performance Not Met (c=2 patients) / Eligible Population / Denominator (d=8 patients) = 7 patients / 8 patients = **87.50%**

Performance Rate=

Performance Met (a=4 patients) / Data Completeness Numerator (7 patients) – Denominator Exception (b=1 patient) = 4 patients / 6 patients = **66.67%**