



Measure Information

This document contains the information submitted by measure developers/stewards, but is organized according to NQF's measure evaluation criteria and process. The item numbers refer to those in the submission form but may be in a slightly different order here. In general, the item numbers also reference the related criteria (e.g., item 1b.1 relates to sub criterion 1b).

Brief Measure Information

NQF #: 2988

Corresponding Measures:

Measure Title: Medication Reconciliation for Patients Receiving Care at Dialysis Facilities

Measure Steward: Kidney Care Quality Alliance

sp.02. Brief Description of Measure: Percentage of patient-months for which medication reconciliation* was performed and documented by an eligible professional.**

* "Medication reconciliation" is defined as the process of creating the most accurate list of all home medications that the patient is taking, including name, indication, dosage, frequency, and route, by comparing the most recent medication list in the dialysis medical record to one or more external list(s) of medications obtained from a patient or caregiver (including patient-/caregiver-provided "brown bag" information), pharmacotherapy information network (e.g., Surescripts), hospital, or other provider.

** For the purposes of medication reconciliation, "eligible professional" is defined as: physician, RN, ARNP, PA, pharmacist, or pharmacy technician.

1b.01. Developer Rationale: Medication management is a critical safety issue for all patients, but especially so for patients with ESRD, who often require 10 or more medications and take an average of 17-25 doses per day, have numerous comorbid conditions, have multiple healthcare providers and prescribers, and undergo frequent medication regimen changes(1,2,3,4). Medication-related problems (MRPs) contribute significantly to the approximately \$40 billion in public and private funds spent annually on ESRD care in the United States(5,6), and it is believed that medication management practices focusing on medication documentation, review, and reconciliation could systematically identify and resolve MRPs, improve ESRD patient outcomes, and reduce total costs of care. As most hemodialysis patients are seen at least thrice weekly and peritoneal dialysis patients monthly, the dialysis facility has been suggested as a reasonable locale for medication therapy management(7).

sp.12. Numerator Statement: Number of patient-months for which medication reconciliation was performed and documented by an eligible professional during the reporting period.

The medication reconciliation MUST:

- Include the name or other unique identifier of the eligible professional;

AND

- Include the date of the reconciliation;

AND

- Address ALL known home medications (prescriptions, over-the-counters, herbals, vitamin/mineral/dietary (nutritional) supplements, and medical marijuana);

AND

- Address for EACH home medication: Medication name(1), indication(2), dosage(2), frequency(2), route of administration(2), start and end date (if applicable)(2), discontinuation date (if applicable)(2), reason medication was stopped or discontinued (if applicable)(2), and identification of individual who authorized stoppage or discontinuation of medication (if applicable)(2);

AND

- List any allergies, intolerances, or adverse drug events experienced by the patient.

1. For patients in a clinical trial, it is acknowledged that it may be unknown as to whether the patient is receiving the therapeutic agent or a placebo.

2. "Unknown" is an acceptable response for this field.

sp.14. Denominator Statement: Total number of patient-months for all patients permanently assigned to a dialysis facility during the reporting period.

sp.16. Denominator Exclusions: In-center patients who receive <7 hemodialysis treatments in the facility during the reporting month.

Measure Type: Process

sp.28. Data Source:

Electronic Health Data

Other

sp.07. Level of Analysis:

Facility

IF Endorsement Maintenance – Original Endorsement Date: 2017-01-26 02:35 PM

Most Recent Endorsement Date: 1/26/2017 2:35:12 PM

IF this measure is included in a composite, NQF Composite#/title:

IF this measure is paired/grouped, NQF#/title:

sp.03. IF PAIRED/GROUPED, what is the reason this measure must be reported with other measures to appropriately interpret results?:

1. Importance to Measure and Report

Extent to which the specific measure focus is evidence-based, important to making significant gains in healthcare quality, and improving health outcomes for a specific high-priority (high-impact) aspect of healthcare where there is variation in or overall less-than-optimal performance. Measures must be judged to meet all sub criteria to pass this criterion and be evaluated against the remaining criteria

1ma.01. Indicate whether there is new evidence about the measure since the most recent maintenance evaluation. If yes, please briefly summarize the new evidence, and ensure you have updated entries in the Evidence section as needed.

[Response Begins]

[Response Ends]

Please separate added or updated information from the most recent measure evaluation within each question response in the Importance to Measure and Report: Evidence section. For example:

Current Submission:

Updated evidence information here.

Previous (Year) Submission:

Evidence from the previous submission here.

1a.01. Provide a logic model.

Briefly describe the steps between the healthcare structures and processes (e.g., interventions, or services) and the patient's health outcome(s). The relationships in the diagram should be easily understood by general, non-technical audiences. Indicate the structure, process or outcome being measured.

[Response Begins]

[Response Ends]

1a.02. Select the type of source for the systematic review of the body of evidence that supports the performance measure.

A systematic review is a scientific investigation that focuses on a specific question and uses explicit, prespecified scientific methods to identify, select, assess, and summarize the findings of similar but separate studies. It may include a quantitative synthesis (meta-analysis), depending on the available data.

[Response Begins]

[Response Ends]

If the evidence is not based on a systematic review, skip to the end of the section and do not complete the repeatable question group below. If you wish to include more than one systematic review, add additional tables by clicking "Add" after the final question in the group.

Evidence - Systematic Reviews Table (Repeatable)

Group 1 - Evidence - Systematic Reviews Table

1a.03. Provide the title, author, date, citation (including page number) and URL for the systematic review.

[Response Begins]

[Response Ends]

1a.04. Quote the guideline or recommendation verbatim about the process, structure or intermediate outcome being measured. If not a guideline, summarize the conclusions from the systematic review.

[Response Begins]

[Response Ends]

1a.05. Provide the grade assigned to the evidence associated with the recommendation, and include the definition of the grade.

[Response Begins]

[Response Ends]

1a.06. Provide all other grades and definitions from the evidence grading system.

[Response Begins]

[Response Ends]

1a.07. Provide the grade assigned to the recommendation, with definition of the grade.

[Response Begins]

[Response Ends]

1a.08. Provide all other grades and definitions from the recommendation grading system.

[Response Begins]

[Response Ends]

1a.09. Detail the quantity (how many studies) and quality (the type of studies) of the evidence.

[Response Begins]

[Response Ends]

1a.10. Provide the estimates of benefit, and consistency across studies.

[Response Begins]

[Response Ends]

1a.11. Indicate what, if any, harms were identified in the study.

[Response Begins]

[Response Ends]

1a.12. Identify any new studies conducted since the systematic review, and indicate whether the new studies change the conclusions from the systematic review.

[Response Begins]

[Response Ends]

1a.13. If source of evidence is NOT from a clinical practice guideline, USPSTF, or systematic review, describe the evidence on which you are basing the performance measure.

[Response Begins]

[Response Ends]

1a.14. Briefly synthesize the evidence that supports the measure.

[Response Begins]

[Response Ends]

1a.15. Detail the process used to identify the evidence.

[Response Begins]

[Response Ends]

1a.16. Provide the citation(s) for the evidence.

[Response Begins]

[Response Ends]

1b.01. Briefly explain the rationale for this measure.

Explain how the measure will improve the quality of care, and list the benefits or improvements in quality envisioned by use of this measure.

[Response Begins]

Medication management is a critical safety issue for all patients, but especially so for patients with ESRD, who often require 10 or more medications and take an average of 17-25 doses per day, have numerous comorbid conditions, have multiple healthcare providers and prescribers, and undergo frequent medication regimen changes(1,2,3,4). Medication-related problems (MRPs) contribute significantly to the approximately \$40 billion in public and private funds spent annually on ESRD care in the United States(5,6), and it is believed that medication management practices focusing on medication documentation, review, and reconciliation could systematically identify and resolve MRPs, improve ESRD patient outcomes, and reduce total costs of care. As most hemodialysis patients are seen at least thrice weekly and peritoneal dialysis patients monthly, the dialysis facility has been suggested as a reasonable locale for medication therapy management(7).

[Response Ends]

1b.02. Provide performance scores on the measure as specified (current and over time) at the specified level of analysis.

Include mean, std dev, min, max, interquartile range, and scores by decile. Describe the data source including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities include. This information also will be used to address the sub-criterion on improvement (4b) under Usability and Use.

[Response Begins]

Medication Reconciliation for Patients Receiving Care at Dialysis Facilities is new measure that is not yet in use, so performance scores over time are not available. However, the measure was tested using data from three KCQA member dialysis organizations, each with the capacity to provide retrospective analyses from a data warehouse/repository. All pertinent data from all eligible (i.e., adult and pediatric in-center and home hemodialysis and peritoneal dialysis) patients of the participating organizations during the testing period were included in the dataset. The number of patients and contributing facilities varied by month, but approximately 325,000 patients and 5,292 facilities across the three organizations were included in each of the six months of the study. The study was conducted on data from April 1-September 30, 2015.

Performance scores obtained during testing are as follows:

- Mean Performance Score = 52.62%
- Standard Deviation = 32.83
- Standard Error = 0.197
- 95% Confidence Interval = 52.24 to 53.01
- Median Score = 48.18
- Mode of Scores = 100
- Range of Scores = 0 to 100
- Interquartile Range = 27.59 to 87.62

Results show a significant spread between both the minimum and maximum scores, as well as the median and minimum and maximum scores, indicating there is significant room for improvement in this aspect of care and that the measure identifies clinically and practically meaningful differences in performance among the measured entities.

[Response Ends]

1b.03. If no or limited performance data on the measure as specified is reported above, then provide a summary of data from the literature that indicates opportunity for improvement or overall less than optimal performance on the specific focus of measurement. Include citations.

[Response Begins]

Testing data are presented in 1b.2. Contemporary literature supports our findings documenting variations in performance and room for improvement in medication management practices in dialysis facilities.

As previously noted, ESRD patients often are prescribed 10 or more medications, have multiple comorbidities and numerous healthcare providers, and undergo frequent medication regimen changes, putting them at high risk for medication errors, discrepancies, and other medication-related problems (MRPs)(1,2,3,4). While there is a paucity of peer-reviewed empirical studies addressing medication management specifically in dialysis facilities, those that have been published provide convincing evidence for the need for increased focus in this area.

One small prospective observational study (2003) in a single outpatient hemodialysis center identified discrepancies in 60% of participating patients' home medications lists when compared to those documented in the dialysis facility medical record(8). A 2009 randomized controlled trial demonstrated an association between increased focus on medication management in dialysis facilities and the identification of real and potential MRPs, as well as a decrease in the numbers of drugs taken by ESRD patients and a reduction in all-cause hospitalization rates and hospital lengths-of-stay(1,9,10). Likewise, the Identifying Best Practices in Dialysis (IBPiD) Study, a cross-sectional staff survey of three dialysis organizations comparing the perceived quality of patient-, provider-, and facility-level practices with Standardized Mortality Ratio (SMR) scores from U.S. Renal Data Service (USRDS) facility reports, found units with lower-than-expected mortality rates convene multidisciplinary conferences sooner after

dialysis patients return to the facility after hospitalization and perform medication reconciliation more frequently than high-mortality units(11).

[Response Ends]

1b.04. Provide disparities data from the measure as specified (current and over time) by population group, e.g., by race/ethnicity, gender, age, insurance status, socioeconomic status, and/or disability.

Describe the data source including number of measured entities; number of patients; dates of data; if a sample, characteristics of the entities included. Include mean, std dev, min, max, interquartile range, and scores by decile. For measures that show high levels of performance, i.e., “topped out”, disparities data may demonstrate an opportunity for improvement/gap in care for certain sub-populations. This information also will be used to address the sub-criterion on improvement (4b) under Usability and Use.

[Response Begins]

Not applicable—new measure; not yet in use.

[Response Ends]

1b.05. If no or limited data on disparities from the measure as specified is reported above, then provide a summary of data from the literature that addresses disparities in care on the specific focus of measurement. Include citations. Not necessary if performance data provided in above.

[Response Begins]

Again, empirical studies addressing medication management remain limited, and those focusing on dialysis patients or on sociodemographic discrepancies even more so. Two publications tangentially addressing such disparities among population groups were identified; only one was specific to the dialysis setting. Specifically, the previously mentioned 2003 observational study by Manley et al. reported a negative correlation between age and the number of drug record discrepancies identified ($r = -0.27$, $p = 0.04$) in hemodialysis patients(8). The authors noted this was a reversal from what had previously been reported in medication adherence studies(14,15), and speculated sample size, follow-up period, or random phenomenon might apply. The other publication reported findings from a small 2014 Duquesne University study at an urban indigent primary care clinic, wherein medication discrepancies were more likely to persist in Caucasian subjects when compared to African Americans, despite pharmacist-led medication reconciliation. The authors theorized this finding might stem from variations in providers’ communication styles with the two patient groups, but noted additional investigations in this area are needed(13).

[Response Ends]

2. Scientific Acceptability of Measure Properties

Extent to which the measure, as specified, produces consistent (reliable) and credible (valid) results about the quality of care when implemented. Measures must be judged to meet the sub criteria for both reliability and validity to pass this criterion and be evaluated against the remaining criteria.

spma.01. Indicate whether there are changes to the specifications since the last updates/submission. If yes, update the specifications in the Measure Specifications section of the Measure Submission Form, and explain your reasoning for the changes below.

[Response Begins]

No

[Response Ends]

spma.02. Briefly describe any important changes to the measure specifications since the last measure update and provide a rationale.

For annual updates, please explain how the change in specifications affects the measure results. If a material change in specification is identified, data from re-testing of the measure with the new specifications is required for early maintenance review.

For example, specifications may have been updated based on suggestions from a previous NQF CDP review.

[Response Begins]

There have been no changes to the measure since endorsement.

[Response Ends]

sp.01. Provide the measure title.

Measure titles should be concise yet convey who and what is being measured (see [What Good Looks Like](#)).

[Response Begins]

Medication Reconciliation for Patients Receiving Care at Dialysis Facilities

[Response Ends]

sp.02. Provide a brief description of the measure.

Including type of score, measure focus, target population, timeframe, (e.g., Percentage of adult patients aged 18-75 years receiving one or more HbA1c tests per year).

[Response Begins]

Percentage of patient-months for which medication reconciliation* was performed and documented by an eligible professional.**

* "Medication reconciliation" is defined as the process of creating the most accurate list of all home medications that the patient is taking, including name, indication, dosage, frequency, and route, by comparing the most recent medication list in the dialysis medical record to one or more external list(s) of medications obtained from a patient or caregiver (including patient-/caregiver-provided "brown bag" information), pharmacotherapy information network (e.g., Surescripts), hospital, or other provider.

** For the purposes of medication reconciliation, “eligible professional” is defined as: physician, RN, ARNP, PA, pharmacist, or pharmacy technician.

[Response Ends]

sp.04. Check all the clinical condition/topic areas that apply to your measure, below.

Please refrain from selecting the following answer option(s). We are in the process of phasing out these answer options and request that you instead select one of the other answer options as they apply to your measure.

Please do not select:

- *Surgery: General*

[Response Begins]

Renal

Renal: End Stage Renal Disease (ESRD)

[Response Ends]

sp.05. Check all the non-condition specific measure domain areas that apply to your measure, below.

[Response Begins]

Care Coordination

Safety

Safety: Medication

[Response Ends]

sp.06. Select one or more target population categories.

Select only those target populations which can be stratified in the reporting of the measure's result.

Please refrain from selecting the following answer option(s). We are in the process of phasing out these answer options and request that you instead select one of the other answer options as they apply to your measure.

Please do not select:

- *Populations at Risk: Populations at Risk*

[Response Begins]

[Response Ends]

sp.07. Select the levels of analysis that apply to your measure.

Check ONLY the levels of analysis for which the measure is SPECIFIED and TESTED.

Please refrain from selecting the following answer option(s). We are in the process of phasing out these answer options and request that you instead select one of the other answer options as they apply to your measure.

Please do not select:

- *Clinician: Clinician*
- *Population: Population*

[Response Begins]

Facility

[Response Ends]

sp.08. Indicate the care settings that apply to your measure.

Check ONLY the settings for which the measure is SPECIFIED and TESTED.

[Response Begins]

Post-Acute Care

[Response Ends]

sp.09. Provide a URL link to a web page specific for this measure that contains current detailed specifications including code lists, risk model details, and supplemental materials.

Do not enter a URL linking to a home page or to general information. If no URL is available, indicate "none available".

[Response Begins]

<http://kidneycarepartners.com/kidney-care-quality-alliance-kcqa/>

[Response Ends]

sp.12. Attach the data dictionary, code table, or value sets (and risk model codes and coefficients when applicable). Excel formats (.xlsx or .csv) are preferred.

Attach an excel or csv file; if this poses an issue, [contact staff](#). Provide descriptors for any codes. Use one file with multiple worksheets, if needed.

[Response Begins]

No data dictionary/code table – all information provided in the submission form

[Response Ends]

sp.13. State the numerator.

Brief, narrative description of the measure focus or what is being measured about the target population, i.e., cases from the target population with the target process, condition, event, or outcome).

DO NOT include the rationale for the measure.

[Response Begins]

Number of patient-months for which medication reconciliation was performed and documented by an eligible professional during the reporting period.

The medication reconciliation MUST:

- Include the name or other unique identifier of the eligible professional;

AND

- Include the date of the reconciliation;

AND

- Address ALL known home medications (prescriptions, over-the-counters, herbals, vitamin/mineral/dietary (nutritional) supplements, and medical marijuana);

AND

- Address for EACH home medication: Medication name(1), indication(2), dosage(2), frequency(2), route of administration(2), start and end date (if applicable)(2), discontinuation date (if applicable)(2), reason medication was stopped or discontinued (if applicable)(2), and identification of individual who authorized stoppage or discontinuation of medication (if applicable)(2);

AND

- List any allergies, intolerances, or adverse drug events experienced by the patient.

1. For patients in a clinical trial, it is acknowledged that it may be unknown as to whether the patient is receiving the therapeutic agent or a placebo.

2. “Unknown” is an acceptable response for this field.

[Response Ends]

sp.14. Provide details needed to calculate the numerator.

All information required to identify and calculate the cases from the target population with the target process, condition, event, or outcome such as definitions, time period for data collection, specific data collection items/responses, code/value sets.

Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at sp.11.

[Response Begins]

NUMERATOR STEP 1. For each patient meeting the denominator criteria in the given calculation month, identify all patients with each of the following three numerator criteria (a, b, and c) documented in the facility medical record to define the numerator for that month:

A. Facility attestation that during the calculation month:

1. The patient’s most recent medication list in the dialysis medical record was reconciled to one or more external list(s) of medications obtained from the patient/caregiver (including patient-/caregiver-provided “brown-bag” information), pharmacotherapy information network (e.g., Surescripts®), hospital, or other provider AND that ALL known medications (prescriptions, OTCs, herbals, vitamin/mineral/dietary [nutritional] supplements, and medical marijuana) were reconciled;

AND

2. ALL of the following items were addressed for EACH identified medication:

- a) Medication name;
- b) Indication (or “unknown”);
- c) Dosage (or “unknown”);

- d) Frequency (or “unknown”);
- e) Route of administration (or “unknown”);
- f) Start date (or “unknown”);
- g) End date, if applicable (or “unknown”);
- h) Discontinuation date, if applicable (or “unknown”);
- i) Reason medication was stopped or discontinued, if applicable (or “unknown”); and
- j) Identification of individual who authorized stoppage or discontinuation of medication, if applicable (or “unknown”);

AND

3. Allergies, intolerances, and adverse drug events were addressed and documented.

B. Date of the medication reconciliation.

C. Identity of eligible professional performing the medication reconciliation.

NUMERATOR STEP 2. Repeat “Numerator Step 1” for each month of the one-year reporting period to define the final numerator (patient-months).

[Response Ends]

sp.15. State the denominator.

Brief, narrative description of the target population being measured.

[Response Begins]

Total number of patient-months for all patients permanently assigned to a dialysis facility during the reporting period.

[Response Ends]

sp.16. Provide details needed to calculate the denominator.

All information required to identify and calculate the target population/denominator such as definitions, time period for data collection, specific data collection items/responses, code/value sets.

Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at sp.11.

[Response Begins]

DENOMINATOR STEP 1. Identify all in-center and home hemodialysis and peritoneal dialysis patients permanently assigned to the dialysis facility in the given calculation month.

DENOMINATOR STEP 2. For all patients included in the denominator in the given calculation month in “Denominator Step 1”, identify and remove all in-center hemodialysis patients who received < 7 dialysis treatments in the calculation month.

DENOMINATOR STEP 3. Repeat “Denominator Step 1” and “Denominator Step 2” for each month of the one-year reporting period.

[Response Ends]

sp.17. Describe the denominator exclusions.

Brief narrative description of exclusions from the target population.

[Response Begins]

In-center patients who receive <7 hemodialysis treatments in the facility during the reporting month.

[Response Ends]

sp.18. Provide details needed to calculate the denominator exclusions.

All information required to identify and calculate exclusions from the denominator such as definitions, time period for data collection, specific data collection items/responses, code/value sets – Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format at sp.11.

[Response Begins]

As detailed in “Denominator Step 2” above, transient patients, defined as in-center patients who receive <7 hemodialysis treatments in the facility during the reporting month, are excluded from the measure.

[Response Ends]

sp.19. Provide all information required to stratify the measure results, if necessary.

Include the stratification variables, definitions, specific data collection items/responses, code/value sets, and the risk-model covariates and coefficients for the clinically-adjusted version of the measure when appropriate. Note: lists of individual codes with descriptors that exceed 1 page should be provided in an Excel or csv file in required format in the Data Dictionary field.

[Response Begins]

Not applicable.

[Response Ends]

sp.20. Is this measure adjusted for socioeconomic status (SES)?

[Response Begins]

[Response Ends]

sp.21. Select the risk adjustment type.

Select type. Provide specifications for risk stratification and/or risk models in the Scientific Acceptability section.

[Response Begins]

No risk adjustment or risk stratification

[Response Ends]

sp.22. Select the most relevant type of score.

Attachment: If available, please provide a sample report.

[Response Begins]

Rate/proportion

[Response Ends]

sp.23. Select the appropriate interpretation of the measure score.

Classifies interpretation of score according to whether better quality or resource use is associated with a higher score, a lower score, a score falling within a defined interval, or a passing score

[Response Begins]

Better quality = Higher score

[Response Ends]

sp.24. Diagram or describe the calculation of the measure score as an ordered sequence of steps.

Identify the target population; exclusions; cases meeting the target process, condition, event, or outcome; time period of data, aggregating data; risk adjustment; etc.

[Response Begins]

Scores are calculated using the following algorithm. For each calculation month in the one-year reporting period:

1. IDENTIFY THE “RAW DENOMINATOR POPULATION”

Identify all in-center and home hemodialysis and peritoneal dialysis patients permanently assigned to the dialysis facility during the given calculation month.

2. REMOVE PATIENTS MEETING MEASURE EXCLUSION CRITERIA TO DEFINE THE “FINAL DENOMINATOR POPULATION” FOR THE CALCULATION MONTH

For all patients included in the denominator during the given calculation month in Step 1 above, identify and remove all in-center patients who received < 7 hemodialysis treatments during the given calculation month.

3. IDENTIFY THE “NUMERATOR POPULATION” FOR THE CALCULATION MONTH

For each patient remaining in the denominator during the given calculation month after Step 2, identify all patients with each of the following three numerator criteria (a, b, and c) documented in the facility medical record to define the numerator for that month:

A. Facility attestation that during the calculation month:

1. The patient’s most recent medication list in the dialysis medical record was reconciled to one or more external list(s) of medications obtained from the patient/caregiver (including patient-/caregiver-provided “brown-bag” information), pharmacotherapy information network (e.g., Surescripts®), hospital, or other provider AND that ALL known medications (prescriptions, OTCs, herbals, vitamin/mineral/dietary [nutritional] supplements, and medical marijuana) were reconciled;

AND

2. ALL of the following items were addressed for EACH identified medication:

- a) Medication name;
- b) Indication (or “unknown”);
- c) Dosage (or “unknown”);
- d) Frequency (or “unknown”);
- e) Route of administration (or “unknown”);
- f) Start date (or “unknown”);

- g) End date, if applicable (or “unknown”);
- h) Discontinuation date, if applicable (or “unknown”);
- i) Reason medication was stopped or discontinued, if applicable (or “unknown”); and
- j) Identification of individual who authorized stoppage or discontinuation of medication, if applicable (or “unknown”);

AND

3. Allergies, intolerances, and adverse drug events were addressed and documented.

B. Date of medication reconciliation.

C. Identity of eligible professional performing medication reconciliation.

4. CALCULATE THE PERFORMANCE SCORE FOR THE CALCULATION MONTH

Calculate the facility's performance score for the given calculation month as follows:

Month's Performance Score = Month's Final Numerator Population ÷ Month's Final Denominator Population

5. CALCULATE THE ANNUAL PERFORMANCE SCORE

Calculate the facility's annual performance score as follows:

Facility's Annual Performance Score = (Facility's Month 1 Score + Month 2 Score +..... + Month 12 Score) ÷ 12

[Response Ends]

sp.27. If measure testing is based on a sample, provide instructions for obtaining the sample and guidance on minimum sample size.

Examples of samples used for testing:

- *Testing may be conducted on a sample of the accountable entities (e.g., hospital, physician). The analytic unit specified for the particular measure (e.g., physician, hospital, home health agency) determines the sampling strategy for scientific acceptability testing.*
- *The sample should represent the variety of entities whose performance will be measured. The [2010 Measure Testing Task Force](#) recognized that the samples used for reliability and validity testing often have limited generalizability because measured entities volunteer to participate. Ideally, however, all types of entities whose performance will be measured should be included in reliability and validity testing.*
- *The sample should include adequate numbers of units of measurement and adequate numbers of patients to answer the specific reliability or validity question with the chosen statistical method.*
- *When possible, units of measurement and patients within units should be randomly selected.*

[Response Begins]

Not applicable.

[Response Ends]

sp.30. Select only the data sources for which the measure is specified.

[Response Begins]

Electronic Health Data

[Response Ends]

sp.31. Identify the specific data source or data collection instrument.

For example, provide the name of the database, clinical registry, collection instrument, etc., and describe how data are collected.

[Response Begins]

Dialysis facility medical record; intended for use by CMS in its CROWNWeb ESRD Clinical Data Repository.

[Response Ends]

sp.32. Provide the data collection instrument.

[Response Begins]

No data collection instrument provided

[Response Ends]

2ma.01. Indicate whether additional empirical reliability testing at the accountable entity level has been conducted. If yes, please provide results in the following section, Scientific Acceptability: Reliability - Testing. Include information on all testing conducted (prior testing as well as any new testing).

Please separate added or updated information from the most recent measure evaluation within each question response in the Scientific Acceptability sections. For example:

Current Submission:

Updated testing information here.

Previous Submission:

Testing from the previous submission here.

[Response Begins]

[Response Ends]

2ma.02. Indicate whether additional empirical validity testing at the accountable entity level has been conducted. If yes, please provide results in the following section, Scientific Acceptability: Validity - Testing. Include information on all testing conducted (prior testing as well as any new testing).

Please separate added or updated information from the most recent measure evaluation within each question response in the Scientific Acceptability sections. For example:

Current Submission:

Updated testing information here.

Previous Submission:

Testing from the previous submission here.

[Response Begins]

[Response Ends]

2ma.03. For outcome, patient-reported outcome, resource use, cost, and some process measures, risk adjustment/stratification may be conducted. Did you perform a risk adjustment or stratification analysis?

[Response Begins]

[Response Ends]

2ma.04. For maintenance measures in which risk adjustment/stratification has been performed, indicate whether additional risk adjustment testing has been conducted since the most recent maintenance evaluation. This may include updates to the risk adjustment analysis with additional clinical, demographic, and social risk factors.

Please update the Scientific Acceptability: Validity - Other Threats to Validity section.

Note: This section must be updated even if social risk factors are not included in the risk adjustment strategy.

[Response Begins]

[Response Ends]

Measure testing must demonstrate adequate reliability and validity in order to be recommended for endorsement. Testing may be conducted for data elements and/or the computed measure score. Testing information and results should be entered in the appropriate fields in the Scientific Acceptability sections of the Measure Submission Form.

- Measures must be tested for all the data sources and levels of analyses that are specified. If there is more than one set of data specifications or more than one level of analysis, contact NQF staff about how to present all the testing information in one form.
- All required sections must be completed.
- For composites with outcome and resource use measures, Questions 2b.23-2b.37 (Risk Adjustment) also must be completed.
- If specified for multiple data sources/sets of specifications (e.g., claims and EHRs), Questions 2b.11-2b.13 also must be completed.
- An appendix for supplemental materials may be submitted (see Question 1 in the Additional section), but there is no guarantee it will be reviewed.
- Contact NQF staff with any questions. Check for resources at the [Submitting Standards webpage](#).
- For information on the most updated guidance on how to address social risk factors variables and testing in this form refer to the release notes for the [2021 Measure Evaluation Criteria and Guidance](#).

Note: The information provided in this form is intended to aid the Standing Committee and other stakeholders in understanding to what degree the testing results for this measure meet NQF's evaluation criteria for testing.

2a. Reliability testing demonstrates the measure data elements are repeatable, producing the same results a high proportion of the time when assessed in the same population in the same time period and/or that the measure score is precise. For instrument-based measures (including PRO-PMs) and composite performance measures, reliability should be demonstrated for the computed performance score.

2b1. Validity testing demonstrates that the measure data elements are correct and/or the measure score correctly reflects the quality of care provided, adequately identifying differences in quality. For instrument based measures (including PRO-PMs) and composite performance measures, validity should be demonstrated for the computed performance score.

2b2. Exclusions are supported by the clinical evidence and are of sufficient frequency to warrant inclusion in the specifications of the measure;

AND

If patient preference (e.g., informed decision-making) is a basis for exclusion, there must be evidence that the exclusion impacts performance on the measure; in such cases, the measure must be specified so that the information about patient preference and the effect on the measure is transparent (e.g., numerator category computed separately, denominator exclusion category computed separately).

2b3. For outcome measures and other measures when indicated (e.g., resource use):

- an evidence-based risk-adjustment strategy (e.g., risk models, risk stratification) is specified; is based on patient factors (including clinical and social risk factors) that influence the measured outcome and are present at start of care; 14,15 and has demonstrated adequate discrimination and calibration

OR

- rationale/data support no risk adjustment/ stratification.

2b4. Data analysis of computed measure scores demonstrates that methods for scoring and analysis of the specified measure allow for identification of statistically significant and practically/clinically meaningful 16 differences in performance;

OR

there is evidence of overall less-than-optimal performance.

2b5. If multiple data sources/methods are specified, there is demonstration they produce comparable results.

2b6. Analyses identify the extent and distribution of missing data (or nonresponse) and demonstrate that performance results are not biased due to systematic missing data (or differences between responders and non-responders) and how the specified handling of missing data minimizes bias.

2c. For composite performance measures, empirical analyses support the composite construction approach and demonstrate that:

2c1. the component measures fit the quality construct and add value to the overall composite while achieving the related objective of parsimony to the extent possible; and

2c2. the aggregation and weighting rules are consistent with the quality construct and rationale while achieving the related objective of simplicity to the extent possible.

(if not conducted or results not adequate, justification must be submitted and accepted)

Definitions

Reliability testing applies to both the data elements and computed measure score. Examples of reliability testing for data elements include, but are not limited to: inter-rater/abstractor or intra-rater/abstractor studies; internal consistency for multi-item scales; test-retest for survey items. Reliability testing of the measure score addresses precision of measurement (e.g., signal-to-noise).

Validity testing applies to both the data elements and computed measure score. Validity testing of data elements typically analyzes agreement with another authoritative source of the same information. Examples of validity testing of the measure score include, but are not limited to: testing hypotheses that the measures scores indicate quality of care, e.g., measure scores are different for groups known to have differences in quality assessed by another valid quality measure or method; correlation of measure scores with another valid indicator of quality for the specific topic; or relationship to conceptually related measures (e.g., scores on process measures to scores on outcome measures). Face validity of the measure score as a quality indicator may be adequate if accomplished through a systematic and transparent process, by identified experts, and explicitly addresses whether performance scores resulting from the measure as specified can be used to distinguish good from poor quality. The degree of consensus and any areas of disagreement must be provided/discussed.

Examples of evidence that an exclusion distorts measure results include, but are not limited to: frequency of occurrence, variability of exclusions across providers, and sensitivity analyses with and without the exclusion.

Patient preference is not a clinical exception to eligibility and can be influenced by provider interventions.

Risk factors that influence outcomes should not be specified as exclusions.

With large enough sample sizes, small differences that are statistically significant may or may not be practically or clinically meaningful. The substantive question may be, for example, whether a statistically significant difference of one percentage point in the percentage of patients who received smoking cessation counseling (e.g., 74 percent v. 75 percent) is clinically meaningful; or whether a statistically significant difference of \$25 in cost for an episode of care (e.g., \$5,000 v. \$5,025) is practically meaningful. Measures with overall less-than-optimal performance may not demonstrate much variability across providers.

Please separate added or updated information from the most recent measure evaluation within each question response in the Scientific Acceptability sections. For example:

Current Submission:

Updated testing information here.

Previous (Year) Submission:

Testing from the previous submission here.

2a.01. Select only the data sources for which the measure is tested.

[Response Begins]

[Response Ends]

2a.02. If an existing dataset was used, identify the specific dataset.

The dataset used for testing must be consistent with the measure specifications for target population and healthcare entities being measured; e.g., Medicare Part A claims, Medicaid claims, other commercial insurance, nursing home MDS, home health OASIS, clinical registry).

[Response Begins]

[Response Ends]

2a.03. Provide the dates of the data used in testing.

Use the following format: "MM-DD-YYYY - MM-DD-YYYY"

[Response Begins]

[Response Ends]

2a.04. Select the levels of analysis for which the measure is tested.

Testing must be provided for all the levels specified and intended for measure implementation, e.g., individual clinician, hospital, health plan.

Please refrain from selecting the following answer option(s). We are in the process of phasing out these answer options and request that you instead select one of the other answer options as they apply to your measure.

Please do not select:

- *Clinician: Clinician*
- *Population: Population*

[Response Begins]

[Response Ends]

2a.05. List the measured entities included in the testing and analysis (by level of analysis and data source).

Identify the number and descriptive characteristics of measured entities included in the analysis (e.g., size, location, type); if a sample was used, describe how entities were selected for inclusion in the sample.

[Response Begins]

[Response Ends]

2a.06. Identify the number and descriptive characteristics of patients included in the analysis (e.g., age, sex, race, diagnosis), separated by level of analysis and data source; if a sample was used, describe how patients were selected for inclusion in the sample.

If there is a minimum case count used for testing, that minimum must be reflected in the specifications.

[Response Begins]

[Response Ends]

2a.07. If there are differences in the data or sample used for different aspects of testing (e.g., reliability, validity, exclusions, risk adjustment), identify how the data or sample are different for each aspect of testing.

[Response Begins]

[Response Ends]

2a.08. List the social risk factors that were available and analyzed.

For example, patient-reported data (e.g., income, education, language), proxy variables when social risk data are not collected from each patient (e.g. census tract), or patient community characteristics (e.g. percent vacant housing, crime rate) which do not have to be a proxy for patient-level data.

[Response Begins]

[Response Ends]

Note: If accuracy/correctness (validity) of data elements was empirically tested, separate reliability testing of data elements is not required – in 2a.09 check patient or encounter-level data; in 2a.010 enter “see validity testing section of data elements”; and enter “N/A” for 2a.11 and 2a.12.

2a.09. Select the level of reliability testing conducted.

Choose one or both levels.

[Response Begins]

[Response Ends]

2a.10. For each level of reliability testing checked above, describe the method of reliability testing and what it tests.

Describe the steps—do not just name a method; what type of error does it test; what statistical analysis was used.

[Response Begins]

[Response Ends]

2a.11. For each level of reliability testing checked above, what were the statistical results from reliability testing?

For example, provide the percent agreement and kappa for the critical data elements, or distribution of reliability statistics from a signal-to-noise analysis. For score-level reliability testing, when using a signal-to-noise analysis, more than just one overall statistic should be reported (i.e., to demonstrate variation in reliability across providers). If a particular method yields only one statistic, this should be explained. In addition, reporting of results stratified by sample size is preferred (pg. 18, [NQF Measure Evaluation Criteria](#)).

[Response Begins]

[Response Ends]

2a.12. Interpret the results, in terms of how they demonstrate reliability.

(In other words, what do the results mean and what are the norms for the test conducted?)

[Response Begins]

[Response Ends]

2b.01. Select the level of validity testing that was conducted.

[Response Begins]

[Response Ends]

2b.02. For each level of testing checked above, describe the method of validity testing and what it tests.

Describe the steps—do not just name a method; what was tested, e.g., accuracy of data elements compared to authoritative source, relationship to another measure as expected; what statistical analysis was used.

[Response Begins]

[Response Ends]

2b.03. Provide the statistical results from validity testing.

Examples may include correlations or t-test results.

[Response Begins]

[Response Ends]

2b.04. Provide your interpretation of the results in terms of demonstrating validity. (i.e., what do the results mean and what are the norms for the test conducted?)

[Response Begins]

[Response Ends]

2b.05. Describe the method for determining if statistically significant and clinically/practically meaningful differences in performance measure scores among the measured entities can be identified.

Describe the steps—do not just name a method; what statistical analysis was used? Do not just repeat the information provided in Importance to Measure and Report: Gap in Care/Disparities.

[Response Begins]

[Response Ends]

2b.06. Describe the statistical results from testing the ability to identify statistically significant and/or clinically/practically meaningful differences in performance measure scores across measured entities.

Examples may include number and percentage of entities with scores that were statistically significantly different from mean or some benchmark, different from expected; how was meaningful difference defined.

[Response Begins]

[Response Ends]

2b.07. Provide your interpretation of the results in terms of demonstrating the ability to identify statistically significant and/or clinically/practically meaningful differences in performance across measured entities.

In other words, what do the results mean in terms of statistical and meaningful differences?

[Response Begins]

[Response Ends]

2b.08. Describe the method of testing conducted to identify the extent and distribution of missing data (or non-response) and demonstrate that performance results are not biased due to systematic missing data (or differences between responders and non-responders). Include how the specified handling of missing data minimizes bias.

Describe the steps—do not just name a method; what statistical analysis was used.

[Response Begins]

[Response Ends]

2b.09. Provide the overall frequency of missing data, the distribution of missing data across providers, and the results from testing related to missing data.

For example, provide results of sensitivity analysis of the effect of various rules for missing data/non-response. If no empirical sensitivity analysis was conducted, identify the approaches for handling missing data that were considered and benefits and drawbacks of each).

[Response Begins]

[Response Ends]

2b.10. Provide your interpretation of the results, in terms of demonstrating that performance results are not biased due to systematic missing data (or differences between responders and non-responders), and how the specified handling of missing data minimizes bias.

In other words, what do the results mean in terms of supporting the selected approach for missing data and what are the norms for the test conducted; if no empirical analysis was conducted, justify the selected approach for missing data.

[Response Begins]

[Response Ends]

Note: This item is directed to measures that are risk-adjusted (with or without social risk factors) OR to measures with more than one set of specifications/instructions (e.g., one set of specifications for how to identify and compute the measure from medical record abstraction and a different set of specifications for claims or eQMs). It does not apply to measures that use more than one source of data in one set of specifications/instructions (e.g., claims data to identify the denominator and medical record abstraction for the numerator). Comparability is not required when comparing performance scores with and without social risk factors in the risk adjustment model. However, if comparability is not demonstrated for measures with more than one set of specifications/instructions, the different specifications (e.g., for medical records vs. claims) should be submitted as separate measures.

2b.11. Indicate whether there is more than one set of specifications for this measure.

[Response Begins]

[Response Ends]

2b.12. Describe the method of testing conducted to compare performance scores for the same entities across the different data sources/specifications.

Describe the steps—do not just name a method. Indicate what statistical analysis was used.

[Response Begins]

[Response Ends]

2b.13. Provide the statistical results from testing comparability of performance scores for the same entities when using different data sources/specifications.

Examples may include correlation, and/or rank order.

[Response Begins]

[Response Ends]

2b.14. Provide your interpretation of the results in terms of the differences in performance measure scores for the same entities across the different data sources/specifications.

In other words, what do the results mean and what are the norms for the test conducted.

[Response Begins]

[Response Ends]

2b.15. Indicate whether the measure uses exclusions.

[Response Begins]

[Response Ends]

2b.16. Describe the method of testing exclusions and what was tested.

Describe the steps—do not just name a method; what was tested, e.g., whether exclusions affect overall performance scores; what statistical analysis was used?

[Response Begins]

[Response Ends]

2b.17. Provide the statistical results from testing exclusions.

Include overall number and percentage of individuals excluded, frequency distribution of exclusions across measured entities, and impact on performance measure scores.

[Response Begins]

[Response Ends]

2b.18. Provide your interpretation of the results, in terms of demonstrating that exclusions are needed to prevent unfair distortion of performance results.

In other words, the value outweighs the burden of increased data collection and analysis. Note: If patient preference is an exclusion, the measure must be specified so that the effect on the performance score is transparent, e.g., scores with and without exclusion.

[Response Begins]

[Response Ends]

2b.19. Check all methods used to address risk factors.

[Response Begins]

[Response Ends]

2b.20. If using statistical risk models, provide detailed risk model specifications, including the risk model method, risk factors, risk factor data sources, coefficients, equations, codes with descriptors, and definitions.

[Response Begins]

[Response Ends]

2b.21. If an outcome or resource use measure is not risk-adjusted or stratified, provide rationale and analyses to demonstrate that controlling for differences in patient characteristics (i.e., case mix) is not needed to achieve fair comparisons across measured entities.

[Response Begins]

[Response Ends]

2b.22. Select all applicable resources and methods used to develop the conceptual model of how social risk impacts this outcome.

[Response Begins]

[Response Ends]

2b.23. Describe the conceptual and statistical methods and criteria used to test and select patient-level risk factors (e.g., clinical factors, social risk factors) used in the statistical risk model or for stratification by risk.

Please be sure to address the following: potential factors identified in the literature and/or expert panel; regression analysis; statistical significance of $p < 0.10$ or other statistical tests; correlation of x or higher. Patient factors should be present at the start of care, if applicable. Also discuss any "ordering" of risk factor inclusion; note whether social risk factors are added after all clinical factors. Discuss any considerations regarding data sources (e.g., availability, specificity).

[Response Begins]

[Response Ends]

2b.24. Detail the statistical results of the analyses used to test and select risk factors for inclusion in or exclusion from the risk model/stratification.

[Response Begins]

[Response Ends]

2b.25. Describe the analyses and interpretation resulting in the decision to select or not select social risk factors.

Examples may include prevalence of the factor across measured entities, availability of the data source, empirical association with the outcome, contribution of unique variation in the outcome, or assessment of between-unit effects and within-unit effects. Also describe the impact of adjusting for risk (or making no adjustment) on providers at high or low extremes of risk.

[Response Begins]

[Response Ends]

2b.26. Describe the method of testing/analysis used to develop and validate the adequacy of the statistical model or stratification approach (describe the steps—do not just name a method; what statistical analysis was

used). Provide the statistical results from testing the approach to control for differences in patient characteristics (i.e., case mix) below. If stratified ONLY, enter "N/A" for questions about the statistical risk model discrimination and calibration statistics.

Validation testing should be conducted in a data set that is separate from the one used to develop the model.

[Response Begins]

[Response Ends]

2b.27. Provide risk model discrimination statistics.

For example, provide c-statistics or R-squared values.

[Response Begins]

[Response Ends]

2b.28. Provide the statistical risk model calibration statistics (e.g., Hosmer-Lemeshow statistic).

[Response Begins]

[Response Ends]

2b.29. Provide the risk decile plots or calibration curves used in calibrating the statistical risk model.

The preferred file format is .png, but most image formats are acceptable.

[Response Begins]

[Response Ends]

2b.30. Provide the results of the risk stratification analysis.

[Response Begins]

[Response Ends]

2b.31. Provide your interpretation of the results, in terms of demonstrating adequacy of controlling for differences in patient characteristics (i.e., case mix).

In other words, what do the results mean and what are the norms for the test conducted?

[Response Begins]

[Response Ends]

2b.32. Describe any additional testing conducted to justify the risk adjustment approach used in specifying the measure.

Not required but would provide additional support of adequacy of the risk model, e.g., testing of risk model in another data set; sensitivity analysis for missing data; other methods that were assessed.

[Response Begins]

[Response Ends]

3. Feasibility

Extent to which the specifications including measure logic, require data that are readily available or could be captured without undue burden and can be implemented for performance measurement.

3.01. Check all methods below that are used to generate the data elements needed to compute the measure score.

[Response Begins]

[Response Ends]

3.02. Detail to what extent the specified data elements are available electronically in defined fields.

In other words, indicate whether data elements that are needed to compute the performance measure score are in defined, computer-readable fields.

[Response Begins]

ALL data elements are in defined fields in electronic health records (EHRs)

[Response Ends]

3.03. If ALL the data elements needed to compute the performance measure score are not from electronic sources, specify a credible, near-term path to electronic capture, OR provide a rationale for using data elements not from electronic sources.

[Response Begins]

[Response Ends]

3.04. Describe any efforts to develop an eCQM.

[Response Begins]

[Response Ends]

3.06. Describe difficulties (as a result of testing and/or operational use of the measure) regarding data collection, availability of data, missing data, timing and frequency of data collection, sampling, patient confidentiality, time and cost of data collection, other feasibility/implementation issues.

[Response Begins]

[Response Ends]

Consider implications for both individuals providing data (patients, service recipients, respondents) and those whose performance is being measured.

3.07. Detail any fees, licensing, or other requirements to use any aspect of the measure as specified (e.g., value/code set, risk model, programming code, algorithm),

Attach the fee schedule here, if applicable.

[Response Begins]

Not applicable.

[Response Ends]

4. Usability and Use

Extent to which potential audiences (e.g., consumers, purchasers, providers, policy makers) are using or could use performance results for both accountability and performance improvement to achieve the goal of high-quality, efficient healthcare for individuals or populations.

Extent to which intended audiences (e.g., consumers, purchasers, providers, policy makers) can understand the results of the measure and are likely to find them useful for decision making.

NQF-endorsed measures are expected to be used in at least one accountability application within 3 years and publicly reported within 6 years of initial endorsement, in addition to demonstrating performance improvement.

4a.01. Check all current uses. For each current use checked, please provide:

Name of program and sponsor

URL

Purpose

Geographic area and number and percentage of accountable entities and patients included

Level of measurement and setting

[Response Begins]

[Response Ends]

4a.02. Check all planned uses.

[Response Begins]

Public reporting

Payment Program

Quality Improvement with Benchmarking (external benchmarking to multiple organizations)

Quality Improvement (internal to the specific organization)

[Response Ends]

4a.03. If not currently publicly reported OR used in at least one other accountability application (e.g., payment program, certification, licensing), explain why the measure is not in use.

For example, do policies or actions of the developer/steward or accountable entities restrict access to performance results or block implementation?

[Response Begins]

This is a new measure undergoing initial endorsement assessment. The measure is not yet in use as specified; however, variants of the measure are currently in use by KCQA member dialysis organizations for internal quality improvement, prompting KCQA to develop this measure to standardize the specifications and definitions for accountability purposes.

[Response Ends]

4a.04. If not currently publicly reported OR used in at least one other accountability application, provide a credible plan for implementation within the expected timeframes: used in any accountability application within 3 years, and publicly reported within 6 years of initial endorsement.

A credible plan includes the specific program, purpose, intended audience, and timeline for implementing the measure within the specified timeframes. A plan for accountability applications addresses mechanisms for data aggregation and reporting.

[Response Begins]

The measure was developed for use by CMS for its accountability initiatives. We note the measure requires a number of data fields not currently available in the CROWNWeb ESRD clinical data repository, and would require a system update for implementation. As we have done for other KCQA measures, we intend to commence discussions with CMS in this regard, specifically to request that the measure be included in the Measures Under Consideration for Use in Federal Programs List submitted to NQF's Measure Applications Partnership (MAP) in an upcoming cycle and that a CROWNWeb System Change form be created to commence building the necessary data elements into the system.

[Response Ends]

4a.05. Describe how performance results, data, and assistance with interpretation have been provided to those being measured or other users during development or implementation.

Detail how many and which types of measured entities and/or others were included. If only a sample of measured entities were included, describe the full population and how the sample was selected.

[Response Begins]

KCQA is not a measure implementer and thus does not have access to current performance results on NQF 2988 and does not provide contemporaneous results, data, or assistance with interpretation to those being measured or other users. Moreover, the measure is not yet in use, so performance scores over time are not available to date. However, measure testing using data from three KCQA member large dialysis organizations in 2015 yielded a mean performance score of 52.62% (95% confidence interval 52.24—53.01%; range of scores 0-100%).

NQF 2988 was tested using data from three KCQA member large dialysis organizations, each with the capacity to provide retrospective analyses from a data warehouse/repository. All pertinent data from all eligible (i.e., adult and pediatric in-center and home hemodialysis and peritoneal dialysis) patients of the participating organizations during the testing period were included in the dataset. The number of patients and contributing facilities varied by month, but approximately 325,000 patients and 5,292 facilities across the three organizations were included in each of the six months of the study. The study was conducted on data from April 1—September 30, 2015.

[Response Ends]

4a.06. Describe the process for providing measure results, including when/how often results were provided, what data were provided, what educational/explanatory efforts were made, etc.

[Response Begins]

Not applicable; NQF 2988 is not yet in use. Additionally, as KCQA is not a measure implementer, we do not have access to current performance results and do not provide contemporaneous results, data, or assistance with interpretation to those being measured or other users.

[Response Ends]

4a.07. Summarize the feedback on measure performance and implementation from the measured entities and others. Describe how feedback was obtained.

[Response Begins]

KCQA is not a measure implementer and thus does not have access to current performance results and does not seek feedback on measure performance and implementation from measured entities. However, NQF 2988 was tested in 2015 using data from three KCQA member large dialysis organizations, each with the capacity to provide retrospective analyses from a data warehouse/repository. When developing the measure specifications and operationalizing the specifications for testing, it was noted that while all three participating dialysis organizations had identified and engage in the same three components of medication management—i.e., documentation, reconciliation, and review—one organization defined reconciliation and review in reverse to those detailed in the KCQA measure specifications. Specifically, “medication reconciliation” was defined within that organization as “the process of creating the most accurate list of all medications that the patient is taking by comparing the most recent medication list in the medical record to one or more external list(s) of medications obtained from a patient or caregiver,” while “medication review” was defined as “a process of evaluating a patient’s medications and confirming them as being appropriate, safe, and convenient for the patient; a review with the patient may be included.” Based on KCQA Workgroup member input and our outreach to the other two testing organizations and KCQA members, this appeared to be an outlier situation. Our final approach to the medication management definitions was ultimately agreed upon because the majority of dialysis organizations use this convention, as do hospitals, pharmacists, and the existing NQF/endorsed measures in the area.

Additionally, variations between the three participating dialysis organizations’ electronic medical record systems were identified. For example, a given data element (e.g., indication, start date, name of eligible professional) might not be present or might be available only as a free text field. It was further noted that this variability might be even greater in medium and small dialysis organizations. Given the variability among electronic systems and because some medications are prescribed by other entities for which “indication” may be unknown, for instance, it was determined that “unknown” must be an allowable response to many data elements so as to maintain the measure’s feasibility.

[Response Ends]

4a.08. Summarize the feedback obtained from those being measured.

[Response Begins]

As summarized in 4a2.2.1.

[Response Ends]

4a.09. Summarize the feedback obtained from other users.

[Response Begins]

Not applicable; the measure is not yet in use. However, the measure was developed for use by CMS for its accountability initiatives and was submitted by CMS during NQF’s 2017-2018 Measure Applications Partnership (MAP) cycle for consideration for use in the ESRD QIP. MAP supports use of the measure. We have been in contact with CMS about updating the CROWNWeb system to build the necessary data elements into the platform to allow for implementation of the measure in the ESRD QIP; discussions in this regard are ongoing.

[Response Ends]

4a.10. Describe how the feedback described has been considered when developing or revising the measure specifications or implementation, including whether the measure was modified and why or why not.

[Response Begins]

The feedback described in 4a2.2.1 was considered when finalizing the measure specifications. As noted, our final approach to the medication management definitions was ultimately agreed upon because the majority of dialysis organizations use this convention, as do hospitals, pharmacists, and the existing NQF/endorsed measures in the

area. Specifically, “medication reconciliation” was defined in NQF 2988 as “the process of creating the most accurate list of all home medications that the patient is taking by comparing the most recent medication list in the medical record to one or more external list(s) of medications obtained from a patient or caregiver or other provider.”

Additionally, because of variations in electronic medical record systems and because some medications are prescribed by entities outside the dialysis facility, “unknown” was included as an allowable response to many data elements in the final specifications so as to maintain the measure’s feasibility.

[Response Ends]

4b.01. You may refer to data provided in Importance to Measure and Report: Gap in Care/Disparities, but do not repeat here. Discuss any progress on improvement (trends in performance results, number and percentage of people receiving high-quality healthcare; Geographic area and number and percentage of accountable entities and patients included). If no improvement was demonstrated, provide an explanation. If not in use for performance improvement at the time of initial endorsement, provide a credible rationale that describes how the performance results could be used to further the goal of high-quality, efficient healthcare for individuals or populations.

[Response Begins]

The measure is new and is not yet in use. However, variants of the measure are currently in use by KCQA member dialysis organizations for internal quality improvement. Standardizing specifications and definitions for accountability purposes will improve and expedite identification and resolution of real and potential medication-related problems (MRPs) in ESRD patients. Associated hospitalization, readmissions, mortality, and health care costs should consequently be minimized.

[Response Ends]

4b.02. Explain any unexpected findings (positive or negative) during implementation of this measure, including unintended impacts on patients.

[Response Begins]

No unintended consequences were identified during testing.

[Response Ends]

4b.03. Explain any unexpected benefits realized from implementation of this measure.

[Response Begins]

[Response Ends]

5. Comparison to Related or Competing Measures

If a measure meets the above criteria and there are endorsed or new related measures (either the same measure focus or the same target population) or competing measures (both the same measure focus and the same target population), the measures are compared to address harmonization and/or selection of the best measure.

If you are updating a maintenance measure submission for the first time in MIMS, please note that the previous related and competing data appearing in question 5.03 may need to be entered in to 5.01 and 5.02, if the measures are NQF endorsed. Please review and update questions 5.01, 5.02, and 5.03 accordingly.

5.01. Search and select all NQF-endorsed related measures (conceptually, either same measure focus or target population).

(Can search and select measures.)

[Response Begins]

[Response Ends]

5.02. Search and select all NQF-endorsed competing measures (conceptually, the measures have both the same measure focus or target population).

(Can search and select measures.)

[Response Begins]

[Response Ends]

5.03. If there are related or competing measures to this measure, but they are not NQF-endorsed, please indicate the measure title and steward.

[Response Begins]

Not applicable.

[Response Ends]

5.04. If this measure conceptually addresses EITHER the same measure focus OR the same target population as NQF-endorsed measure(s), indicate whether the measure specifications are harmonized to the extent possible.

[Response Begins]

No

[Response Ends]

5.05. If the measure specifications are not completely harmonized, identify the differences, rationale, and impact on interpretability and data collection burden.

[Response Begins]

Medication Reconciliation for Patients Receiving Care at Dialysis Facilities is harmonized with existing NQF-endorsed medication reconciliation measures in that all similarly specify that the medication reconciliation must address ALL prescriptions, over-the-counters, herbals, vitamin/mineral/dietary (nutritional) supplements AND must contain the medications' name, dosage, frequency, and route. The KCQA measure, however, is unique among the currently endorsed medication reconciliation measures in that the level of analysis is the dialysis facility. The KCQA measure also moves beyond a single "check/box", specifying multiple components that must be met to be counted as a "success." It requires the following additional information on each medication, where applicable and known: indication, start and end date, discontinuation date, reason the medication was stopped or discontinued, and

identification of the individual who authorized stoppage or discontinuation of the medication. Additionally, given the increasing frequency with which medical marijuana is prescribed, the KCQA measure specifies that this pharmacotherapeutic agent must be addressed during the reconciliation. KCQA believes these additional foci are necessary to ensure the medication reconciliation process is as comprehensive as possible to better identify and effectively address potential sources of adverse drug-related events and not function merely as a single “check-box” measure. Testing demonstrated these data elements are effectively captured and recorded in facility’s electronic medical record systems during the routine medication reconciliation process.

[Response Ends]

5.06. Describe why this measure is superior to competing measures (e.g., a more valid or efficient way to measure quality). Alternatively, justify endorsing an additional measure.

Provide analyses when possible.

[Response Begins]

Not applicable; this medication management measure is unique in its specific focus on the ESRD population.

[Response Ends]

Appendix

Supplemental materials may be provided in an appendix.:

Contact Information

Measure Steward (Intellectual Property Owner): Kidney Care Quality Alliance

Measure Steward Point of Contact: , , lmcgon@msn.com

Measure Developer if different from Measure Steward: Kidney Care Quality Alliance

Measure Developer Point(s) of Contact: , , lmcgon@msn.com

Additional Information

1. Provide any supplemental materials, if needed, as an appendix. All supplemental materials (such as data collection instrument or methodology reports) should be collated one file with a table of contents or bookmarks. If material pertains to a specific criterion, that should be indicated.

[Response Begins]

[Response Ends]

2. List the workgroup/panel members' names and organizations.

Describe the members' role in measure development.

[Response Begins]

The KCQA Steering Committee guides the measure development process. Steering Committee members are:

- Edward Jones, MD; KCQA Co-Chair — Renal Physicians Association
- Allen Nissenson, MD; KCQA Co-Chair — DaVita
- Jason Spangler, MD, MPH — Amgen
- Donna Bednarski, RN, MSN — American Nephrology Nurses Association
- Barbara Fivush, MD — American Society of Pediatric Nephrology
- Raymond Hakim, MD, PhD — American Society of Nephrology
- Scott Ash, MHA — Fresenius Medical Care North America
- Chris Lovell, RN, MSN — Dialysis Clinics, Inc.
- Thomas Manley, RN, BSN — National Kidney Foundation
- Gail Wick, MHSA, BSN, RN — American Kidney Fund
- Shari M. Ling, MD, Chief Medical Officer, Centers for Medicare and Medicaid Services, Center for Clinical Standards and Quality (CCSQ) – CMS Liaison Member

The KCQA Measure Feasibility/Testing Workgroup provided technical expertise and guidance to develop the specifications. Workgroup members were:

- Richard Faris, PhD, MSc, RPh — DaVita
- James Guffey — Dialysis Patient Citizens
- Jeffrey Hymes, MD — Fresenius Medical Care North America
- Len Usvyat, PhD — Fresenius Medical Care Renal Therapies Group
- Harold Manley, PharmD, FASN, FCCP — Dialysis Clinics, Inc.
- Paul Miller, MD — Renal Physicians Association
- Donald Molony, MD — Forum of ESRD Networks
- Glenda Payne, MS, RN, CNN — American Nephrology Nurses Association
- Sharon Perlman, MD — American Society of Pediatric Nephrology
- Wendy St. Peter, PharmD, FASN, FCCP, FNKF — National Kidney Foundation
- Gail Wick, MHSA, BSN, RN; KCQA Steering Committee Liaison — American Kidney Fund

KCQA Lead (Voting) Representatives identify KCQA's measure development foci, review the Workgroup's output and testing results, and approve major milestones during the development of the process, including and assessment of the face validity of the measure and submission to NQF. KCQA Lead Representatives are:

- Michael Heffets, MD — AbbVie
- Qing Zuraw, MD, MBA — Akebia Therapeutics, Inc.
- Gail Wick, MHSA, BSN, RN — American Kidney Fund
- Glenda Payne, MS, RN, CNN — American Nephrology Nurses' Association
- Richard Cronin, MD — American Renal Associates, Inc.
- Raymond Hakim, MD, PhD — American Society of Nephrology
- Barbara Fivush, MD — American Society of Pediatric Nephrology

- Jason Spangler, MD, MPH — Amgen
- Maggie Gellens — Baxter Healthcare Corporation
- RJ Picciano — Board of Nephrology Examiners and Technology
- Peter DeOreo, MD — Centers for Dialysis Care
- LeAnne Zumwalt — DaVita Healthcare Partners, Inc.
- James Michael Guffey — Dialysis Patient Citizens
- Doug Johnson, MD — Dialysis Clinic, Inc.
- Jeffrey Hymes, MD — Fresenius Medical Care North America
- Robert Kossman, MD — Fresenius Medical Care Renal Therapies Group
- Jennifer Holcomb/William Poire — Greenfield Health Systems
- Thomas Nusbickel — Hospira
- Greg Madison — Keryx Biopharmaceuticals, Inc.
- Cherilyn Cepriano — Kidney Care Council
- Linda Keegan — Kidney Care Partners
- Donald Molony, MD/Andrew Howard, MD — The National Forum of ESRD Networks
- Tonya Saffer — National Kidney Foundation
- Deb Cote — National Renal Administrators Association
- Nancy Gallagher — Nephrology Nursing Certification Commission
- Tosha Whitley — Northwest Kidney Centers
- Leslie Spry, MD — NxStage Medical
- Paul Palevsky, MD — Renal Physicians Association
- Jonathan Lorch, MD — Rogosin Institute
- Sara Froelich — Sanofi
- Brigitte Schiller — Satellite Healthcare
- Stan Lindenfeld, MD — U.S. Renal Care

In addition to the assessment by KCQA Lead Representatives, KCQA conducted face validity assessment at the performance score level by convening a 9-member panel of other renal experts:

- Lorien Dalrymple, MD, MPH — University of California, Davis Health System
- Norma Gomez, MSN, MBA — Satellite Healthcare
- Hrant Jamgochian, JD, LLM — Dialysis Patient Citizens
- Charla Litton, FNP — People's Health Network
- Klemens Meyer, MD — Dialysis Clinic, Inc.
- Donna Painter, RN — Fresenius Medical Care North America
- Barry Smith, MD — Rogosin Institute
- Katherine Swanzy — DaVita Kidney Care
- Daniel Weiner, MD, MS — Tufts Medical Center

[Response Ends]

3. Indicate the year the measure was first released.

[Response Begins]

[Response Ends]

4. Indicate the month and year of the most recent revision.

[Response Begins]

[Response Ends]

5. Indicate the frequency of review, or an update schedule, for this measure.

[Response Begins]

Annually, and as needed with changes or additions to the evidence base.

[Response Ends]

6. Indicate the next scheduled update or review of this measure.

[Response Begins]

[Response Ends]

7. Provide a copyright statement, if applicable. Otherwise, indicate "N/A".

[Response Begins]

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[Response Ends]

8. State any disclaimers, if applicable. Otherwise, indicate "N/A".

[Response Begins]

Dialysis facility performance measures (Measures) and related data specifications, developed by the Kidney Care Quality Alliance (KCQA), primarily funded by Kidney Care Partners, are intended to facilitate quality improvement activities by dialysis providers.

These Measures are intended to assist dialysis facilities in enhancing quality of care. Measures are designed for use by any dialysis facility. These performance Measures are not clinical guidelines and do not establish a standard of medical care. KCQA has not tested its Measures for all potential applications. KCQA encourages the evaluation of its Measures.

Measures are subject to review and may be revised or rescinded at any time by KCQA. The Measures may not be altered without the prior written approval of KCQA. Measures developed by KCQA, while copyrighted, can be reproduced and distributed, without modification, for noncommercial purposes, e.g., use by dialysis providers in connection with their care delivery or for research. Commercial use is defined as the sale, license, or distribution of the Measures for commercial gain, or incorporation of the Measures into a product or service that is sold, licensed or distributed for commercial gain. Commercial uses of the Measures require a license agreement between the user and Kidney Care Partners, on behalf of KCQA.

Neither KCQA nor its members shall be responsible for any use of these Measures.

THE MEASURES ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND.

[Response Ends]

9. Provide any additional information or comments, if applicable. Otherwise, indicate "N/A".

[Response Begins]

[Response Ends]