



## 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 subcriterion 1b).

### Brief Measure Information

**NQF #:** 0323

**De.2. Measure Title:** Adult Kidney Disease: Hemodialysis Adequacy: Solute

**Co.1.1. Measure Steward:** Renal Physicians Association

**De.3. Brief Description of Measure:** Percentage of calendar months within a 12-month period during which patients aged 18 years and older with a diagnosis of End Stage Renal Disease (ESRD) receiving hemodialysis three times a week for  $\geq 90$  days have a  $\text{spKt/V} \geq 1.2$

**1b.1. Developer Rationale:** Adequate dialysis dose ( $\text{Kt/V} > \text{or} = 1.2$ ), is strongly associated with better outcomes, including decreased mortality, fewer hospitalizations, decreased length of hospitalizations, and decreased hospital costs.(1,2)

1. Plantinga LC, Fink NE, Jaar BG, et al. Attainment of clinical performance targets and improvement in clinical outcomes and resource use in hemodialysis care: a prospective cohort study. BMC Health Serv Res. 2007 Jan 9;7:5.  
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1783649/pdf/1472-6963-7-5.pdf>. Accessed April 27, 2011.

2. Sehgal AR, Dor A, Tsai AC: Morbidity and cost implications of inadequate hemodialysis. Am J Kidney Dis 37:1223-1231, 2001

**S.4. Numerator Statement:** Calendar months during which patients have a  $\text{spKt/V} \geq 1.2$

**S.7. Denominator Statement:** All calendar months during which patients aged 18 years and older with a diagnosis of ESRD are receiving hemodialysis three times a week for  $\geq 90$  days

**S.10. Denominator Exclusions:** There are no denominator exceptions.

**De.1. Measure Type:** Outcome

**S.23. Data Source:** Administrative claims, Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Electronic Clinical Data : Registry

**S.26. Level of Analysis:** Clinician : Group/Practice, Clinician : Individual, Clinician : Team

**IF Endorsement Maintenance – Original Endorsement Date:** Nov 15, 2007 **Most Recent Endorsement Date:** Oct 02, 2015

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

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

**De.4. IF PAIRED/GROUPED, what is the reason this measure must be reported with other measures to appropriately interpret results?** This measure is not a composite or paired measure.

### 1. Evidence, Performance Gap, Priority – 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 subcriteria to pass this criterion and be evaluated against the remaining criteria.**

**1a. Evidence to Support the Measure Focus – See attached Evidence Submission Form**

[MeasSubm\\_Evidence\\_0323-\\_update.docx](#)

### 1b. Performance Gap

Demonstration of quality problems and opportunity for improvement, i.e., data demonstrating:

- considerable variation, or overall less-than-optimal performance, in the quality of care across providers; and/or
- disparities in care across population groups.

#### 1b.1. Briefly explain the rationale for this measure (e.g., the benefits or improvements in quality envisioned by use of this measure)

Adequate dialysis dose ( $Kt/V > \text{or} = 1.2$ ), is strongly associated with better outcomes, including decreased mortality, fewer hospitalizations, decreased length of hospitalizations, and decreased hospital costs.(1,2)

1. Plantinga LC, Fink NE, Jaar BG, et al. Attainment of clinical performance targets and improvement in clinical outcomes and resource use in hemodialysis care: a prospective cohort study. BMC Health Serv Res. 2007 Jan 9;7:5.

<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1783649/pdf/1472-6963-7-5.pdf>. Accessed April 27, 2011.

2. Sehgal AR, Dor A, Tsai AC: Morbidity and cost implications of inadequate hemodialysis. Am J Kidney Dis 37:1223-1231, 2001

#### 1b.2. Provide performance scores on the measure as specified (current and over time) at the specified level of analysis. (This is required for endorsement maintenance. Include mean, std dev, min, max, interquartile range, 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 included). This information also will be used to address the subcriterion on improvement (4b.1) under Usability and Use.

Data show that the quality of some aspects of dialysis care has remained high. The percentage of patients receiving adequate hemodialysis with a mean delivered  $spKt/V = 1.2$  increased from 85% in 1998 to 94% in 2008. In 2007, 95% of female patients and 89% of male patients received adequate hemodialysis.(1)

This measure was used in the CMS Physician Quality Reporting Initiative (PQRI), in the 2008 claims option and the Registry option starting in 2009. The measure is in use in the CMS Physician Quality Reporting System for 2015.(2)

There is a gap in care as shown by this 2008 data; 41.36 % of patients reported on did not receive the optimal care.

10th percentile: 7.80%

25th percentile: 29.77 %

50th percentile: 60.00 %

75th percentile: 79.29 %

90th percentile: 91.30%

#### 1b.3. If no or limited performance data on the measure as specified is reported in 1b2, 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.

1. 2008 Annual Report, End Stage Renal Disease Clinical Performance Measures Project. Department of Health and Human Services, Centers for Medicare & Medicaid Services, Office of Clinical Standards & Quality, Baltimore, Maryland, December 2008.

2. Confidential CMS PQRI 2008 Performance Information by Measure (PQRI Measure #81). Jan-Sept TAP file.

#### 1b.4. 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. (This is required for endorsement maintenance. 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 subcriterion on improvement (4b.1) under Usability and Use.

1. Racial differences in the quality of dialysis care have been observed. In 1994, data from the core indicator project conducted by the Center of Medical and Medicaid Services (CMS) showed that 60% of African Americans on dialysis received an "inadequate" dose of dialysis (as defined by process, not outcome measures). Although evidence suggests that this percentage has decreased over time, in 1997 African Americans still had a 20% chance of receiving inadequate dialysis.

2. The proportion of all patients with an adequate hemodialysis dose increased 2-fold from 43% in 1993 to 86% in 2000. In 1993, 46% of white patients and 36% of black patients received an adequate dose. Corresponding figures for 2000 were 87% and 84%, respectively. Thus, the gap between white and black patients decreased from 10% to 3%. In 1993, 54% of female patients and 31% of male patients received an adequate hemodialysis dose. Corresponding figures for 2000 were 91% and 82%, respectively. Thus, the gap between female and male patients decreased from 23% to 9%. In addition, the magnitude of gaps between whites and

blacks and between women and men varied by region. Eleven regions had race gaps of 4% or less. However, no region had similarly small sex gaps.

**1b.5. If no or limited data on disparities from the measure as specified is reported in 1b4, then provide a summary of data from the literature that addresses disparities in care on the specific focus of measurement. Include citations.**

1. Powe NR. To have and have not: Health and health care disparities in chronic kidney disease. Johns Hopkins University School of Medicine, Baltimore, Maryland, USA, *Kidney International*, Vol. 64 (2003), pp. 763–772

2. Sehgal AR. Impact of Quality Improvement Efforts on Race and Sex Disparities in Hemodialysis. *JAMA*, February 26, 2003-Vol 289, No. 8.

**1c. High Priority** (previously referred to as High Impact)

The measure addresses:

- a specific national health goal/priority identified by DHHS or the National Priorities Partnership convened by NQF; OR
- a demonstrated high-priority (high-impact) aspect of healthcare (e.g., affects large numbers of patients and/or has a substantial impact for a smaller population; leading cause of morbidity/mortality; high resource use (current and/or future); severity of illness; and severity of patient/societal consequences of poor quality).

**1c.1. Demonstrated high priority aspect of healthcare**

Affects large numbers, A leading cause of morbidity/mortality, Frequently performed procedure, High resource use, Patient/societal consequences of poor quality, Severity of illness

**1c.2. If Other:**

**1c.3. Provide epidemiologic or resource use data that demonstrates the measure addresses a high priority aspect of healthcare.**

**List citations in 1c.4.**

Chronic kidney disease (CKD), affects approximately 13.1% of United States adults and leads to end-stage renal disease (ESRD), cardiovascular disease (CVD), and premature death. (1)

CKD affects up to 5% of the population and 25% of those aged 70 years or older. An additional 6% of the population has signs of kidney damage, which may progress to ESRD. (2)

CKD is not recognized as a major public health concern. It is estimated that approximately 26.3 million adults in the U.S. have non-dialysis dependent kidney disease and over 470,000 have ESRD, collectively representing over 13% of the US population. In the next 20 years, the burden of CKD is expected to increase, with over 2 million individuals projected to be receiving renal replacement therapy (dialysis or kidney transplant) by 2030. (3)

Costs for CKD patients are now 23 percent of Medicare expenditures in the fee-for-service sector; when added to costs for ESRD patients, it appears that 31 percent of all Medicare expenditures are incurred by patients with a diagnosis of kidney disease. (4)

The CPM Project report is a summary of a national survey of the quality of care of randomly sampled ESRD patients from each Network, and it is the starting point for Network quality improvement activity. The first CPM report in 1994 found that 43% of all hemodialysis patients nationally and 32% of patients in Network 6 were adequately dialyzed.(5)

**1c.4. Citations for data demonstrating high priority provided in 1a.3**

1. Snyder JJ, Collins AJ. Association of Preventive Health Care with Atherosclerotic Heart Disease and Mortality in CKD. *J Am Soc Nephrol*. 2009 July; 20(7): 1614–1622.

2. Alves TP, Lewis J. Racial differences in chronic kidney disease (CKD) and end-stage renal disease (ESRD) in the United States: a social and economic dilemma. *Clinical Nephrology*. 2010;74(1):S72-S77.

3. Choi AI, Rodriguez RA, Bacchetti P, Bertenthal D, et al. White/Black Racial Differences in Risk of End-Stage Renal Disease and Death. *Am J Med*. 2009 July;122(7):672-678.

4. 1. US Renal Data System, *USRDS 2010 Annual Data Report: Atlas of Chronic Kidney Disease and End-Stage Renal Disease in the*

United States, National Institutes of Health, National Institute of Diabetes and Digestive and Kidney Diseases, Bethesda, MD, 2010.

5. McClellan WM, Hodgin E, Pastan S, McAdams L, Soucie M. A Randomized Evaluation of Two Health Care Quality Improvement Program (HCQIP) Interventions to Improve the Adequacy of Hemodialysis Care of ESRD Patients: Feedback Alone versus Intensive Intervention. J Am Soc Nephrol 15:754-760, 2004

**1c.5. If a PRO-PM (e.g. HRQoL/functional status, symptom/burden, experience with care, health-related behaviors), provide evidence that the target population values the measured PRO and finds it meaningful. (Describe how and from whom their input was obtained.)**

## 2. Reliability and Validity—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 subcriteria for both reliability and validity to pass this criterion and be evaluated against the remaining criteria.**

**2a.1. Specifications** The measure is well defined and precisely specified so it can be implemented consistently within and across organizations and allows for comparability. eMeasures should be specified in the Health Quality Measures Format (HQMF) and the Quality Data Model (QDM).

**De.5. Subject/Topic Area** (check all the areas that apply):

Renal, Renal : End Stage Renal Disease (ESRD)

**De.6. Cross Cutting Areas** (check all the areas that apply):

Safety, Safety : Complications

**S.1. Measure-specific Web Page** (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.)

<http://www.ama-assn.org/apps/listserv/x-check/qmeasure.cgi?submit=PCPI>

**S.2a. If this is an eMeasure**, HQMF specifications must be attached. Attach the zipped output from the eMeasure authoring tool (MAT) - if the MAT was not used, contact staff. (Use the specification fields in this online form for the plain-language description of the specifications)

**This is not an eMeasure Attachment:**

**S.2b. Data Dictionary, Code Table, or Value Sets** (and risk model codes and coefficients when applicable) must be attached. (Excel or csv file in the suggested format preferred - if not, contact staff)

**Attachment Attachment:** [AMA-PCPI\\_AKID-10\\_HDAdequacy\\_11.8.2011-635289365199063523.pdf](#)

**S.3. For endorsement maintenance**, please briefly describe any changes to the measure specifications since last endorsement date and explain the reasons.

**S.4. Numerator Statement** (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)

**IF an OUTCOME MEASURE**, state the outcome being measured. Calculation of the risk-adjusted outcome should be described in the calculation algorithm.

[Calendar months during which patients have a spKt/V >= 1.2](#)

**S.5. Time Period for Data** (What is the time period in which data will be aggregated for the measure, e.g., 12 mo, 3 years, look back to August for flu vaccination? Note if there are different time periods for the numerator and denominator.)

[Each calendar month within 12 consecutive month measurement period](#)

**S.6. Numerator Details** (All information required to identify and calculate the cases from the target population with the target process, condition, event, or outcome such as definitions, 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 S.2b)*  
*IF an OUTCOME MEASURE, describe how the observed outcome is identified/counted. Calculation of the risk-adjusted outcome should be described in the calculation algorithm.*

Note: Urea kinetic modeling (UKM) or the second generation Daugirdas formula (simplified multivariable equation) are the most appropriate ways to calculate spKt/V, and the two accepted methods for calculating spKt/V per the KDOQI guidelines. For more information on these methods, please refer to National Kidney Foundation's KDOQI Clinical Practice Guidelines and Clinical Practice Recommendations for 2006 Updates: Hemodialysis Adequacy, Peritoneal Dialysis Adequacy and Vascular Access. Am J Kidney Dis 48:S1-S322, 2006 (suppl 1).

For Administrative/Claims, report the quality data code designated for this numerator: G8713 - spKt/V greater than or equal to 1.2 (single-pool clearance of urea [Kt] / volume [V])

During the NQF Maintenance Process, an EHR specification was provided for this performance measure, see attachment in field S.2b. Data Dictionary Code Table.

**S.7. Denominator Statement** (Brief, narrative description of the target population being measured)

All calendar months during which patients aged 18 years and older with a diagnosis of ESRD are receiving hemodialysis three times a week for  $\geq 90$  days

**S.8. Target Population Category** (Check all the populations for which the measure is specified and tested if any):

Senior Care

**S.9. Denominator Details** (All information required to identify and calculate the target population/denominator such as definitions, 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 S.2b)

During the NQF Maintenance Process, an EHR specification was provided for this performance measure, see attachment in field S.2b. Data Dictionary Code Table.

For Administrative/Claims:

Patients aged  $\geq 18$  years old

AND

Diagnosis for ESRD (ICD-9-CM) [for use 1/1/2014-9/30/2014]: 585.6

Diagnosis for ESRD (ICD-10-CM) [for use 10/01/2014-12/31/2014]: N18.6

AND

Encounter for Dialysis and Dialysis Catheter Care (ICD-9-CM) [for use 1/1/2014-9/30/2014]: V56.0, V56.1, V56.32

Encounter for Dialysis and Dialysis Catheter Care (ICD-10-CM) [for use 10/01/2014-12/31/2014]: Z49.01, Z49.31, Z49.32

AND

Hemodialysis treatment performed exactly three times per week for  $\geq 90$  days: G8714

AND

Patient encounter during the reporting period (CPT): 90957, 90958, 90959, 90960, 90961, 90962, 90965, 90966, 90969, 90970

**S.10. Denominator Exclusions** (Brief narrative description of exclusions from the target population)

There are no denominator exceptions.

**S.11. Denominator Exclusion Details** (All information required to identify and calculate exclusions from the denominator such as definitions, 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 S.2b)

N/A

**S.12. Stratification Details/Variables** (All information required to stratify the measure results including the stratification variables, definitions, 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 with at S.2b)

We encourage the results of this measure to be stratified by race, ethnicity, administrative sex, and primary language.

**S.13. Risk Adjustment Type** (Select type. Provide specifications for risk stratification in S.12 and for statistical model in S.14-15)

No risk adjustment or risk stratification

If other:

**S.14. Identify the statistical risk model method and variables** (Name the statistical method - e.g., logistic regression and list all the risk factor variables. Note - risk model development and testing should be addressed with measure testing under Scientific Acceptability)

N/A

**S.15. Detailed risk model specifications** (must be in attached data dictionary/code list Excel or csv file. Also indicate if available at measure-specific URL identified in S.1.)

Note: Risk model details (including coefficients, equations, codes with descriptors, definitions), should be provided on a separate worksheet in the suggested format in the Excel or csv file with data dictionary/code lists at S.2b.

**S.15a. Detailed risk model specifications** (if not provided in excel or csv file at S.2b)

**S.16. Type of score:**

Rate/proportion

If other:

**S.17. Interpretation of Score** (Classifies interpretation of score according to whether better quality is associated with a higher score, a lower score, a score falling within a defined interval, or a passing score)

Better quality = Higher score

**S.18. Calculation Algorithm/Measure Logic** (Describe the calculation of the measure score as an ordered sequence of steps including identifying the target population; exclusions; cases meeting the target process, condition, event, or outcome; aggregating data; risk adjustment; etc.)

Calculation algorithm is included in S.2b. Data Dictionary Code Table

**S.19. Calculation Algorithm/Measure Logic Diagram URL or Attachment** (You also may provide a diagram of the Calculation Algorithm/Measure Logic described above at measure-specific Web page URL identified in S.1 OR in attached appendix at A.1)

**S.20. Sampling** (If measure is based on a sample, provide instructions for obtaining the sample and guidance on minimum sample size.)

IF a PRO-PM, identify whether (and how) proxy responses are allowed.

This measure does not require sampling or a survey.

**S.21. Survey/Patient-reported data** (If measure is based on a survey, provide instructions for conducting the survey and guidance on minimum response rate.)

IF a PRO-PM, specify calculation of response rates to be reported with performance measure results.

N/A

**S.22. Missing data** (specify how missing data are handled, e.g., imputation, delete case.)

Required for Composites and PRO-PMs.

**S.23. Data Source** (Check ONLY the sources for which the measure is SPECIFIED AND TESTED).

If other, please describe in S.24.

Administrative claims, Electronic Clinical Data, Electronic Clinical Data : Electronic Health Record, Electronic Clinical Data : Registry

**S.24. Data Source or Collection Instrument** (Identify the specific data source/data collection instrument e.g. name of database, clinical registry, collection instrument, etc.)

IF a PRO-PM, identify the specific PROM(s); and standard methods, modes, and languages of administration.

N/A



**S.25. Data Source or Collection Instrument** (available at measure-specific Web page URL identified in S.1 OR in attached appendix at A.1)

**S.26. Level of Analysis** (Check ONLY the levels of analysis for which the measure is SPECIFIED AND TESTED)

Clinician : Group/Practice, Clinician : Individual, Clinician : Team

**S.27. Care Setting** (Check ONLY the settings for which the measure is SPECIFIED AND TESTED)

Ambulatory Care : Clinician Office/Clinic, Dialysis Facility, Home Health, Other, Post Acute/Long Term Care Facility : Nursing Home/Skilled Nursing Facility

If other: Domiciliary, Rest Home, or Custodial Care Services

**S.28. COMPOSITE Performance Measure** - Additional Specifications (Use this section as needed for aggregation and weighting rules, or calculation of individual performance measures if not individually endorsed.)

**2a. Reliability** – See attached Measure Testing Submission Form

**2b. Validity** – See attached Measure Testing Submission Form

[MeasTesting\\_0323-update.docx](#)

### 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.

#### 3a. Byproduct of Care Processes

For clinical measures, the required data elements are routinely generated and used during care delivery (e.g., blood pressure, lab test, diagnosis, medication order).

##### 3a.1. Data Elements Generated as Byproduct of Care Processes.

generated by and used by healthcare personnel during the provision of care, e.g., blood pressure, lab value, medical condition

If other:

#### 3b. Electronic Sources

The required data elements are available in electronic health records or other electronic sources. If the required data are not in electronic health records or existing electronic sources, a credible, near-term path to electronic collection is specified.

**3b.1. To what extent are the specified data elements available electronically in defined fields?** (i.e., data elements that are needed to compute the performance measure score are in defined, computer-readable fields)

[ALL data elements are in defined fields in electronic health records \(EHRs\)](#)

**3b.2. 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 other than electronic sources.**

**3b.3. If this is an eMeasure, provide a summary of the feasibility assessment in an attached file or make available at a measure-specific URL.**

Attachment:

#### 3c. Data Collection Strategy

Demonstration that the data collection strategy (e.g., source, timing, frequency, sampling, patient confidentiality, costs associated with fees/licensing of proprietary measures) can be implemented (e.g., already in operational use, or testing demonstrates that it is ready to put into operational use). For eMeasures, a feasibility assessment addresses the data elements and measure logic and demonstrates the eMeasure can be implemented or feasibility concerns can be adequately addressed.

**3c.1. Describe what you have learned/modified 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.

**IF a PRO-PM, consider implications for both individuals providing PROM data (patients, service recipients, respondents) and those whose performance is being measured.**

This measure was found through testing to be both feasible and reliable. Data collection was performed in a reasonable timeframe. There is no fee for use of the measure.

**3c.2. Describe 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).**

## 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.

### 4a. Accountability and Transparency

Performance results are used in at least one accountability application within three years after initial endorsement and are publicly reported within six years after initial endorsement (or the data on performance results are available). If not in use at the time of initial endorsement, then a credible plan for implementation within the specified timeframes is provided.

#### 4.1. Current and Planned Use

*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 performance improvement.*

Planned	Current Use (for current use provide URL)
Professional Certification or Recognition Program	<p>Public Reporting PQRS participation reported on Physician Compare <a href="http://www.medicare.gov/physiciancompare/staticpages/data/aboutthedata.html">http://www.medicare.gov/physiciancompare/staticpages/data/aboutthedata.html</a></p> <p>Payment Program PQRS <a href="http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/PQRS/index.html">http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/PQRS/index.html</a></p> <p>Quality Improvement (Internal to the specific organization) RPA Kidney Quality Improvement Registry <a href="https://www.medconcert.com/content/medconcert/rpaqir/">https://www.medconcert.com/content/medconcert/rpaqir/</a></p>

#### 4a.1. For each CURRENT use, checked above, provide:

- Name of program and sponsor
- Purpose
- Geographic area and number and percentage of accountable entities and patients included

The Centers for Medicare & Medicaid Services (CMS) implemented the Physician Quality Reporting System (PQRS) (formerly, Physician Quality Reporting Initiative or PQRI), authorized under Section 101(b) of division B of the Tax Relief and Health Care Act (TRHCA) of 2006 (Public Law 109423; 120 Stat. 2975), in 2007. PQRS is a national CMS reporting program that uses a combination of incentive payments and negative payment adjustments to promote reporting of quality information by eligible professionals (EPs). A total of \$167,815,193 in Physician Quality Reporting System incentive payments were paid by CMS for the 2012 program year (most recent data available), which reflects successful participation of 29,254 practices that included 367,228 eligible professionals.

**4a.2. If not currently publicly reported OR used in at least one other accountability application (e.g., payment program, certification, licensing) what are the reasons? (e.g., Do policies or actions of the developer/steward or accountable entities restrict access to performance results or impede implementation?)**



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

**4b. Improvement**

Progress toward achieving the goal of high-quality, efficient healthcare for individuals or populations is demonstrated. If not in use for performance improvement at the time of initial endorsement, then a credible rationale describes how the performance results could be used to further the goal of high-quality, efficient healthcare for individuals or populations.

**4b.1. Progress on Improvement. (Not required for initial endorsement unless available.)**

Performance results on this measure (current and over time) should be provided in 1b.2 and 1b.4. Discuss:

- Progress (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

The percentage of patients receiving adequate hemodialysis with a mean delivered  $\text{spKt/V} = 1.2$  increased from 85% in 1998 to 94% in 2008. In 2007, 95% of female patients and 89% of male patients received adequate hemodialysis. CROWNWeb data from December 2013 on clinical indicators relating to dialysis adequacy, achieved hemoglobin (Hgb) level, and prevalent VA. Achievement of KDOQI dialysis adequacy targets for HD is 97 percent of such patients obtaining a single pool  $\text{Kt/V} = 1.2$ . Source: 2014 USRDS Annual Data Report.

In 2012, 98,954 new patients began ESRD therapy with hemodialysis and 402,514 prevalent ESRD patients were receiving hemodialysis therapy nationwide. (Source 2014 USRDS Annual Data Report)

**4b.2. If no improvement was demonstrated, what are the reasons? 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.**

**4c. Unintended Consequences**

The benefits of the performance measure in facilitating progress toward achieving high-quality, efficient healthcare for individuals or populations outweigh evidence of unintended negative consequences to individuals or populations (if such evidence exists).

**4c.1. Were any unintended negative consequences to individuals or populations identified during testing; OR has evidence of unintended negative consequences to individuals or populations been reported since implementation? If so, identify the negative unintended consequences and describe how benefits outweigh them or actions taken to mitigate them.**

We are not aware of any unintended consequences related to this measurement.

**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.

**5. Relation to Other NQF-endorsed Measures**

Are there related measures (conceptually, either same measure focus or target population) or competing measures (conceptually both the same measure focus and same target population)? If yes, list the NQF # and title of all related and/or competing measures.  
Yes

**5.1a. List of related or competing measures (selected from NQF-endorsed measures)**

0249 : Delivered Dose of Hemodialysis Above Minimum

<p><b>5.1b. If related or competing measures are not NQF endorsed please indicate measure title and steward.</b></p>
<p><b>5a. Harmonization</b>          The measure specifications are harmonized with related measures;  <b>OR</b>          The differences in specifications are justified</p> <p><b>5a.1. If this measure conceptually addresses EITHER the same measure focus OR the same target population as NQF-endorsed measure(s):</b>  <b>Are the measure specifications completely harmonized?</b>  <a href="#">Yes</a></p> <p><b>5a.2. If the measure specifications are not completely harmonized, identify the differences, rationale, and impact on interpretability and data collection burden.</b></p>
<p><b>5b. Competing Measures</b>          The measure is superior to competing measures (e.g., is a more valid or efficient way to measure);  <b>OR</b>          Multiple measures are justified.</p> <p><b>5b.1. If this measure conceptually addresses both the same measure focus and the same target population as NQF-endorsed measure(s):</b>  <b>Describe why this measure is superior to competing measures (e.g., a more valid or efficient way to measure quality); OR provide a rationale for the additive value of endorsing an additional measure. (Provide analyses when possible.)</b>  <a href="#">Our measure is specified at the clinician level, but measure results can be aggregated at a higher level of measurement.</a></p> <p><a href="#">We have developed and will maintain specifications for multiple data sources, including Electronic Health Records (EHRs) and Claims-Based Reporting. Our specifications for EHRs are developed in accordance with the terminology standards (eg, SNOMED, RxNorm, LOINC) named in the Meaningful Use Program (CMS EHR Incentive Program).</a></p>

<p><b>Appendix</b></p>
<p><b>A.1 Supplemental materials may be provided in an appendix.</b> All supplemental materials (such as data collection instrument or methodology reports) should be organized in one file with a table of contents or bookmarks. If material pertains to a specific submission form number, that should be indicated. Requested information should be provided in the submission form and required attachments. There is no guarantee that supplemental materials will be reviewed.  <b>Attachment:</b></p>
<p><b>Contact Information</b></p>
<p><b>Co.1 Measure Steward (Intellectual Property Owner):</b> <a href="#">Renal Physicians Association</a>  <b>Co.2 Point of Contact:</b> <a href="#">Dale, Singer, dsinger@renalmd.org, 301-468-3515-</a>  <b>Co.3 Measure Developer if different from Measure Steward:</b> <a href="#">Renal Physicians Association</a>  <b>Co.4 Point of Contact:</b> <a href="#">Amy, Beckrich, abeckrich@renalmd.org, 301-468-3515-</a></p>
<p><b>Additional Information</b></p>
<p><b>Ad.1 Workgroup/Expert Panel involved in measure development</b>  <b>Provide a list of sponsoring organizations and workgroup/panel members' names and organizations. Describe the members' role in measure development.</b>  <a href="#">Louis H. Diamond, MBChB, FCP (SA), FACP, FHIMSS (Work Group Co-Chair) (Nephrology, Methodology) President, Quality Healthcare Consultants, Rockville, MD</a>  <a href="#">Barbara Fivush, MD (Work Group Co-Chair) (Nephrology - Pediatrics) Professor of Pediatrics, Division Chief of Pediatric Nephrology, Johns Hopkins University, Baltimore, MD</a></p>

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PCPI measures are developed through cross-specialty, multi-disciplinary work groups. All medical specialties and other health care professional disciplines participating in patient care for the clinical condition or topic under study are invited to participate as equal contributors to the measure development process. In addition, the PCPI strives to include on its work groups individuals representing the perspectives of patients, consumers, private health plans, and employers. This broad-based approach to measure development ensures buy-in on the measures from all stakeholders and minimizes bias toward any individual specialty or stakeholder group. All work groups have at least two co-chairs who have relevant clinical and/or measure development expertise and who are responsible for ensuring that consensus is achieved and that all perspectives are voiced.

#### Measure Developer/Steward Updates and Ongoing Maintenance

**Ad.2 Year the measure was first released:** 2007

**Ad.3 Month and Year of most recent revision:** 06, 2011

**Ad.4 What is your frequency for review/update of this measure?** Every 3 years or as new evidence becomes available that materially affects the measures.

**Ad.5 When is the next scheduled review/update for this measure?**

**Ad.6 Copyright statement:** Physician Performance Measures (Measures) and related data specifications have been developed by the American Medical Association (AMA) convened Physician Consortium for Performance Improvement® (PCPI™).

**Ad.7 Disclaimers:**

**Ad.8 Additional Information/Comments:** The following updates were made on 11/09/11:

Specifications:

2a1.1 Numerator note was added regarding calculation methods

2a1.2 Time window was updated

2a1.6 Time window was updated

Importance:

1b.4 New disparities data added  
1b.5 Citation for new disparities data added